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SUSTAINABLE SUPPLY MANAGEMENT IN SMES

Evidence from the Finnish textile industry

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ABSTRACT

This study examines the phenomenon of sustainable supply management among small and medium-sized enterprises operating in the Finnish textile industry. Major environmental challenges as well as increasing stakeholder pressure compel the firms to address the sustainability impact of their actions, and to engage in sustainable practices that involve managing the economic, environmental as well as social performance of the firm. Moreover, due to globalization and extensive increase in outsourcing, firm's responsibility extends beyond its own borders and direct control, as companies are increasingly held responsible also for their suppliers' actions. Thus, it is relevant to study how the buyer firms can manage sustainability in their upstream supply chains. Previous research has studied the phenomenon mainly from the perspective of large corporations, and the research addressing how the SMEs can integrate sustainability into their supply management remains limited.

The research is initiated by conducting an extensive literature review on the phenomenon of sustainable supply management, taking also the characteristics of SMEs as well as the challenging nature of the textile industry into consideration. Based on the literature review, theoretical framework of the study is formulated to guide the empirical research. The empirical part of the research employs a research strategy of an extensive case study. The empirical data is collected through theme interviews with the representatives of six small and medium-sized enterprises operating in the Finnish textile industry, and the data is analysed by employing a theory-bonded content analysis.

The main findings of the study indicate that sustainability is viewed as an increasing trend in the textile industry. The SMEs consider sustainability as an integral part of their identity, brand and firm values, and also increasingly recognize the positive impact of sustainable practices on the economic benefits of the business. The motivation to manage sustainability in relation to suppliers was found to mainly derive from the internal aspiration of the SMEs as well as from the increasing consumer awareness. Despite the various challenges originating from the nature of the industry as well as the characteristics of SMEs, the textile SMEs rather proactively engage in sustainable supply management through careful supplier selection, active development, close and long-term collaboration as well as continuous assessment.

This thesis contributes to the existing research by examining how the SMEs can manage sustainability in relation to their suppliers, as well as by addressing the motivational factors and perceived challenges behind the firms' sustainability efforts. Regarding the managerial contribution of the study, this thesis provides suggestions for the SMEs of how to overcome the challenges derived from the low negotiating power and how to increase the ability to influence the sustainability performance of the suppliers. Overall, the SMEs should aim at developing direct and close supplier relationships with a long-term orientation to efficiently drive sustainable development forward in the textile industry.

KEYWORDS: Sustainability, sustainable supply management, small and medium-sized enterprises, textile industry

1. INTRODUCTION

This thesis investigates the phenomenon of sustainable supply management among small and medium-sized enterprises operating in the Finnish textile industry. The first chapter introduces the background and motivation of the study as well as the research gap in the field by shortly presenting the key findings from the previous research. The chapter proceeds by presenting the aim of the study and the research questions, and finally introduces the structure of the study.

1.1. Background of the study

Sustainability has recently received an increasing attention in the business world (Yang & Zhang 2017). In addition to the more traditional economic side of the business, organizations face increasing pressure from various stakeholders such as the governments, NGOs, customers and the media that compel the firms to recognize also the social and environmental impact of the business (Jorgensen & Knudsen 2006; Porter & Kramer 2006; Sancha, Gimenez & Sierra 2016, Winter & Knemeyer 2013). Moreover, the needs and expectations from different stakeholders, including the company employees, surrounding community and investors, towards the sustainable efforts of the firm may vary to great extent (Funk 2003). Lintukangas, Hallikas & Kähkönen (2015) highlight especially the increasing consumer awareness related to sustainability issues, and suggest this in particular urge the companies to reconsider their environmental and ethical values. Moreover, due to the globalization, decreasing power of national governments increases the corporations' responsibility not only for their stakeholders but also the society as a whole (Baden, Harwood & Woodward 2009). Organizations are increasingly expected to address and act on sustainability related issues such as the depletion of natural resources, climate change as well as working conditions of the suppliers operating in the developing countries (Pagell & Shevchenko 2014).

Companies are required, simultaneously as aiming to achieve profitability, to also contribute to the welfare of the society as well as to the environmental impact of their business. Overall, firms are expected to engage in and contribute to sustainability, which include managing the profits, people as well as the planet. (McWilliams, Parhankangas, Coupet, Welch & Barnum 2016). This view refers to the concept of triple bottom line of sustainability that is based on the idea that the success of the firm

should be determined by assessing its performance in all three dimensions of sustainability; financial, social and environmental (Norman & MacDonald 2004, Perry & Towers 2009; Carter & Rogers 2008).

In addition to the term sustainability and its various definitions, many synonyms are widely applied in the existing research. For instance, scholars and practitioners apply concepts such as corporate social responsibility (CSR) among similar sustainability related issues. Savitz & Weber (2013: 3–4) note that the term CSR is often applied when referring to firm's obligations towards society in its entirety. However, the authors make a conscious choice to rather use the term sustainability and justify this by stating that “responsibility emphasizes the benefits to social groups outside the business, whereas sustainability gives equal importance to the benefits enjoyed by the corporation itself”. (Savitz & Weber 2013: 3–4.) In various studies examined in this research (e.g. Baumann-Pauly, Wickert, Spence & Scherer 2013; Gimenez & Tachizawa 2012), the definitions of sustainability and CSR are relatively close to each other and mostly used as synonyms. Also the substance of these concepts is rather similar, both of them covering environmental, social and economic aspects of business. Thus, sustainability and CSR are considered as synonyms also in this thesis, and only the term sustainability is applied to increase the readability and intelligibility of the study.

However, in addition to implementing sustainability in their own operations, organizations have identified the need of their suppliers to apply similar sustainability practices as well (Krause, Vachon & Klassen 2009). The trends of globalization and outsourcing have increased the coordination and control problems in organizations, and thus the role of risk management related to these challenges as well as attention towards social and environmental impacts of the business have grown (Bask, Halme, Kallio & Kuula 2013). The boundary of responsibility extends beyond the reach of a firm's ownership and direct control (Gimenez & Tachizawa 2012) and the buyer firms are increasingly held responsible for the social and environmental impacts of also their suppliers' behaviour (Akhavan & Beckmann 2017). Jorgensen & Knudsen (2006) further indicate that outsourced activities are increasingly seen as an integrated part of the firm responsibility.

Firms have become increasingly conscious about how their suppliers' sustainability performance affects their own development. It is crucial to acknowledge that it is impossible for any organization or supply chain to be truly sustainable without the implementation of sustainable supply chain management and involvement of partners

outside the firm's own borders. (Ageron, Gunasekaran & Spalanzani 2012; Bai & Sarkis 2010; Sancha et al. 2016.) Overall, suppliers play a significant role in firm's performance and long-term success (Yang & Zhang 2017), and it is suggested that an organization is no more sustainable than the suppliers that the organization sources from, and thus the role of purchasing and supply management function becomes crucial when pursuing sustainability (Miemczyk, Johnsen & Macquet 2012; Krause et al. 2009). Moreover, it is suggested that competition no longer exist between individual companies but rather among entire supply chains (Li, Ragu-Nathan, Ragu-Nathan & Rao 2006; Yang & Zhang 2017; Perry & Towers 2009), and as Giunipero, Hooker & Denslow (2012) highlight, in the 21st century the overall sustainability issues involve the entire supply chains. Thus, it is relevant to examine how the buyer firms can implement sustainable supply management to more efficiently influence also their suppliers' sustainability performance.

Moreover, this study focuses on the sustainable supply management among the small and medium-sized enterprises (SMEs). Sustainable actions have mainly been linked to the large multinationals' efforts to guard their reputations and brands for instance from the negative press and consumer boycotts, and less attention has been paid on how the SMEs can, in cooperation with the suppliers, manage the social and environmental issues among their supply chains (Pedersen 2009). In addition to the fact that SMEs represent a dominant form of a business organization worldwide (Battisti & Perry 2011), their role in setting up and implementing sustainability initiatives down to their suppliers is interesting due to various specific characteristics of the firms, such as the limited resources (Ciliberti, Pontrandolfo & Scozzi 2008) and low bargaining power towards the suppliers (Ayuso, Roca & Colomé 2013; Jorgensen & Knudsen 2006). Overall, SMEs might not have the power to influence their suppliers to the same extent than the larger corporations. Some scholars further suggest that due to the minuscule impact of the firms on the society and the environment as well as their lack of resources, SMEs are less likely to take part in sustainable activities (Panwar, Nybakk, Hansen & Pinkse 2016).

This research seeks to examine the phenomenon of sustainable supply management in the SMEs, and more precisely focuses on those operating in the Finnish textile industry. Thus, in addition to the special characteristic of the SMEs and the challenges that they may face in managing sustainability in relation to their suppliers, also the nature of the textile industry is taken into consideration. The globally stretched and fragmented nature of the textile supply chains is emphasized in the previous research (Oelze 2017;

Köksal, Strähle, Müller & Freise 2017; Boström & Micheletti 2016), as the textile production is commonly outsourced to the developing countries (Boström & Micheletti 2016). Overall, the textile production is considered to have a major negative impact on the environmental as well as social sustainability (Zimon & Domingues 2018; Diabat, Kannan & Mathiyazhagan 2014; Boström & Micheletti 2016). However, consumer awareness is growing also in the textile industry (Goworek 2011; Zimon & Domingues 2018), and thus the industry firms are increasingly required to integrate sustainability into their supply management (Shen, Li, Dong & Perry 2017).

1.2. Research gap

The major stream of research began to focus on sustainable supply chain management (SSCM) in the mid 1990s (Seuring & Müller 2008a) and during recent years, focus on SSCM among researches and practitioners has steadily increased (Beske & Seuring 2014). However, Ageron et al. (2012) note that sustainability research focusing on supply management in particular is still rather limited despite the criticality of supply management for organizational competitiveness. Moreover, the existing research on sustainable supply chain management mostly focuses on individual dimensions of sustainability, and studies that consider all three aspects simultaneously are still exceptions (Gimenez & Tachizawa 2012; Seuring and Müller 2008b; Winter & Knemeyer 2013). This research will take all three dimensions of sustainability; economic, environmental and social (Perry & Towers 2009; Carter & Rogers 2008) into consideration as examining how the SMEs can manage sustainability in relation to their suppliers.

Furthermore, as highlighted by Ayuso et al. (2013), most of the research in the field of sustainable supply chain management focus on the large corporations that possess strong brands that are more vulnerable to the public accusations of consumers, NGOs and the media. Regardless of the SMEs' unique characteristics, behavioural features as well as various resource limitations, academic research concentrating solely on SMEs' sustainability efforts is lacking (Perry & Towers 2009). Even though there are some studies that have examined sustainable supply chain management from the SME perspective (Ayuso et al. 2013; Ciliberti et al. 2008), the research commonly applies the perspective in which SMEs act as suppliers to large corporations (Baden et al. 2009; Ciliberti et al. 2008). Only few studies (Ayuso et al. 2013; Ciliberti et al. 2008;

Pedersen 2009) discuss how SMEs as buyer firms can set initiatives and manage sustainability among their upstream supply chains.

Altogether, there is a recognized need to study sustainable supply management especially among SMEs, since these small and medium-sized firms are not only scaled-down versions of large corporations, and thus the concepts and practices of the large organizations cannot be directly transferred to SMEs (Perry & Towers 2009). Furthermore, due to the resource limitations of SMEs', they will continue to have a weak position in their supply chains and face challenges as seeking to influence their suppliers' activities. Thus, it is relevant to study how the SMEs can manage sustainability in relation to their suppliers when taking their limited capabilities into consideration. (Ayuso et al. 2013.)

1.3. Research question and objectives

Based on the recognized research gap in the field, this thesis aims to examine the phenomenon of sustainable supply management among SMEs operating in the Finnish textile industry. The focus of this study is on the upstream supply chain management and more precisely on the relationship between the buyer firm and the supplier, and the thesis examines the phenomenon from the buyer's point of view. Miemczyk et al. (2012) suggest that since sustainability in procurement and supply is quite immature area of research, the natural first step is to concentrate on the direct relationship between the buyer and the supplier as aiming to implement sustainability in the supply chain.

The main research question of this study is following:

- 1) *What is the current state of sustainable supply management in Finnish SMEs operating in the textile industry?*

Three research objectives are applied to find the answer to the main research question. These objectives are:

- 2) *What kind of motivational factors do SMEs have to manage sustainability in relation to their suppliers in the textile industry?*

- 3) *What kind of challenges do SMEs face as implementing sustainable supply management in the textile industry?*
- 4) *How do the textile SMEs manage sustainability in relation to their suppliers in practice?*

1.4. Structure of the study

This thesis consists of five main chapters. The first chapter introduces the topic of the thesis and its background, discusses the research gap in the field as well as presents the aim of the research including the research question and objectives of the study. The second main chapter discusses the prior research on the phenomenon, and includes the concepts of sustainable development, sustainable supply management as well as management of sustainable supply in small and medium-sized enterprises. In the second chapter, also textile industry as the context of this research is introduced and the sustainability aspects emphasized in the industry are discussed, and eventually the theoretical framework of the study is formulated. The third main chapter discusses the research design and methodological choices of the study including the research strategy and methods of the data collection and analysis, as well as considers the reliability and validity of the study. The fourth chapter introduces the case companies of the research, presents the findings from the analysis of the empirical data as well as further discusses the findings in the light of previous research on the phenomenon. The fifth and last chapter summarizes the main findings of the study and introduces the theoretical and managerial contribution of the research. Moreover, the limitations of the study are discussed as well as suggestions for further research are provided.

2. LITERATURE REVIEW

In order to find answers to the main research question and the objectives of the study, the literature review of this thesis is divided into three theoretical concepts; sustainable development in the business context, sustainable supply management (SSM) and SSM in small and medium-sized enterprises. Furthermore, the characteristics of the textile industry and dimensions of sustainability emphasized in the industry are introduced, and the theoretical framework of the study is built.

2.1. Sustainable development

One of the most cited definitions of sustainable development was established by World Commission on Environment and Development, which defines sustainable development as an approach that aims to "meet the needs and aspirations of the present without compromising the ability to meet those of the future" (WCED 1987). However, for example Carter & Rogers (2008) criticize the definition by not providing specific guidance for companies of how to identify the future needs versus present needs, how to determine the resources needed to meet these needs, and how to balance the organization's responsibilities to various different stakeholders. Nevertheless, sustainability has attained an increasing attention in the business world (Yang & Zhang 2017), and during recent years corporate, social and environmental responsibility have become an integral part of the organizations' strategic goals. By integrating sustainability into the business operations and the firm strategy, the organizations are able to ensure their competitiveness, create value for the customers and create competitive advantage. (Ageron et al. 2012.) Thus, corporate sustainability can be seen as the firm's ability to continue operating in a long-term and to ensure its durable survival (Perrini & Tencati 2006).

The concept of sustainability was first introduced in the 1980s and has further developed since (Savitz & Weber 2013: 2). In spite of the growing interest towards the concept, the definitions of sustainability still remain rather ambiguous in the existing research (Giunipero et al. 2012; Carter & Rogers 2008). The divergence of the various definitions can be partly explained by the early stage of development of the topic (Winter & Knemeyer 2013). Perry & Towers (2009) highlight that the ultimate aim of sustainability initiatives is to go beyond the duty of profit-maximization and also beyond solely obeying the law and regulations imposed towards the firms. Moreover,

the concept of sustainability highlights the interdependence of actors on each other and on the surrounding environment. Overall, sustainability can be seen as doing business in a way that recognizes and takes the needs and expectations of other parties, such as stakeholders, into consideration, and that aims not only to cause minimal harm but rather contribute to the environment and the society in which the organization operates. (Savitz & Weber 2013: 3.) Sustainability can be seen as “a fundamental principle of smart management” within today’s organizations, which however is really easy to disregard or take for granted due to the fact that financial performance of firms is still too often regarded as the only measure of success (Savitz & Weber 2013: 6).

Elkington (2004) proposes *seven revolutions* that will require the businesses to change and to operate more sustainably. The first revolution highlights the increasing competition in the markets both domestically and internationally. Companies are required to spot the market conditions and factors to survive and succeed, and companies are increasingly facing pressures to commit to sustainability issues. The second revolution relates to values that are changing from hard to soft and address the shift towards human and societal values. The third revolution of transparency is forcing the companies to open up to their various stakeholders. The stakeholders are expecting to receive information about organizations actions and plans for the future, which increases the need for transparency. Due to growing power of companies and decreasing influence of authorities, the priorities, commitments and activities of the businesses are increasingly under public scrutiny and companies are to a greater extent compared and ranked with the competing firms. (Elkington 2004: 3–4.)

The fourth revolution of life-cycle technology highlights the transparency and all aspects of sustainability throughout the product’s life cycle. Companies are challenged to address sustainability issues all the way their supply chains – from raw materials to recycling and disposal. (Elkington 2004: 4–5.) This aspect highlights the fact that companies are increasingly seen responsible also of the activities outside their direct control. The fifth revolution addresses the importance of new types of partnerships between companies and with other organizations such as NGOs. The sixth revolution of time highlights the urgency and need to plan and make decisions considering the long-term benefits. The final, seventh revolution suggest new questions for the businesses about corporate governance; what is the business for, who makes the decisions of how the business is run and how should the business balance between shareholders and other stakeholders. (Elkington 2004: 4–6.)

2.1.1. Incentives towards more sustainable business

Sustainable development is a widely applied topic in many fields of research, especially in the field of procurement that focuses on the buyer-supplier dyads (Ghadimi, Azadnia, Heavey, Dolgui & Can 2016). The depletion of natural resources and the increasing pressure from various stakeholders to address and act on sustainability issues such as climate change and working conditions of the suppliers operating in developing countries (Pagell & Shevchenko 2014) are among the factors that force organizations to change their operations. Stakeholders have increasingly started to pay attention to sustainability issues of the businesses (Funk 2003). In addition to economical requirements, companies increasingly face both internal and external pressure from various stakeholders to pay attention to improve also their social and environmental impact (Winter & Knemeyer 2013). Moreover, governments, the media and different activist organizations monitor companies and the impact of their activities on social issues, and especially activist groups have become more aggressive in exposing organizations to public pressure on social consequences of their actions (Porter & Kramer 2006).

In addition, the increasing awareness and demands of the end customers related to sustainability issues fuel the companies to consider their environmental and ethical values (Lintukangas et al. 2015). As the awareness towards sustainability issues has increased and studies also show that consumers increasingly prefer environmentally and socially responsible brands, consumers are suggested to be more alert to the consequences of their consumption decisions. They are also more interested to know about the social and environmental impacts of the entire supply chains of the products, such as where the raw materials are sourced from and produced. (Bask et al. 2013.) Since organizations possess various obligations towards the stakeholders to operate in a responsible manner, it is obvious that no firm can succeed in a long-term if it does not acknowledge and take into consideration the interests of the key stakeholders (Norman & MacDonald 2004).

However, sustainability can be a critical challenge for the companies, and if absent it can disable the long-term success (Koszewska 2010). A good starting point for sustainability initiatives is a recognized possibility to create shared value that benefits both, the society and the business itself. It is critical to understand that successful companies need a healthy society and environment in which to operate; quality education, health-care system and equal opportunity are necessary in order to have

productive labour force. Furthermore, safe products and working conditions decrease the internal costs resulted from accidents, and the effective utilization of natural resources make the business more productive. However, no company has the needed resources to solve all the society's issues alone, and thus the firm needs to select issues that are related to its core business. (Porter & Kramer 2006.)

Funk (2003: 65–66) defines sustainable organization as organization “whose characteristics and actions are designed to lead to a desirable future state for all stakeholders”. Considering the variety of the stakeholders, ranging from investors to the employees and the community at large, it can be concluded that the needs and expectations of these stakeholders related to sustainable activities of a company vary greatly. Employees expect the company to retain viability and profitability while managing risk and furthering innovation. At the same time the surrounding community at large anticipates the organization to take care of the environment and invest in social responsibility. (Funk 2003.) Perrini & Tencati (2006) note that sustainability-oriented organization is conscious of its responsibilities towards various stakeholders and also apply tools and methods that are aligned with its attempts to contribute to economic, social and environmental aspects of its processes. Furthermore, sustainable organization is suggested to meet the demands of its shareholders by creating profit while simultaneously protecting the environment and enhancing the lives of the stakeholders that the organization interacts with. In other words, the interests of the business intersect with the interests of the environment and society at large. (Savitz & Weber 2013: 2.)

Not included in the explicit definitions of sustainability, Carter & Rogers (2008) represent supporting facets of sustainability including risk management, transparency, strategy and culture that have a critical role in organizations and that also emerge often in the sustainability literature. Firms increasingly recognize risk management as an integral part of their sustainability. Risks can result for example from poor environmental and social performance of the firm and its suppliers, and may lead to costly legal actions. Among transparency, the authors note that it has become extremely challenging and risky to conceal corporate wrongdoings. The firm's transparency can be improved by reporting to the stakeholders and also by engaging them and using their feedback to improve the processes. The coordination with the firm's supply chain as well as across the networks is also suggested to improve the transparency of the firm. Considering strategy and culture, it is critical that the sustainability initiatives related to environmental, social and economic goals and the firm's corporate strategy are closely interconnected. (Carter & Rogers 2008.)

Furthermore, as opposed to the traditional view that views sustainable practices more as costs that correlate negatively with the firm's returns, by engaging in the strategic sustainability initiatives companies have proved to have opportunity to gain competitive advantage and increase its profits (Funk 2003; Giunipero et al. 2012). Also Cruz, Boehe & Ogasavara (2015) suggest that with sustainability initiatives as a strategic tool, the companies aim to gain competitive advantage by positioning themselves as socially or environmentally responsible from the stakeholders' perspective. In addition, instead of being only a cost, constraint or charitable deed, striving for sustainability goals has potential to be a source of opportunity, innovation and increased performance (Porter & Kramer 2006; Bask et al. 2013; Beske & Seuring 2014).

Sustainability issues are suggested to concern all angles of business operations "from product design to finance" and affect the variety of stakeholders such as government, investors and citizens (Funk 2003: 66). Therefore, any separate entity within an organization cannot be responsible for sustainability activities alone, but responsibility for sustainability needs to be shared between all employees and integrated in everyone's tasks, including and starting from the top management (Pagell & Wu 2009). Moreover, Pedersen (2009) highlights that organizational and managerial commitment to sustainability activities are extremely important in order to successfully implement these activities throughout the organization. The matter of commitment is suggested to include the firm's "willingness to prioritise, communicate, manage and allocate resources" considering the sustainability issues. (Pedersen 2009: 112.) Most of all, sustainability initiatives need to be tied to the firm strategy and activities (Porter & Kramer 2006). As Savitz & Weber (2013: 8) frame it, when sustainability is correctly understood and applied within the organization, it is about strategy, management and profits.

2.1.2. Triple bottom line of sustainability

The concept of triple bottom line (TBL) was first introduced in the mid-1990s (Winter & Knemeyer 2013; Norman & MacDonald 2004). Triple bottom line is based on the fundamental idea that an organization's success should be determined by assessing the organization's performance in all three dimensions of sustainability; financial, social and environmental (Norman & MacDonald 2004, Perry & Towers 2009; Carter & Rogers 2008). Organizations pursuing sustainability are required to simultaneously consider the financial, environmental as well as social impacts of their business activities (Yang & Zhang 2017). Triple bottom line addresses the companies on the

economic value that they create but also on the environmental and social value that they add – or alternatively destroy (Elkington 2004). Porter & Kramer (2006) define triple bottom line as the principle of sustainability, and highlight that corporations should operate in a way that secures the economic performance in the long-term by avoiding socially harmful and environmentally wasteful short-term behaviour.

It is essential to acknowledge that businesses not only consume financial resources such as the money received from the investors and sales revenues, but they also spend environmental resources such as energy and raw materials as well as social resources such as the time of the employees when operating. Thus, according to the concept of triple bottom line, an organization should be able to measure, document and report a positive return on investment on all dimensions of sustainability. In addition to the firm itself, it should be also able to address the benefits received by the stakeholders regarding the economical, environmental and social dimensions. (Savitz & Weber 2013: 4–5.)

Winter & Knemeyer (2013) suggest that the economic dimension of the triple bottom line is often seen as more traditional and is widely recognized and utilized in business, and the two other dimensions, social and environmental are less common and also their measurement is suggested to be more difficult. On the other hand, sustainability research has focused mostly on the environmental dimension, which could be partly due to the fact that it is more easily measured and implemented (Beske & Seuring 2014; Seuring & Müller 2008b; Winter & Knemeyer 2013), and the social dimension is considered to be a rather neglected aspect of sustainability due to the difficulty to quantify the social performance (Sancha et al. 2016; Carter & Rogers 2008). Thus, Miemczyk et al. (2012) suggest that more research especially about social sustainability is needed.

The idea of integrating sustainability into firms' operations is to simultaneously engage in activities that have positive impact on society and environment and that create economic benefits in a long-term as maintaining the firm's competitive advantage (Winter & Knemeyer 2013). Furthermore, commitment and proactive behaviour towards sustainable practices is suggested to be efficient only if the dimensions of sustainability are aligned with the firm's business model (Winter & Knemeyer 2013; Pagell & Wu 2009). Carter & Rogers (2008: 371) further highlight that "true sustainability occurs at the intersection of all three areas – environmental, social, and economic". At this intersection of sustainability performance (see Figure 1),

organizations can engage in activities that not only have a positive effect on the natural environment and the society, but that also lead to long-term economic benefits and competitive advantage. (Carter & Rogers 2008.)

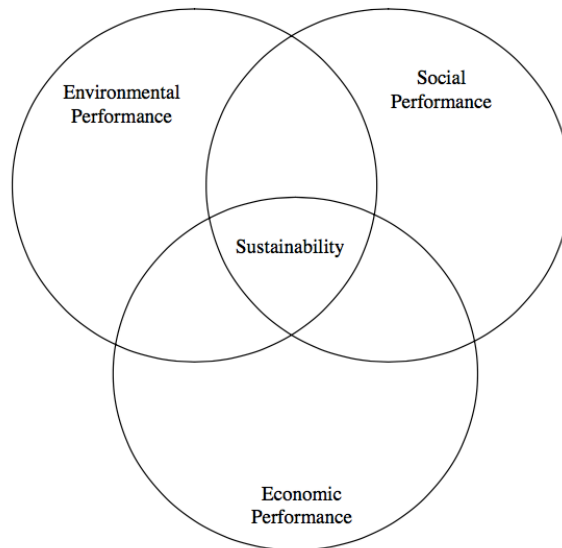


Figure 1. Triple bottom line of sustainability (Carter & Rogers 2008).

As stated above, much of the existing sustainability research has focused on the *environmental dimension* of sustainability (Winter & Knemeyer 2013; Beske & Seuring 2014; Seuring & Müller 2008b). This dimension involves the objectives, plans and mechanisms that contribute to greater environmental responsibility (Winter & Knemeyer 2013). Environmental dimension of sustainability addresses issues such as climate change (Baumann-Pauly et al. 2013) and global warming (Ageron et al. 2012), and the activities include for example the protection of natural resources (Krause et al. 2009; Ageron et al. 2012), reduction of waste, emissions and pollution (Krause et al. 2009; Lintukangas et al. 2015; Ageron et al. 2012; Gimenez & Tachizawa 2012) and reduction of carbon footprint (Ageron et al. 2012). Diabat et al. (2014) recognize the role of effective resource utilization in reduction of waste. In addition, Gimenez & Tachizawa (2012) suggest that environmental performance commonly includes energy efficiency and reduction of environmental accidents. Holt & Ghobadian (2009) emphasize that environmental sustainability is one of the critical issues now as well as continue being in the future. Due to tightening governmental legislation, firms cannot neglect the environmental issues in order to remain in business (Ghadimi et al. 2016).

The *social dimension* of sustainability concerns both the individuals as well as the organizational level of the firm (Winter & Knemeyer 2013). Sancha et al. (2016), on the other hand, note that social dimension of sustainability involves both internal communities of the firm such as employees, as well as the external parties such as local communities, and the organization is required to balance between the needs and wellbeing of both communities. Social aspect of the triple bottom line includes issues with poverty, injustice and human rights, employee's health and safety issues (Krause et al. 2009; Ghadimi et al. 2016), diversity (Gimenez & Tachizawa 2012), labour standards (Baumann-Pauly et al. 2013; Gimenez & Tachizawa 2012) as well as working conditions and child labour (Sancha et al. 2016).

Contrary to the environmental and social aspects of sustainability, *economic dimension* is quantitative and emphasizes the efficient use of resources and the return on investments (Winter & Knemeyer 2013). Furthermore, economic aspect of sustainability relates to operational efficiency, market share and sales (Gimenez & Tachizawa 2012). The economic dimension also builds on the long-term success and competitiveness of a company (Winter & Knemeyer 2013). The economic aspect of sustainability involves meeting the company's, employees' and other stakeholders' needs (Krause et al. 2009).

2.2. Sustainable supply management

Ageron et al. (2012) indicate that firms do not want to be held responsible for environmental damage, either intentional or accidental, and therefore organizations increasingly implement mechanisms related to pollution reduction as well as actions considering employee health and safety. However, it is required that this kind of sustainable responsibility is extended to the supply base as well. (Ageron et al. 2012.) Boström (2015) applies the term extended upstream responsibility to describe the focal firm's commitment in taking the expectations of various stakeholders into account as extending the responsibility for sustainability beyond the firm's own borders. It is recognized that unethical behaviour of suppliers can cause severe damage to buyer firm's sustainability performance, and thus Sancha et al. (2016) suggest that one of the most critical challenges for the firms among sustainability is to implement practices by which to also ensure the sustainable actions of the suppliers. Moreover, organizations face growing challenges in managing their supply chain relationships as aiming to address the unethical and unsustainable activities that occur in their operations

(Touboullic & Walker 2015; Krause et al. 2009; Pagell and Shevchenko 2014). Even though increasing attention is paid on the sustainable supply chain management, companies still find it challenging to manage the social and environmental issues in their supply chains that they cannot directly control (Pedersen 2009).

The basis and imperative for sustainable supply chain management is the mind set of the organization and the orientation towards sustainability (Beske & Seuring 2014; Pagell & Wu 2009), and therefore the devotion to sustainability issues and supply chain management need to be integrated with the firm's strategy and values (Beske & Seuring 2014). Moreover, Giunipero et al. (2012: 260) further highlight that by considering environmental and social dimensions in addition to the economic values, sustainable supply management practices will assist the firm to "achieve its overall goals in a profitable and sustainable manner".

By employing sustainable supply management practices, firms are able to integrate environmental, economic and social criteria into their own and the whole supply chain's performance objectives in addition to the more traditional criteria such as quality, cost and flexibility (Ageron et al. 2012; Bai & Sarkis 2010; Yang & Zhang 2017). However, the importance of and emphasis on different dimensions of sustainability vary greatly in the existing research. Pagell & Shevchenko (2014) note that much of the previous research on sustainable supply chain management proposes that sustainable actions need to be carried out with especially paying attention to the economic performance of the firm. Therefore, it is often suggested that a firm should focus on those environmentally and socially sustainable activities that create economical benefits. Also Carter & Rogers (2008: 369) highlight that environmental and social dimensions should be "undertaken with a clear and explicit recognition of the economic goals of the firm". However, Pagell & Shevchengo (2014) suggest that firms must recognize the trade-offs and go beyond thinking that the shareholders are the most important stakeholders of the firm. The authors highlight that the supply chains have to satisfy the demands and needs of various different stakeholders such as governments, communities and NGOs, for whom the economic performance of the chain is not the prior interest but who focus more on the societal and environmental impacts of the chain. A firm may need to apply also non-synergistic practices, since by focusing only on economically beneficial practices, the supply chain will not be able to address all its negative impacts on social and environmental issues. (Pagell & Shevchenko 2014.)

The definitions vary greatly in the existing research about sustainability in the supply chain management, and include for example *sustainable supply chain management* (Beske & Seuring 2014; Pagell & Shevchenko 2014), *sustainable supply management* (Ageron et al. 2012; Giunipero et al. 2012; Sancha et al. 2016), *sustainable procurement* (Ghadimi et al. 2016), *sustainable sourcing* (Pagell, Wu & Wasserman 2010) as well as *responsible purchasing and supplier management* (Foerstl, Reuter, Hartmann & Blome 2010). Lintukangas et al. (2015) highlight that these terms are commonly applied interchangeably, and terms such as purchasing, procurement, supply management and logistics can be considered as subthemes of supply chain management (Seuring & Müller 2008a; Ghadimi et al. 2016). Term sustainable supply management can be considered to be the most relevant considering this thesis since the research covers sustainable supply chain management more closely from the dyadic perspective, and discusses the topic among the relationship between the buyer firm and its suppliers. However, in order to build more explicit picture of the area of research and similar terms, the main concepts are presented in Table 1 below with their definitions and possible synonyms.

Table 1. Definitions of SSCM.

Term	Definition	Possible synonyms
Sustainable supply chain management (SSCM)	<p>“... <i>the designing, organizing, coordinating, and controlling of supply chains to become truly sustainable with the minimum expectation of a truly sustainable supply chain being to maintain economic viability, while doing no harm to social or environmental systems.</i>” (Pagell & Shevchenko 2014: 45)</p> <p>“... <i>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.</i>” (Seuring and Müller 2008b: 1700)</p>	<p>Green supply chain management (Giunipero et al. 2012), Responsible supply chain management (Pagell et al. 2010)</p>

Sustainable supply management (SSM)	<p><i>“... the extent to which supply management incorporates environmental, social, and economic value into the selection, evaluation and management of its supply base.”</i> (Giunipero et al. 2012: 260)</p> <p><i>“... extends traditional SM system by including more sustainable aspects such as social responsibility and environmental protection ”</i> (Yang & Zhang 2017: 113)</p>	<p>Sustainable procurement (Ghadimi et al. 2016), Sustainable sourcing (Pagell et al. 2010), Responsible purchasing and supplier management (Foerstl et al. 2010), Green supply management (Lintukangas et al. 2015)</p>
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It can be concluded from the definitions of SSCM and SSM that majority of them address the triple bottom line of sustainability (Pagell & Shevchenko 2014; Bask et al. 2013). Thus, sustainable supply chain research addresses how environmental, social and economic aspects of sustainability are integrated in the supply management, and how this allows interlinked firms within supply chains to gain long-term economic success (Merminod & Paché 2011). Sustainable supply management takes broader value considerations into account when managing the suppliers (Giunipero et al. 2012). Socially responsible supply management relates to the buyer firm’s efforts to address human rights, safety, diversity, worker’s rights, wages and workforce issues among its procurement activities, whereas environmentally sustainable supply considers the environmental performance of the suppliers and the sourced products (Akhavan & Beckmann 2017; Leire & Mont 2010).

2.2.1. Transition from conventional supply management to SSM

Supply chain management (SCM) pursues to integrate the activities, actors and resources that are dependent on each other between the point of origin of the raw materials and the point of consumption of the firm’s products (Svensson 2007). SCM has conventionally been considered as rather operational and the focus has mostly been on cost reduction. However, during recent years this prevailing perspective has broadened considerably as organizations understood that in order to improve their competitiveness, more effective supply management strategies are needed. (Giunipero et al. 2012.) In addition to implementing sustainability in their own operations, firms have identified the need of their suppliers to apply similar sustainability practices as well, and thus the firms are required to encourage their suppliers to adopt sustainability as their own competitive priority (Krause et al. 2009). Above all, it is suggested that an organization is no more sustainable than its suppliers that the organization sources from

and therefore purchasing and supply management functions are crucial when pursuing sustainability (Miemczyk et al. 2012; Krause et al. 2009; Ghadimi et al. 2016). Also Yang & Zhang (2017) argue that successful implementation of sustainability in particular relies upon the procurement function of an organization, which includes the acquisition of materials, components and services from the upstream suppliers.

In addition to profits, the performance of a supply chain should be determined also by the extent to which the supply chain is influencing the social and environmental issues (Pagell & Wu 2009). Lintukangas et al. (2015) highlight that new risks, such as use of toxicant materials and child labour as well as poor working conditions, are increasingly arising from the supply base that are threatening to violate the brand and the image of the focal firm. The actions and poor performance of the suppliers related to the dimensions of sustainability can damage the sustainability performance of the buying firm and affect its long-term success (Sancha et al. 2016; Gimenez & Tachizawa 2012). Pagell & Shevchenko (2014) note that in the future, social and environmental performance of the supply chain will need to be considered equally or even more relevant than the economic performance.

Above all, what is crucial for the companies to understand is that most of the supply chains will not survive if they do not change their practices and business models to address their negative impacts on social and environmental issues (Pagell & Shevchenko 2014). Pagell et al. (2010) suggest that the transition from supply chain management to SSCM calls for the firms to change their strategies and tactics radically in order to respond to the changes derived from the societal needs for sustainability. Furthermore, the shift towards sustainable supply chain management will also require the firms to rethink their relationship management strategies to address the changes driven by sustainability needs (Touboulic & Walker 2015; Pagell et al. 2010).

Even though conventional supply chain management and SSCM are more and more aligned, no single supply chain exists that would pursue all the dimensions of triple bottom line equally and therefore would be considered as truly sustainable (Beske & Seuring 2014; Pagell and Shevchenko 2014; Pagell & Wu 2009). Also Pagell & Shevchenko (2014) highlight that SSCM as a stream of research is still very novel and research on unsustainable supply chains can still be seen as the norm. Furthermore, it is suggested that the present knowledge in the field of research is not adequate to form truly sustainable supply chains, and thus previous SSCM research has mostly concentrated on transforming unsustainable supply chains to be less unsustainable. The

authors also indicate that until scholars give up treating SSCM as a separate stream of supply chain management, it will not be possible to examine how to create truly sustainable supply chains. (Pagell & Shevchenko 2014.) Overall, the engagement in the concept of triple bottom line is suggested to be one of the factors distinguishing sustainable supply chain management from the conventional supply chain management (Beske & Seuring 2014).

2.2.2. Motivational factors and challenges in sustainable supply management

Despite of the increasing attention towards sustainable supply management, Giunipero et al. (2012) note that still very little is known about the actual drivers and barriers behind organizations' efforts towards sustainable practices. However, during recent years both scholars as well as the practitioners have paid increasing attention to sustainability issues and organizations' contributions and impacts related to different dimensions of sustainability (Ghadimi et al. 2016). Perry & Towers (2009) suggest that, in contrast to the traditional view, today firms are an integral part of their surrounding environment and society, and therefore the social and economic objectives of a firm are strongly interconnected.

Holt & Ghobadian (2009) study green supply chain management in UK manufacturing industry and focus on the environmental aspects of sustainability. In their study, they examine external and internal drivers for green supply chain management and find that *legislative pressure* is ranked the highest followed by *internal drivers* such as reduction of healthy and safety risk, *competitive drivers* such as outperforming the competitors, *supply chain drivers* such as requirements from organizations that you supply to, and *societal drivers* such as presenting environmentally or socially responsible image. (Holt & Ghobadian 2009.) Also Seuring & Müller (2008a) and Ghadimi et al. (2016) suggest that governmental legislation is one of the most dominating incentives for firms to engage in sustainable supply chain management in order to ensure their competitiveness. Moreover, Holt & Ghobadian (2009) find the pressure from *individual consumers* as one of the lowest factors to influence manufacturing companies. However, there are rather dissentient results in the prior research about the influence of the consumers, and for instance Ageron et al. (2012) suggest that the customer pressure is one of the most influential factors that motivate the firms to engage in sustainable supply management.

Giunipero et al. (2012), on the other hand, suggest that the *top management initiatives* are the most significant driver of sustainability, which indicates that the vision and support from the firm's top management are crucial in sustainable supply management. Also Pagell & Wu (2009) recognize the critical role of proactive top management in creating sustainable supply chains. In addition to top management vision as a critical internal driver for sustainable supply management, Ageron et al. (2012) also emphasize the role of employee and middle management commitment. However, being consistent with the other studies, Giunipero et al. (2012) suggest that sustainability efforts are still commonly driven by compliance to government regulations. Thus, it can be concluded based on the previous research that firms' efforts are still mostly reactive to laws and regulations, and more proactive and voluntary efforts are needed in order to drive the development of sustainable supply management forward.

Sustainable supply management may also improve the competitive advantage of the buyer by enhancing the reputation of the firm as well as retain the customer loyalty (Yang & Zhang 2017). Furthermore, Sancha et al. (2016) suggest that for example better working conditions of suppliers could result in enhanced satisfaction and wellbeing of the buyer firm's employees, and thus in higher reputation of the firm (Sancha et al. 2016). Similarly, Pedersen (2009) highlights improved corporate image and reputation as outcomes of sustainability related activities. Also Perry & Towers (2009) highlight that sustainability related practices might have positive effect on intangible concepts such as employee motivation and retention, firm's reputation management, management of investor relations and access to capital as well as establishment of good industrial relations. By proactively investing in sustainability issues can help also in risk management and to lead to better decision-making (Funk 2003). Integrating sustainability into their supply management practices, firms may be able to shield from the environmental and social risks as well as uncertainty related to their suppliers (Beske & Seuring 2014; Holt and Ghobadian 2009; Yang & Zhang 2017).

Porter & Kramer (2006) state that reinforcement of social issues in the company's value proposition may also distinguish the company from its rivals. Thus, investing in sustainability practices can also lead to differentiation. Funk (2003) notes that especially in commodity industries product differentiation may be challenging, but some companies have successfully managed to differentiate themselves by improved intangibles performance such as sustainability.

Despite the various drivers and potential benefits of engaging in sustainable supply management initiatives, it is critical to also recognize the challenges and barriers that firms may face that hinder them from enforcing sustainability in their supply operations. Giunipero et al. (2012) recognize factors that hinder firms' sustainability efforts to include lack of consensus at the CEO level, costs of sustainability and economic conditions, lack of sustainability standards and appropriate regulations, as well as misalignment of short-term and long-term strategic goals. As already mentioned above, sustainability is still considered to be rather broad and evolving concept and therefore organizations lack a common definition for it. Furthermore, often the rewards for the efforts are not clear enough and commonly understood inside the organization, which creates challenges in the implementation of sustainability. (Giunipero et al. 2012.)

Investing in sustainability initiatives in the supply chains can also be really expensive for firms. Giunipero et al. (2012) recognize the high initial buyer and supplier investment costs of employing sustainable supply management practices as well as economic uncertainty as the most critical barriers, and suggest that today the sustainable supply management is still mostly driven by the economic factors. Also Oelze (2017) emphasize the financial as well as personnel costs as considerable barriers in implementation of sustainable supply management practices. However, Zimon & Domingues (2018) suggest that long-term investments represent a necessity for the future-oriented firms that aim to drive sustainability forward. Thus, costs developed from integrating sustainability into the firm's operations and supply management should be viewed as investments that will generate benefits in the long run. (Zimon & Domingues 2018.)

Moreover, it is often unclear how the firm should measure the progress once the sustainability actions have been undertaken (Giunipero et al. 2012). Even though the relationship between sustainability activities and economic performance of the firm is unquestioned, it is suggested to be challenging to quantitatively evaluate the impact of these activities. Thus, it can be concluded that financial justification of the sustainable activities is really challenging to review. (Winter & Knemeyer 2013.) Also Savitz & Weber (2013: 5) note that an accurate and complete numerical description of the environmental and social benefits of sustainable activities still remains unsolved.

Köksal et al. (2017) suggest that in addition to the barriers related to the financial resources in the implementation of sustainable supply chain management, the challenges can also include the buyer firm's capabilities to manage intricate issues such

as implementation of the supplier instructions, monitoring of the suppliers as well as communication with the suppliers. Moreover, Oelze (2017) emphasize the challenges that may occur from the supplier side that may hinder the successful implementation of sustainable supply management practices. For instance, the suppliers may resist sharing of information with the buyer firm or to refuse following the guidelines and instructions due to the lack of understanding about their necessity. (Oelze 2017.) Thus, Ageron et al. (2012) highlight that one of the critical tasks of the buyer firms today is to assist the suppliers to acknowledge and understand the importance of the sustainability issues. Furthermore, challenges regarding the implementation of sustainability may be derived from the cultural differences between the buyer firm and its suppliers, and the suppliers may view the multiplicity of sustainability requirements and standards rather as extra costs without a link to their core business (Oelze 2017). Moreover, the suppliers' top management commitment, organizational culture as well as their location and size may act as barriers for implementing sustainable supply management (Ageron et al. 2012).

2.3. Managing sustainability in buyer-supplier dyads

Usually the focal firm, in the context of this thesis the buyer firm, is considered to be the most influential and powerful actor in the supply chain and to act as an initiator of sustainable supply management practices. This focal firm usually pursues to improve its own sustainability performance and thus also requires sustainable actions from its suppliers as well. (Beske & Seuring 2014; Gimenez & Tachizawa 2012; Miemczyk et al. 2012.) Increasing importance of economic, environmental and social sustainability compel the organizations to develop more comprehensive sourcing strategies that involve different supplier management activities (Akhavan & Beckmann 2017).

Yang & Zhang (2017) emphasize that sustainable supply management practices enable the information flow between the buyer and the supplier and also allow the buyer firm to know more about its suppliers. Moreover, buyer-supplier relationship has been recognized to have a tremendous impact on the profitability of the entire supply chain (Ghadimi et al. 2016), and manufacturers increasingly build closer, cooperative supplier relationships due to the benefits of reduced costs, shorter lead-time, increased productivity and better quality (Yang & Zhang 2017; Li et al. 2006). Lintukangas et al. (2015) highlight that the firm's capability to manage its supplier relationships is crucial in implementation of sustainable practices over the supplier network. Furthermore, since the buyer firm and the supplier are both necessary entities in the relationship, the

performance of both parties should be considered in the adaptation of SSM practices to attain sustainable supply chain and to examine the effectiveness of these practices (Sancha et al. 2016).

The tools and practices of sustainable supply management may vary depending on to what extent the buyer firm is aiming to influence and control its suppliers' performance (Ayuso et al. 2013). Krause et al. (2009) further suggest that the managerial actions should be adapted to the type of products and services supplied and to their strategic importance. Practices and strategies employed by the buyer firms may also vary based on the sustainability challenges they face, their context settings and divergent supply chains (Akhavan & Beckmann 2017). Akhavan & Beckmann (2017) suggest that SSCM strategies can range from reactive, compliance oriented strategies to more comprehensive, proactive sustainability concepts. When firms apply inactive and reactive SSCM strategies, the assessment activities are the main focus of supplier governance, whereas when the firm applies the proactive strategies more emphasis is placed in supplier collaboration and development to promote sustainability. (Akhavan & Beckmann 2017.) Beske & Seuring (2014) suggest that even though most companies today have implemented some sort of sustainability management systems, they are mostly reactive in nature, and only companies that highlight sustainability as one of their core values seem to engage in transforming their supply chains to be more sustainable.

Overall, Ciliberti et al. (2008) suggest that firms may apply two different management strategies considering the sustainable supply management; compliance with requirements or capacity building. They can either set standards and sustainability criteria for the suppliers and monitor their performance, or aim at developing the suppliers' capacity and capabilities related to sustainability by providing skills, technology and organizational capabilities (Ciliberti et al. 2008; Akhavan & Beckmann 2017; Boström 2015). Based on the previous research, firms may apply practices such as supplier selection, development and collaboration, as well as assessment and evaluation of the suppliers (Akhavan & Beckmann 2017; Gimenez & Tachizawa 2012; Sancha et al. 2016; Yang & Zhang 2017) as integrating sustainability into their supply management. Whereas supplier assessment enables the firm to identify the improvement areas of the suppliers, collaboration and development may be employed to assist the suppliers to advance the recognized capabilities (Sancha et al. 2016). This study will employ the same kind of categorization, and examines how firms can manage sustainability in relation to their suppliers through supplier selection, supplier

development, supplier collaboration as well as assessment of suppliers (see Figure 2 below).

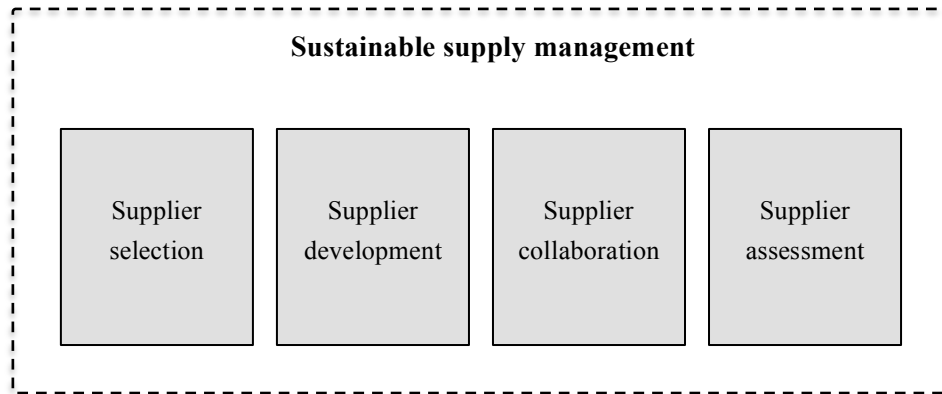


Figure 2. Sustainable supply management practices (Adapted from Yang & Zhang 2017).

2.3.1. Supplier selection

Chen, Lin & Huang (2006) indicate that one of the key strategic decisions of an organization is to determine the suitable suppliers in the firm's supply chain. The performance of the entire supply chain depends on the performance of each individual link in the chain, and thus supplier selection is considered to be one of the most critical practices of efficient supply chain management (Beske & Seuring 2014; Chen et al. 2006; Bai & Sarkis 2010). Ageron et al. (2012) further emphasize the fact that suppliers have a crucial role especially in sustainable supply chain management and contribute greatly to the buyer firm's performance as well as that of the whole supply chain. Moreover, careful supplier selection is required among the management of the firm's corporate legitimacy and reputation (Bai & Sarkis 2010).

Selecting appropriate suppliers is recognized to have variety of benefits such as reduced purchasing costs, improved competitiveness and enhanced end-user satisfaction (Ghadimi et al. 2016). Traditionally, buyer firms have focused exclusively on the economic dimension of sustainability when evaluating and selecting new suppliers such as price, delivery times, quality and flexibility (Yang & Zhang 2017; Chen et al. 2006; Bai & Sarkis 2010). However, today supplier selection is considered to be a critical partnering issue, and for companies that emphasize and engage in sustainability, commodity and price-based supplier relationships are no longer adequate (Bai & Sarkis 2010). Thus, it is essential to consider the right criteria for the selection of suppliers

when striving for sustainable supply management. In addition to the more traditional criteria, Ageron et al. (2012) further suggest that the supplier selection should include aspects concerning size of the suppliers, possible certifications, location of the suppliers as well as the environmental and social issues at large.

Supplier selection includes the evaluation and selection of supplier characteristics that best meet the requirements of the buyer firm (Yang & Zhang 2017), which means that the suppliers need to possess relevant skills and capabilities to be selected as partners (Ghadimi et al. 2016). The supplier selection process aims to decrease the purchase risk, maximize the overall value for the buyer firm as well as to build and develop close and long-term relationships between the parties (Chen et al. 2006). Bai & Sarkis (2010) note that increasing attention towards sustainability makes the supplier selection process even more complex. In addition to the factors addressing the economic performance in supplier selection process, the value of considering also the environmental and social aspects has been recognized recently (Yang & Zhang 2017). Considering sustainable supply management, economic, environmental and social dimensions of sustainability need to be carefully evaluated in the firm's supplier selection agenda (Ageron et al. 2012; Bai & Sarkis 2010; Zimon & Domingues 2018). Seuring & Müller (2008a) suggest that supplier selection process that incorporates also environmental and social criteria represents one of the main tools in the firm's supply management.

Due to the increasing expectations from various stakeholders and customers, manufacturing firms are more willing to source raw materials and products from suppliers that engage in triple bottom line and integrate sustainability into their operations (Ghadimi et al. 2016). To comprehensively evaluate the suppliers' sustainability performance a number of criteria can be applied (Bai & Sarkis 2010; Ghadimi et al. 2016). Overall, Ageron et al. (2012) suggest that sustainable supplier selection criteria should include objectives such as price, quality, reliability, flexibility, supplier certifications, environmental aspects and social responsibility. Ghadimi et al. (2016) identify five main criteria among environmental dimension; environmental performance, green image, pollution control, green competencies and green design. These criteria involve practices such as implementation of environmental policies, efforts to develop environmentally friendly image among different stakeholders, ability to control pollution levels and emissions in compliance to regulations and requirements as well as competencies to greener production and ability to design greener products. (Ghadimi et al. 2016.) Furthermore, Bai & Sarkis (2010) suggest that factors such as pollution controls, pollution prevention, environmental management system, resource

consumption and pollution production should be taken into consideration among the environmental metrics. Moreover, the buyer firm may also promote sustainable supply by preferring suppliers that provide materials that can be reused, recycled and are absence of toxicants (Yang & Zhang 2017).

Bai & Sarkis (2010) suggest that the research addressing economical and environmental aspects in the supplier selection is increasing, but social aspects such as child labour, human right abuses as well as employee health issues still need more attention. Thus, in order to fulfil all dimensions of triple bottom line among the supplier selection process, also social criteria should be integrated with the economic and environmental criteria, and issues related to human rights, child labour, employees' health and safety, employment practices, local communities as well as stakeholder involvement should be recognized (Ghadimi et al. 2016). Firm may also cooperate with local suppliers to reduce the risk of child labour. However, in this case the acquisition costs may increase (Winter & Knemeyer 2013). Moreover, firms may decrease the risks concerning sustainability issues by narrowing down the supply base (Beske & Seuring 2014) and supplying from small number of suppliers when possible (Pagell et al. 2010).

Due to the pressure from various stakeholders towards the firms' extended responsibility for also their suppliers' practices, as well as the rise of private sustainability regulation among global production chains, firms increasingly adopt private voluntary regulatory systems such as various standards, codes of conducts as well as auditing and certification schemes across their upstream supply chains (Boström 2015; Egels-Zandén & Lindholm 2015; Locke, Rissing & Pal 2013). For instance, buyer firms may select suppliers that have certifications and follow certain sustainability standards to ensure the state of their actions and performance regarding sustainability (Ageron et al. 2012). Morali & Searcy (2013) suggest that buyer firms can expect the suppliers to conform with certain environmental and social standards and management systems such as ISO 14001 and SA8000. For instance the social standard of SA8000 sets the criteria for health and safety issues, working conditions as well as right to form unions (Freise & Seuring 2015). Moreover, Morali & Searcy (2013) categorized the standards most commonly employed by the buyer firms into *codes of conducts*, *certifications* related to products or processes, as well as *management systems and initiatives*. By these standards and supplier contract requirements buyer firms seek to encourage sustainability in their suppliers operations (Morali & Searcy 2013) and enhance the effectiveness of the supplier selection process (Yang & Zhang 2017). Furthermore, Boström (2015) suggest that in addition to different written policies and

management systems, the use of various labels and lists of restricted substances are common especially in the textile industry.

Codes of Conducts (CoCs) may be applied by the focal firms as seeking to influence the suppliers' practices and to provide instructions and guidelines of how the suppliers are expected to operate considering the firm standards (Mamic 2005). Oelze (2017) note that use of Codes of Conduct is rather common especially in the textile industry when setting specific sustainability criteria for the suppliers and assuring the suppliers' compliance with these standards and requirements. Yu (2008) suggest that majority of the codes seem to be based on the core conventions of ILO (International Labor Organization), and may include directions on various issues such as child and forced labour, decent wages and working hours, discrimination, the rights to freedom of association, health and safety of the employees as well as practices related to environmental aspects (Yu 2008; Mamic 2005; Locke et al. 2013). Locke et al. (2013) note that the principles and goals of the organizations' Codes of Conduct may vary greatly in terms of which issues they mainly focus on. Thus, multiplicity of the codes is suggested to cause redundancies and confusion among the suppliers since they are often required to engage in and comply with numerous Codes of Conduct and requirements of different buyer organizations. Moreover, the suppliers are monitored and audited various times a year by multiple buyer organizations and third-party auditors according to the various regulations and requirements. (Locke et al. 2013.) This kind of supplier assessment is discussed more comprehensively in the forthcoming parts of this thesis.

2.3.2. Supplier development

Supplier development is one form of exchange occurring between organizations and involves the activities and efforts applied by the buyer firm to enhance the performance and develop the capabilities of its suppliers (Krause, Handfield & Tyler 2007; Yang & Zhang 2017). The traditional overall objective of the process is to reduce costs, gain better quality of products and greater flexibility as well as to secure delivery (Krause et al. 2007). In addition to traditional supplier development, sustainable supplier development practices include activities aiming to achieve also the environmental and social objectives (Yang & Zhang 2017). Yang & Zhang (2017) further suggest that sustainable supplier development practices may also lead to better availability of products, enhanced delivery speed and increased reliability of the buyer and thus decrease the uncertainty in the buyer firm's operations. Thus, Ghadimi et al. (2016)

highlight that the buyer firm should engage in continuous improvement to increase the suppliers' awareness of the dimensions of sustainability.

Sustainable supplier development encompasses concepts such as sharing of knowledge and resource investments between the buyer and supplier (Krause et al. 2007). By investing in supplier development, the buyer firm can offer the supplier the needed external knowledge and resources (Yang & Zhang 2017). Furthermore, the buyer firm is suggested to get directly involved with the supplier's business through knowledge-sharing and shared asset investments (Akhavan & Beckmann 2017; Krause et al. 2007). Krause et al. (2007) suggest sustainable supplier development to include activities such as setting of common goals, supplier evaluation and performance assessment as well as supplier training. Supplier training is also rather frequently mentioned in the existing literature on sustainable supplier development practices (Krause et al. 2007; Ghadimi et al. 2016; Akhavan & Beckmann 2017; Holt & Ghobadian 2009; Pagell et al. 2010; Yang & Zhang 2017; Gimenez & Tachizawa 2012). Moreover, Holt & Ghobadian (2009) mention supplier education, mentoring, coaching and dissemination of best practices as approaches to respond to external and internal pressures on sustainability issues. However, since supplier development may require large investments from the buyer firm, it is critical for the buyer to recognize those investments that have potential to earn benefits and add value (Krause et al. 2007).

Krause et al. (2007) suggest that companies that engage in direct involvement development activities have more personal face-to-face interactions with their suppliers, which results in efficient transfer of tacit knowledge between the firms and in improved performance. The authors further suggest that the direct involvement development activities may include practices such as regular visits to suppliers' sites, training of the suppliers' employees as well as assigning a dedicated team for supplier development. (Krause et al. 2007.) The buyer firm may also provide technological support, needed equipment and professional personnel to the supplier in order to enhance the supplier's performance and among new sustainability requirements (Yang & Zhang 2017; Touboulic & Walker 2015). Furthermore, Li et al. (2006) mention information sharing as one of the important dimensions in managing of suppliers. Changing information between the partners on a regular basis enables the organizations to work as a single entity, better understand the needs of the end customer and react to the market changes faster. (Li et al. 2006.)

Supplier development focusing on the environmental dimension of sustainability seeks to enhance the eco-performance of the suppliers (Akhavan & Beckmann 2017). The buyer firm can for instance assist its suppliers to implement environmental practices (Yang & Zhang 2017). Activities regarding the environmental supplier development are suggested to include training of suppliers, collaboration in the product design and process modification as well as shared development of new innovations (Akhavan & Beckmann 2017). Supplier development regarding the social aspects includes supporting suppliers to fulfil the social requirements and to implement their capabilities (Akhavan & Beckmann 2017). These activities are suggested to include training of suppliers such as how to meet different standards, development of corrective action plans and guidelines as well as the follow-up activities. By this kind of cooperation with the suppliers, the buyer firms aims to improve social sustainability of its supply base, which is beneficial especially when pursuing long-term relationships. (Akhavan & Beckmann 2017; Leire & Mont 2010.)

2.3.3. Supplier collaboration

Whereas supplier development refers to the buyer firm's efforts to develop its suppliers' capabilities and thus enhance their performance (Yang & Zhang 2017), supplier collaboration refers to the cooperation between the parties with an objective to jointly improve the performance (Sancha et al. 2016). Yang & Zhang (2017) further suggest that the aim of supplier collaboration is to create a situation that benefits the buyer and the supplier mutually instead of an adversarial relationship. Due to increasing attention towards firms' environmental and social issues, also emphasis on the sustainable and strategic role of supplier relationships has grown (Bai & Sarkis 2010; Seuring & Müller 2008b). Moreover, collaboration is recognized to have a critical role among supply chain management in improving the supply network's competitive advantage and also in lowering costs and uncertainty (Beske & Seuring 2014; Carter & Rogers 2008). Companies are also able to ultimately reduce risk related to sustainability issues by increasing collaboration with their suppliers and engaging in long-term relationships (Beske & Seuring 2014). Ageron et al. (2012) suggest that by collaborating with its suppliers the buyer firm is expected to increase its performance among traditional dimensions such as quality and flexibility, but also benefit from the suppliers' improvements among sustainability issues. Furthermore, Touboulic & Walker (2015) propose that collaboration between supply chain partners provide the firms an opportunity to create value that is not possible for organizations to create independently.

The role of collaboration between supply chain partners in furthering sustainability initiatives has been widely acknowledged in the previous research on sustainable supply chain relationships (Touboulic & Walker 2015) as cooperation between partnering firms is needed in order to reach and maintain sustainable performance of the entire supply chain (Ageron et al. 2012). In addition to the fact that supplier collaboration has been recognized to be one of the common best practices of supply chain management considering enhanced organizational outcomes, it is also considered to be a critical component in creating sustainable supply chains and in achieving sustainable development objectives (Touboulic & Walker 2015; Pagell & Wu 2009). Sancha et al. (2016) suggest in their study that assessment of suppliers helps to improve the focal firm's social reputation, whereas collaboration with them improves the suppliers' social performance. Thus, the authors highlight the importance of collaboration between the firm and its suppliers in order to improve the social performance of the suppliers and to achieve a truly sustainable supply chain. (Sancha et al. 2016.)

Supplier collaboration involves the combination of resources and capabilities between the buyer firm and the suppliers (Yang & Zhang 2017) and is also suggested to relate to enhanced communication as well as technological and logistical integration between the organizations (Beske & Seuring 2014; Seuring & Müller 2008a). Sharing of information and know-how are considered to be critical in building collaborative relationships and in communicating sustainability requirements to the suppliers (Beske & Seuring 2014; Seuring & Müller 2008a; Yang & Zhang 2017; Sancha et al. 2016; Krause et al. 2009). Moreover, Krause et al. (2009) suggest that the buyer firm should particularly focus on collaboration with the suppliers and cross-fertilization of knowledge with them to reduce the environmental and social impacts of the products. Seuring & Müller (2008a) note that collaboration and communication between supply chain members, shared understanding on what needs to be achieved regarding sustainability aspects, and also learning and innovation are considered relevant in sustainable supply chain management (Seuring & Müller 2008a).

Li et al. (2006) apply the term 'strategic supplier partnership' and define it as long-term relationship between the focal company and its supplier that underlines direct, long-term collaboration between the parties and promotes contribution for mutual planning and problem solving. These strategic partnerships enable the parties to work more closely with each other and decrease time and efforts spent, and by this to work more efficiently. (Li et al. 2006.) Touboulic & Walker (2015) further suggest that depth and quality of the supplier relationships are critical factors in fostering sustainable supply

chain management. Also Krause et al. (2007) emphasize that performance improvements that the firms aim to achieve through efficient supply chain management are only possible when the organizations commit to develop long-term relationships with their key suppliers. Development of long-term relationships between the buyer firm and its suppliers is widely recognized also by other researchers in the field (see also Pagell & Wu 2009; Beske & Seuring 2014).

Also joint research and development between the parties are considered to be noteworthy as aiming to achieve the sustainability goals (Yang & Zhang 2017; Sancha et al. 2016; Beske & Seuring 2014). The partnering firms may for example co-develop new materials and processes to support sustainable development (Pagell et al. 2010). Moreover, Ageron et al. (2012) further suggest that the buyer firm may also utilize direct and joint involvement of suppliers in the development of sustainable management and solutions.

Moreover, Yang & Zhang (2017) indicate that close supplier collaboration has mutual benefits such as reduced information asymmetries, increased mutual trust, and also long-term relationships between the firms are developed and maintained. In contrast to power that dominates compliance-based relationships (Touboulic & Walker 2015), trust between the partners is crucial, since lack of it can act as a barrier for collaboration (Beske & Seuring 2014). Moreover, investing in long-term relationships with the supply chain partners is suggested to enable trust between the actors as well as development of common goals and shared structures (Beske & Seuring 2014). Furthermore, in the long-term as the partners start to trust on each other, the quantity and quality of shared information is suggested to increase (Beske & Seuring 2014; Miemczyk et al. 2012). Also the study of Touboulic & Walker (2015) highlights the importance of trust, relationship history and commitment in supporting collaborative efforts for sustainability and in enhancing sustainable supply chain performance. Furthermore, Krause et al. (2007) suggest that collaboration between the actors decreases the opportunistic behaviour of firms as well as lowers the perceptions of exchange hazards. Moreover, information exchange, strong willingness to learn from each other as well as good understanding of own and the other party's responsibilities and capabilities are suggested to build a rich collaborative context and enhance the sustainability performance of firms (Ageron et al. 2012).

However, Holt & Ghobadian (2009) suggest that only few companies engage in collaboration and proactive support of their suppliers and more often they apply

practices related to supplier auditing. Pagell et al. (2010) highlight the fact that usually the procurement function has limited resources, and close long-term supplier partnerships are costly to develop and maintain. Furthermore, it is acknowledged that close partnerships with the suppliers increase the transaction costs, and benefits of the partnerships are unlikely to be greater than the increased costs. (Pagell et al. 2010.) Moreover, Boström (2015) note that especially small firms may face challenges in developing close relationships with their suppliers with frequent and repeated interactions, and suggest that these might be possible only for the large organizations.

Touboullic & Walker (2015) on the other hand find in their study that the main challenge to further collaboration and work in a unified manner towards the common goals between the firm and its suppliers is the lack of alignment of systems and technologies. Ageron et al. (2012) note that even though collaborative approach consisting of shared vision, systems, resources as well as actions appears to be suitable for sustainable supply management, the adjustment of the firms' strategies might end up being a challenge. The authors further emphasize that individualistic approach of a firm is likely to be a faster way but on the other hand the firm might then lack the suppliers' support and long-term strategic perspective. (Ageron et al. 2012.) Krause et al. (2009) further highlight that if the buyer firm faces substantial challenges in engaging the supplier to collaborate regarding the sustainability issues, the supplier selection and retention decisions should be evaluated again.

2.3.4. Supplier assessment

In addition to the efforts of driving sustainability forward in their upstream supply chain through supplier development and collaboration, Yang & Zhang (2017) suggest that buyer firms should also continuously monitor and assess their suppliers to confirm that the suppliers comply with given requirements and guidelines, to keep track of their performance, and in order to provide timely feedback of how the suppliers can improve their activities. Supplier assessment refers to monitoring, evaluating and auditing of suppliers (Sancha et al. 2016; Suering & Müller 2008a). Regarding sustainable supplier assessment, this means taking also the environmental and social aspects in addition to the economical ones into consideration when monitoring suppliers and their performance (Yang & Zhang 2017; Gimenez & Tachizawa 2012; Touboullic & Walker 2015). Sancha et al. (2016) define supplier assessment to include arm's length transactions implemented by the buyer firm that aim to control and evaluate suppliers'

performance regarding the sustainability aspects and with respect to specific performance criteria.

As opposed to the above highlighted aspects that supplier development and education as well as supplier collaboration are recognized as critical practices in creating sustainable supply chains (Touboullic & Walker 2015; Pagell & Wu 2009; Holt & Ghobadian 2009), Suering & Müller (2008a) suggest that instead of further supplier development it would be more beneficial for sustainable supply management to set clear measures and targets for the suppliers on what they need to aim for. Beske & Seuring (2014) note that firms are also better able to manage risk by determining the abovementioned standards and certifications and to monitor the suppliers against these criteria. Furthermore, supplier monitoring activities are suggested to be justified and necessary particularly in dynamic and uncertain business environments (Yang & Zhang 2017).

Companies should have accurate systems to assure the suppliers' compliance with sustainability issues (Akhavan & Beckmann 2017). The supplier evaluation can include for example different reporting and monitoring elements such as on-site visits to suppliers' premises (Gimenez & Tachizawa 2012, Akhavan & Beckmann 2017) and gathering of information through surveys and questionnaires (Yang & Zhang 2017, Sancha et al. 2016, Gimenez & Tachizawa 2012, Akhavan & Beckmann 2017, Ayuso et al. 2013). Regular supplier assessment practices applied to monitor suppliers' sustainability performance may also include inspections and audits conducted by the buyer firm (Yang & Zhang 2017; Ayuso et al. 2013; Sancha et al. 2016; Helin & Babri 2015). Furthermore, the buyer firm can also utilize independent third party to monitor sustainability compliance of its suppliers (Akhavan & Beckmann 2017). Mamic (2005) define these as internal and external monitoring; internal supplier monitoring is conducted by the buyer firm itself to ensure the suppliers' compliance with the requirements such as the Codes of Conduct, whereas external monitoring refers to the audits conducted by the third-party. Moreover, an audit process is suggested to commonly include the inspection and observation of the working conditions in the supplier's factory, inspection of the relevant documents as well as interviews with the supplier's employees (Boström 2015; Mamic 2005).

Yang & Zhang (2017) suggest that by monitoring the suppliers the buyer is able to acquire more information about them, which is considered to act as a basis for establishing long-term and stable relationships. Furthermore, Boström (2015) note that especially by conducting internal audits the buyer firm is able to develop closer

relationships with the suppliers and to evaluate thoroughly how the suppliers are implementing the guidelines and requirements of the buyer firm. Moreover, significant information exchange resulted from supplier assessment including evaluations and audits, performance feedback as well as certifications, is suggested to eventually lead to performance improvements of the buyer (Krause et al. 2007). Supplier monitoring enables the buyers to detect sustainability issues in the supply chain, and the evaluation of suppliers presses them to pay attention to the sustainability aspects in their own supply chains (Sancha et al. 2016). Furthermore, the buyer firms are suggested to apply supplier assessment practices with the aim of impeding the suppliers' unethical behaviour and lowering their opportunistic actions. Considering the benefits for the supplier, reduced opportunistic behaviour is proposed to improve also the sustainability performance of the supplier. (Sancha et al. 2016; Carter & Rogers 2008.)

However, Yang & Zhang (2017) note that some of the suppliers may have negative attitude towards these practices and consider the sustainability-related requirements imposed by the buyer as extra burden. If suppliers experience difficulties in accomplishing the requirements, they may also start behaving opportunistically (Yang & Zhang 2017). Moreover, Boström (2015) emphasize that for instance the on-site visits to suppliers' premises require substantial resources from the buyer firm especially if the suppliers are located at a great distance. Small firms in particular are suggested to face considerable challenges in comprehensively monitoring their suppliers as they lack the power, resources as well as the global reach. Furthermore, excessive supplier monitoring is suggested to diminish the mutual trust and commitment among the buyer-supplier relationship. (Boström 2015.) The applicability and effectiveness of audits can also be criticized in a sense that they are considered to be only snapshots of the current situation of the supplier's sustainability status, but are alone unable to explain why something is happening or how can it be improved (Sancha et al. 2016).

Mamic (2005) further notes that the audits can be divided into announced or unannounced audits depending on whether the supplier has been notified about the upcoming audit beforehand. Based on this categorization, Köksal et al. (2017) emphasize that it is possible that suppliers can prepare and embroider their activities and facilities for the announced audits. Thus, the audits might not tell the whole truth. Moreover, Boström (2015) indicates that especially small firms might face challenges in conducting unannounced audits to their suppliers' premises due to low negotiating power.

Furthermore, the study of Sancha et al. (2016) shows that supplier assessment might actually not be the best practice in extending sustainability to suppliers and in aiming to improve the sustainability performance of the suppliers. The authors do not find a direct link between supplier assessment and social performance of the suppliers. Considering the social aspect of sustainability such as working conditions and use of child labour, based on the study of Sancha et al. (2016) it can be concluded that supplier auditing and monitoring do not lead to direct improvements in the suppliers' premises nor in their sustainability performance. Gimenez & Tachizawa (2012) on the other hand suggest that supplier assessment alone is not adequate enough, but that the buyer firms should implement both supplier assessment as well as collaboration with the suppliers in their attempts to make their supply chains more sustainable. The authors indicate that supplier assessment may be applied first to identify the needed improvements and actions, but the buyer firm needs to also collaborate with its suppliers to enhance the sustainability performance. (Gimenez & Tachizawa 2012.)

Thus, it can be concluded that the assessment and monitoring of suppliers alone are not sufficient (Zimon & Domingues 2018; Boström 2015). Sancha et al. (2016) highlight that the buyer firm who conducts supplier evaluations is also required to quantify and communicate the achieved results to the suppliers. This is especially important in ensuring that the supplier recognizes the inconsistency between its current performance and the buyer's expectations, and only then the supplier is able to improve its performance. (Sancha et al. 2016.) Also Krause et al. (2007) highlight the importance of providing performance feedback to the suppliers.

Moreover, Sancha et al. (2016) emphasize that in addition to indicating the suppliers' sustainability behaviour, the audits performed by the buyer firms should also lead to actual improvements in the suppliers' premises and working conditions. Thus, Yang & Zhang (2017) note that the buyer firm should use the results from the sustainability evaluations as a basis to require corrective actions from the suppliers regarding their environmental and social performance, and possibly abandon the suppliers that perform poorly and that are not able to comply with the requirements. Also Akhavan & Beckmann (2017) propose that supplier evaluation and assessment should be reinforced with explicit remediation or sanction systems. Boström (2015) suggests that for instance the violations of the Codes of Conduct should lead to effective sanctions, at the worst including the replacement of the supplier. However, ending the supplier relationship by replacing the supplier is considered as a significant step involving substantial

transaction costs, including for instance the training of new suppliers, and is not seen as the most responsible alternative when faced with non-compliance. (Boström 2015.)

Köksal et al. (2017) emphasize the criticality of corrective action plans when areas of improvement or non-compliance are revealed among assessment of the suppliers to enable the performance improvements. Mamic (2005) further suggests that the buyer firm should provide assistance to the suppliers to promote the improvements and remediation among the supplier operations, which may include explicit recommendations about the areas of improvement, a specific time frame in which the corrective actions are to be taken as well as the development plan of how these improvements can be implemented. The buyer firm should develop the corrective action plan in cooperation with the supplier and then monitor the implementation process regarding the plan. (Mamic 2005.)

2.4. Sustainable supply management in SMEs operating in the textile industry

In this chapter, the special characteristics of small and medium-size enterprises (SMEs) are presented and the role of sustainable supply management among SMEs is discussed. Furthermore, the characteristics of sustainability in the textile industry, which acts as the context for this study, are reviewed and discussed. Eventually, the theoretical framework of the study is developed on the practices of sustainable supply management taking also the special characteristics of SMEs and the target industry into account.

2.4.1. SSM in small and medium-sized enterprises

Small and medium-sized enterprises account for the majority of all businesses globally (Pedersen 2009; Howarth & Fredericks 2012; Perrini & Tencati 2006), and thus represent a dominant form of a business organization worldwide (Battisti & Perry 2011). Furthermore, SMEs compose 99% of all businesses in Europe and 66% of total employment in the EU (Baden et al. 2009). Small and medium-sized enterprises are defined as firms that employ fewer than 250 persons and that have an annual turnover of up to 50 million euros, and/or an annual balance sheet total not exceeding 43 million euros (Commission Recommendation 2003; Statistics Finland 2018). Furthermore, an SME must meet the criterion of independence meaning that it is not owned as to 25 per cent or more of its capital or voting rights by one enterprise or jointly by several enterprises to which the criterion of SME is not applicable (Statistics Finland 2018).

Moreover, within the SME category, companies can be further divided under micro, small and medium-sized firms. A small enterprise can be defined as firm that has fewer than 50 employees and whose annual turnover and/or annual balance sheet total do not exceed 10 million euros. Furthermore, a micro enterprise can be defined as firm that has fewer than 10 employees and whose annual turnover and/or annual balance sheet total do not exceed 2 million euros. (Commission Recommendation 2003.) See Table 2 below for SME definitions.

Table 2. Definitions of SMEs (Adapted from European Commission 2018a).

Company category	Number of employees	Turnover	Balance sheet total
Medium-sized	< 250	≤ 50 million €	≤ 43 million €
Small	<50	≤ 10 million €	≤ 10 million €
Micro	<10	≤ 2 million €	≤ 2 million €

The SME sector is considered as a remarkable contributor to innovativeness, a source of competition and an important provider of employment and labour flexibility in the markets (Perry & Towers 2009). In addition, Baden et al. (2009) note that SMEs' environmental impact per unit is greater than those of large corporations, and they also heavily contribute to pollution and waste levels. It is suggested that SMEs together account for up to 70% of industrial pollution worldwide (Baden, Harwood & Woodward 2011; Battisti & Perry 2011). Thus, due to the large amount of SMEs, their environmental impact may actually equal or even exceed that of the large corporations (Nulkar 2014). Taking all these aspects into account, SMEs are required to employ especially the environmentally sustainable practices (Diabat et al. 2014), and Battisti & Perry (2011) further highlight that there is a growing need to examine why and how they engage in this kind of environmental sustainability.

Previous research combining SMEs and sustainable supply chain management focuses mostly on SMEs as suppliers and discusses how SMEs are able to engage in the sustainability initiatives coming from their large buyers (see e.g. van Hoof & Thiel 2014; Nulkar 2014). However, Baden et al. (2011) note that there is a growing need to examine how the increasing demand of integrating sustainability criteria into the procurement decisions influence the SMEs. Touboulic & Walker (2015) further emphasize that the lack of research focusing on the small firms' activities in sustainable

supply chain management has been frequently recognized also in the previous research. Moreover, also European Commission has recognized the need for more research on when and how SMEs make and implement sustainability requirements on their suppliers, and how to best promote these requirements taking the capacities of SMEs into consideration (Baden et al. 2011).

SMEs have generally seen to fail in their environmental sustainability attempts due to low take-up rates of sustainable business practices. This is partly because the prevailing frameworks and standards are developed in and for large corporations, not for SMEs. Since SMEs do not operate as miniature large companies, these frameworks cannot be directly applied to SMEs. (Battisti & Perry 2011.) Also Ciliberti et al. (2008) note that SMEs' sustainability practices differ substantially from the large companies' practices. Furthermore, Perrini & Tencati (2006) highlight that many of the methods, tools and instruments developed are not applicable in SMEs due to their complexity and lack of flexibility. Due to the distinct characteristics of SMEs, the practices and issues that apply to large corporations cannot be simply just transferred to small and medium-sized companies (Baden et al. 2011; Pedersen 2009).

Moreover, it is relevant to study sustainable supply management practices among SMEs in particular due to the special characteristics of these firms. SMEs are strongly influenced by their lack of resources and support to implement sustainability practices and also by their strong ties with the business partners and local communities (Ciliberti et al. 2008). Furthermore, Baden et al. (2011) note that sustainability activities in SMEs are often part of the owner-manager's responsibilities that need to be taken care of alongside a large number of other tasks. Thus, lack of management resources is recognized to be a critical barrier for SMEs that hinder them from investing in activities that are not essential for day-to-day operations of the business (Battisti & Perry 2011). Perry & Towers (2009) further highlight that smaller firms' position to implement sustainability is more challenging than the ones of larger firms due to the limited skills and resources, ineffective production as well as lack of understanding about the demands of various stakeholders. Furthermore, SMEs are suggested to have lower bargaining power towards the suppliers due to their small size and smaller purchase volumes (Ayuso et al. 2013; Jorgensen & Knudsen 2006), and therefore the enforcement of sustainability standards into the supply chain might be more challenging for them than for the larger players (Ciliberti et al. 2008; Pedersen 2009; Ayuso et al. 2013).

Moreover, it is suggested that SMEs might not be as willing to act proactively and engage in voluntary sustainability initiatives as the larger corporations. This may be partly due to the low visibility of an individual SME, lower external pressure and therefore also lower reputational risk. (Battisti & Perry 2011; Holt & Ghobadian 2009.) Also Ayuso et al. (2013) suggest that in addition to the fact that large corporations have more human, financial and technological resources that can be reserved for the sustainability activities, they are also more visible in the environment in which they operate and more exposed to external pressure, and may therefore be more induced to apply sustainability initiatives to reduce risk. Ageron et al. (2012) further indicate that proactive approach towards sustainability issues has been mostly applied by large corporations, whereas SMEs rather employ more reactive practices. Baden et al. (2011) further note that SMEs are less engaged in voluntary activities that do not possess direct business benefits. Moreover, sustainability related activities of SMEs may be affected by the fact that the firms are usually owner-managed and thus do not possess responsibility towards external shareholders. (Baden et al. 2011.)

Ghadimi et al. (2016) further suggest that generally SMEs do comply with the laws and regulations related to environmental aspects of the business but more easily neglect the socially sustainable practices. Thus, consciousness of SMEs needs to be increased also about the advantages of social sustainability for the business. (Ghadimi et al. 2016.) Also Baden et al. (2011) propose that SMEs might pay more attention to the environmental activities than the social, and argue that this might be due to the increased interest within the media and governments towards the environmental issues as well as the increasing legislation in relation to these aspects. Furthermore, the authors indicate that the social responsibilities of the business among the SMEs are still mostly viewed as responsibilities towards the company's own staff, and the understanding of the responsibilities towards the wider society and the local communities at large still requires more attention. (Baden et al. 2011.)

In addition to the fact that SMEs differ from large corporations for instance in terms of resource disadvantages, they also differ in terms of their behavioural advantages, which include for example entrepreneurial drive and risk taking, motivation and perseverance, motivated employees as well as flexibility (Perry & Towers 2009). Furthermore, as already highlighted as an important contributor among the implementation of sustainability initiatives, the concept of managerial commitment is particularly present in SMEs in which the manager or owner may decide about the allocation of the company resources. Taking into consideration the facts that SMEs operate in a more

personalized way and that they are less visible for the public, also their efforts related to sustainability activities are more linked to the personal values of the firm's manager or owner than to the external pressure. (Pedersen 2009; Perry & Towers 2009; Battisti & Perry 2011.) Battisti & Perry (2011) further note that since the ownership and management of SMEs may be very centralized and of the same person's responsibility, small and medium-sized firms mostly act and behave based on the values, motivations and psychological characteristics of individuals.

Moreover, Boström (2015) suggest that the individual firms may overcome the challenges of the small size and low negotiating power towards the suppliers by collaborating with different business associations and networks as well as by developing joint requirements and conducting joint supplier assessment practices (Boström 2015). Furthermore, Köksal et al. (2017) indicate that SMEs might benefit from and better implement sustainable supply management practices by sourcing from a small supplier base, which also enables the development of long-term supplier relationships.

2.4.2. Characteristics of the textile industry

The textile industry is characterized by its global nature (Boström & Micheletti 2016; Zimon & Domingues 2018). The supply chains of the textile industry are globally stretched and fragmented, and thus may be rather complex (Oelze 2017; Köksal et al. 2017; Boström & Micheletti 2016). The fragmented nature of the supply chains may create challenges for the industry firms since a large variety of actors from diverse countries, which are commonly developing markets, are involved in the supply chains, and thus also the transparency of the supply chain may suffer (Köksal et al. 2017). Boström & Micheletti (2016) further emphasize that the globalized textile production commonly involves various cultural, geographic and political contexts. Complexity and fragmented nature of the textile industry due to the globalization of the supply chains increase the importance of sustainability issues of the textile production (Khurana & Ricchetti 2016). Moreover, involvement of various players and national contexts in a firm's supply creates substantial challenges related to the governance of the supply chain (Boström & Micheletti 2016). Overall, the globalization of the supply chains in textile industry considerably increases the industry's impact on the environmental and social issues (Khurana & Ricchetti 2016).

Goworek (2011) highlights that textiles are rarely manufactured by the retailers themselves and notes that the production is commonly outsourced and sub-contracted to textile manufacturers located around the world. Boström & Micheletti (2016) suggest that industry firms seek to outsource the textile production to developing countries in particular in order to reduce manufacturing costs and to stay in the tightening global competition. Firms outsource their production to as well as acquire raw materials from countries with low labour costs (Zimon & Domingues 2018; Shen 2014). However, in addition to lower costs, these countries also have lower standards related to labour and environmental issues, and people are less aware of the environmental aspects and human rights (Khurana & Ricchetti 2016; Shen 2014).

Furthermore, Köksal et al. (2017) emphasize that especially clothing supply chains are rather long including several partners. Thus, upstream supply chains including the focal brand, yarn and fabric makers as well as raw material producers may result in a situation where the point of origin of the raw materials are several steps far from the focal brand in the supply chain (Khurana & Ricchetti 2016). Goworek (2011) further notes that by outsourcing the textile production, the industry firms have estranged the consumers from the source of manufacturing.

Moreover, textile and clothing industry is strongly characterized by its fashion-driven nature (Boström & Micheletti 2016). Consumption behaviour of consumers emphasizing wide variety and affordability of products exerts pressure on the industry firms, and compel them to pay attention to the responsiveness and effectiveness of their operations (Oelze 2017). The textile industry also suffers from the trend towards fast fashion and cheap clothing (Zimon & Domingues 2018), which have a considerable sustainability impact. Promoting the mentality of fast fashion creates severe sustainability issues including low quality of products, short-term use, frequent replacement of clothes as well as increasing amount of textile waste (Boström & Micheletti 2016; Niinimäki and Hassi 2011).

However, consumers' awareness regarding sustainability issues is growing and they increasingly demand sustainably produced textiles that are manufactured in decent working conditions respecting the workers' human rights as well as the environment (Goworek 2011; Zimon & Domingues 2018). Thus, the industry firms are required to pay attention to sustainable supply management in their business operations. Also Shen (2014) supports this viewpoint and indicates that consumers are increasingly interested

to buy sustainably produced textiles as well as also willing to pay higher price for them if the quality of the products remains the same.

Even though the implementation of sustainable supply chain management has received an increasing attention among scholars, limited attention has been paid on the implementation of SSCM in the textile sector in particular (Oelze 2017; Zimon & Domingues 2018). However, the increase in consumers' awareness of sustainable textile production is suggested to boost the importance of sustainability and sustainable supply chain management among the industry firms (Shen 2014; Zimon & Domingues 2018). Khurana & Ricchetti (2016: 90) further emphasize the importance of sustainable supply chain management in the industry by stating that "company's most significant environmental and social impacts are found not in its own operations, but in its supply chain". Thus, integrating sustainability into the supply chain management will certainly become a crucial challenge for the textile firms in the near future (Shen et al. 2017) in order to sustain their competitive position and stay in the competition (Zimon & Domingues 2018). Moreover, Shen et al. (2017) suggest that multiple industry firms have already acknowledged the role of sustainability in firm's business operations and started to implement sustainable supply chain practices.

Moreover, Freise & Seuring (2015) emphasize that non-compliance to sustainability requirements is frequently exposed in the textile industry supply chains, and include unacceptable working conditions as well as other burdens concerning sustainability along the supply chains. Thus, Oelze (2017) highlight that a critical challenge commonly faced by the industry firms is to tread a fine line between attaining competitive advantage and implementing sustainability simultaneously as satisfying the needs and expectations of various stakeholders to retain the firm reputation, legitimation and credibility. Moreover, acting sustainably in the textile supply chains in particular is suggested to be challenging due to the abovementioned fragmented and complex nature of the supply chains as well as to the simultaneous pressure for cost and lead time (Shen et al. 2017; Boström & Micheletti 2016).

2.4.3. Dimensions of sustainability emphasized in the textile supply chains

Textile industry, as one of the largest industries globally, is also considered to be one of the world's most polluting industries (Boström & Micheletti 2016; Shen et al. 2017; Diabat et al. 2014), and thus issues related to sustainability and sustainable supply chain management have particular importance in the industry (Zimon & Domingues 2018;

Shen et al. 2017). The negative impacts of the textile production on the environmental as well as social aspects are widely recognized in the previous research (Zimon & Domingues 2018; Diabat et al. 2014; Boström & Micheletti 2016). Moreover, the social and environmental impacts of textile products are significant along the entire lifecycle (Oelze 2017). Boström & Micheletti (2016) further emphasize that textile and clothing industries receive a great attention among the public concerning issues such as climate change, chemical society, water shortage and human rights.

Textile industry and its supply chains are extremely labour intensive (Köksal et al. 2017; Shen 2014). Thus, the importance of social aspects in particular is highlighted in the industry (Freise & Seuring 2015). According to Khurana & Ricchetti (2016), the textile industry has generally been confronted with social issues such as labour standards and working conditions. The entire upstream supply chain from raw materials into finished textile products has major negative impacts regarding the social aspects of sustainability especially when the products are manufactured in countries with lower labour costs (Shen et al. 2017). As emphasized by Diabat et al. (2014) and Freise & Seuring (2015), the most common sustainability issues in the textile industry are related to the social and employee-related aspects. Commonly mentioned issues in the previous research concerning the social aspects and risks in the industry include *child labour* (Diabat et al. 2014; Köksal et al. 2017; Freise & Seuring 2015), *forced labour* (Freise & Seuring 2015), *working hours and conditions* (Diabat et al. 2014; Freise & Seuring 2015; Boström & Micheletti 2016; Köksal et al. 2017; Khurana & Ricchetti 2016) as well as *health and safety of the employees* (Diabat et al. 2014; Boström & Micheletti 2016; Khurana & Ricchetti 2016; Freise & Seuring 2015). Moreover, the textile industry is characterized by issues concerning temporary employment contracts (Boström & Micheletti 2016) and low wages (Boström & Micheletti 2016; Khurana & Ricchetti 2016; Freise & Seuring 2015).

In addition to the social issues emerging from the textile production and other supply chain activities, textile industry has a major impact also on the environmental sustainability (Boström & Micheletti 2016). Khurana & Ricchetti (2016) emphasize the growing pressure on natural resources due to accelerated growth of demand in the textile industry that results from population growth and economic development of the developing countries. The production process of textiles in which the raw materials are turned into finished products have heavy negative impacts on the environment (Shen et al. 2017; Shen 2014; Diabat et al. 2014). In addition to the manufacturing process, also the transportation activities contribute to environmental damage in the industry (Köksal

et al. 2017). Sustainability issues regarding the environmental aspects in the textile supply chains include *extensive use of water* (Köksal et al. 2017; Zimon & Domingues 2018; Boström & Micheletti 2016; Khurana & Ricchetti 2016; Shen 2014), *use of hazardous chemicals* (Köksal et al. 2017; Boström & Micheletti 2016; Khurana & Ricchetti 2016; Shen 2014; Diabat et al. 2014), *increasing pollution and generation of waste* (Köksal et al. 2017; Zimon & Domingues 2018; Boström & Micheletti 2016; Shen et al. 2017; Khurana & Ricchetti 2016), *climate change* (Zimon & Domingues 2018), *biodiversity and animal welfare* (Khurana & Ricchetti 2016) as well as *depletion of raw materials* (Zimon & Domingues 2018).

However, there are already solutions available for developing the state of sustainability in the textile industry suggested by previous research. Shen (2014) indicate that sustainable supply chain management in the textile industry may include for instance development of eco-materials, providing of safety training and monitoring of sustainable manufacturing. In addition, reuse and recycling of materials, such as recycled polyester, recycled cotton and recycled plastic may be used to save energy and water and to lower the greenhouse gas emissions. Moreover, traditional ways of growing cotton, which is used as the main material for textile and apparel production, involves heavy usage of chemicals and pesticides. (Shen 2014.) Goworek (2011) suggest that standard cotton farming has major environmental implications and accounts for 11 per cent of the world's pesticide consumption. However, more sustainable textiles can be produced and the negative environmental impact may be reduced by utilizing organic fabrics such as organic cotton, that is grown without consuming pesticides and synthetic fertilizers (Shen 2014). Zimon & Domingues (2018) further suggest that the environmental impact of the textiles should be identified and taken into consideration already during the designing process.

2.4.4. Theoretical framework of the study

In this chapter, the theoretical framework of the study is developed based on the extensive literature review conducted above. The aim of the research is to examine the current state of sustainable supply management in the Finnish SMEs operating in the textile industry, and to investigate how these firms manage sustainability in relation to their suppliers in practice. The main focus of the study is on the sustainable supply management practices that may be applied in the buyer-supplier relationships. Based on the previous research (Akhavan & Beckmann 2017; Gimenez & Tachizawa 2012; Sancha et al. 2016; Yang & Zhang 2017), these practices are divided into supplier

selection, supplier development, supplier collaboration and supplier assessment. Moreover, this research aims to examine the motivational factors that encourage the industry firms to employ these activities, but also to explore the perceived challenges that may hinder the textile SMEs from engaging in sustainability among their supply management. Furthermore, the special characteristics of SMEs as well as the distinct nature of the textile industry as the context of the study are taken into consideration to investigate how these influence on the SSM practices applied by the focal firms. The theoretical framework of the study is presented below in the Figure 3. This framework provides the basis for the collection and analysis of the empirical data, and will eventually assist to answer to the research question and objectives of the study.

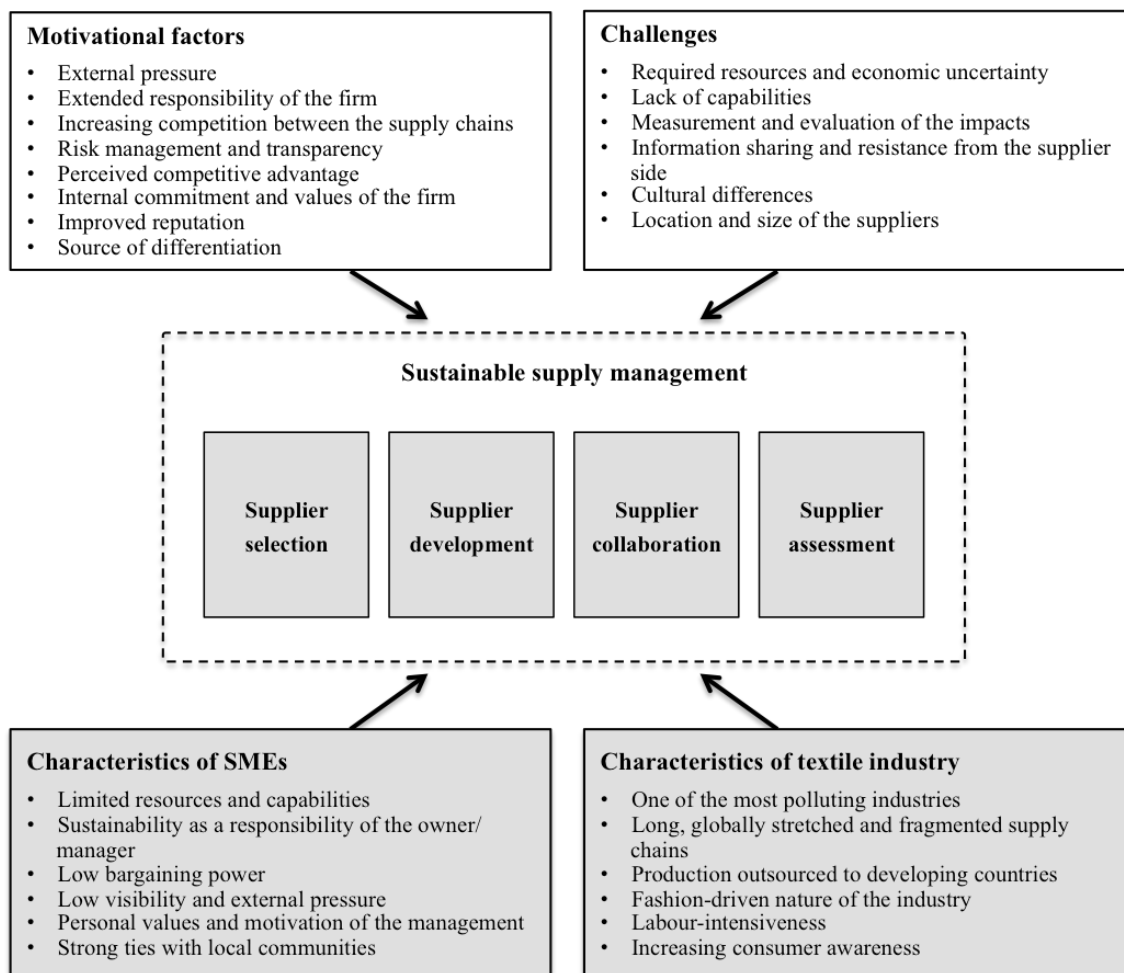


Figure 3. Theoretical framework of the study.

3. RESEARCH DESIGN AND METHODOLOGY

The research problem, research questions and the participants of the study all influence on the decisions on the research strategy and research methods (Hirsjärvi & Hurme 2006: 13, 27–28). In this chapter, methodological choices and methods for data collection and analysis based on the purpose of the research and the research questions are presented as well as further justified.

3.1. Research methodology

Eriksson & Kovalainen (2008: 4, 11) suggest that business research has typically been characterized with quantitative research approach, and qualitative research have received less attention. Typical for quantitative research is the generalization and predictability of the results and the aim of finding explanations of causality, whereas qualitative research pursues contextual explanations, interpretation and understanding of different perspectives (Hirsjärvi & Hurme 2006: 22). This study aims to achieve a deeper understanding of the current state of sustainable supply management in Finnish small and medium-sized enterprises operating in the textile industry, and how these firms pursue to manage sustainability in relation to their suppliers, as well as to understand the motivational factors and challenges behind the sustainable choices that SMEs make in their supply management. Thus, qualitative research approach is justified in this research. Qualitative research aims to understand a specific event profoundly or acquire information about a phenomenon. Qualitative methods also highlight the perspectives of the participants and enable the researcher to get closer to those meanings that individuals give to different phenomena and events. (Hirsjärvi & Hurme 2006: 26–28, 59.) Furthermore, based on qualitative research approach, the reality is seen as socially constructed and interpreted by individuals, and thus in studying specific issues the interpretation and holistic understanding are central (Eriksson & Kovalainen 2008: 4–5, Hirsjärvi & Hurme 2006: 22).

Ontology of the research refers to the assumptions of the nature of reality; what is real and what is the nature of the phenomenon that the research aims to study (Hirsjärvi, Remes & Sajavaara 2009: 130). Considering quantitative research, the nature of reality is seen as objective, congruent and independent from people and their actions, whereas in qualitative research reality is seen as subjective and manifold based on individuals' experiences (Hirsjärvi & Hurme 2006: 22; Eriksson & Kovalainen 2008: 13). The

concept of sustainable supply management considers the relationship between the buyer firm and its suppliers and therefore deals with personal experiences and interactions between the players, as well as reflects human perceptions and subjective knowledge. Since the aim of the study is to examine, understand and interpret the current state of sustainable supply management in Finnish SMEs through experiences, attitudes and perceptions of the firms' representatives, the research is based on the ontological assumption that reality is understood as subjective and manifold. These perceptions and experiences of individuals may differ from each other, change over time and are highly dependent on their context. This kind of assumption, also known as constructionism, assumes that reality is produced in social interaction between individuals, and thus each reality is unique based on individuals' interpretations. (Eriksson & Kovalainen 2008: 13–14.)

Epistemology of the research refers to the nature of knowledge and the relationship between the researcher and the respondents (Hirsjärvi & Hurme 2006: 23; Hirsjärvi et al. 2009: 130). The focus is on how the knowledge is produced and justified (Eriksson & Kovalainen 2008: 14). Considering this thesis, epistemology also observes how to acquire knowledge for the research (Hirsjärvi et al. 2009: 124). The qualitative research approach emphasizes constant interaction between the researcher and the respondents, whereas in the quantitative research the respondent is assumed to be independent of the researcher (Hirsjärvi & Hurme 2006: 23). The researcher can be either seen as autonomous and external or as an actor that takes part in the production process of knowledge (Eriksson & Kovalainen 2008: 15).

These epistemological views are associated with different philosophical positions that include positivism, interpretivism and critical realism. Based on positivism, the reality is constructed from observable material things and the knowledge is possible to obtain only through experience and measurement. Positivism is mostly associated with quantitative research, and is based on the idea that the aim of research is to find causal explanations and regularities. Interpretivism, on the other hand, emphasizes subjective and shared meanings as well as interpretation. Interpretivism suggests that the shared reality may change and is socially constructed through complex patterns of actions, and that the knowledge can be obtained only through social actors. Critical realism combines ideas from both, positivism and interpretivism. (Eriksson & Kovalainen 2008: 15–20.) This research relies on interpretivism as the knowledge is obtained through interaction and shared meanings between the researcher and the participants, and the data is then interpreted and analysed by the researcher based on the specific context.

The reasoning logic in scientific research can be divided into deductive and inductive logic (Tuomi & Sarajärvi 2009: 95). Deductive logic refers to the fact that knowledge relies and is produced based on existing theory, and the research proceeds from theory and hypothesis formulation to empirical analysis. Induction, on the other hand, is based on the assumption that the research process starts from empirical findings and proceeds towards theoretical results. (Eriksson & Kovalainen 2008: 21–23.) However, as Eriksson & Kovalainen (2008: 22–23) highlight, research logic of pure deduction or pure induction rarely exists, but rather a combination of these two concepts, abduction is applied by many researchers that use induction and deduction in different phases of the research. The theory and in-depth literature review are the main points of reference in this thesis, which are then tested by empirical research. Moreover, this thesis aims to reassess the prior theory and increase the knowledge in the area of research through empirical findings. Thus, the research logic of the thesis can be considered as abductive.

3.2. Research strategy

Research strategy refers to the decisions about the methodological choices of the research. The purpose of the research as well as the research problem influence on the decisions about the research strategy. Traditional research strategies can be categorized into experimental studies, surveys and case studies. Experimental studies aim to examine the effect of one variable on the other, and are mostly applied in quantitative studies that are conducted in controlled environments where systematic and deliberated changes of conditions are possible. Surveys aim to obtain information in a standardized form from a group of people through questionnaires or structured interviews. Case studies, on the other hand, aim to obtain detailed information about and describe a specific phenomenon by examining and analysing a single case or a small number of linked cases. (Hirsjärvi et al. 2009: 132–135, 192.)

Based on the above categorization, a case study is the most suitable choice for this thesis considering the aim of the research and other methodological choices presented above. Eriksson & Kovalainen (2008: 116) suggest that by conducting a case study it is possible to represent complex issues in easy to understand and personal way, and thus case studies are rather common especially in business research. A subject of the case study may be an individual, a community, an event or a group of events, and the research commonly focuses on the processes (Hirsjärvi et al. 2009: 135, Saaranen-Kauppinen & Puusniekka 2006). A case study seeks to produce detailed and

comprehensive knowledge about the subject of the research by utilizing multiple empirical sources of data such as interviews, observations and different documents (Eriksson & Kovalainen 2008: 116–117; Hirsjärvi et al. 2009: 135), and the studied cases are often examined in their natural environments. The aim of the case study is to describe the characteristics of the research subject systematically and in detail to increase the knowledge about the phenomenon rather than to present correlation, test hypotheses or make predictions. (Saaranen-Kauppinen & Puusniekka 2006.)

Case studies can be divided into intensive case studies and extensive case studies based on the aim of the research and the number of cases examined (Eriksson & Kovalainen 2008: 116–117). The aim of this thesis is to obtain a comprehensive understanding of the current state of sustainable supply management in Finnish SMEs operating in the textile industry by examining multiple industry firms, and to also address common patterns across these cases (Eriksson & Kovalainen 2008: 118–122). Thus, this thesis employs a research strategy of *extensive case study*. These multiple cases are analysed to examine, understand and explain the phenomenon of sustainable supply management in Finnish SMEs comprehensively, and to test and extend the prior theory. Extensive case study is applicable especially when prior theory on a specific issue is missing or when the prior theories have gaps that need further elaboration and examination (Eriksson & Kovalainen 2008: 119–123). As highlighted in the chapter 2.4.1., there is a recognized gap in the research on sustainable supply management in SMEs, and thus extensive case study as a research strategy is well justified.

3.3. Data collection

In qualitative research, the most common data collection methods include interviews, surveys, observations as well as analyses of different documents (Tuomi & Sarajärvi 2009: 71). The empirical data collected by the researcher are called primary data, and can be obtained for instance by interviews and observations (Eriksson & Kovalainen 2008: 77–78, Hirsjärvi et al. 2009: 186; Hirsjärvi & Hurme 2006: 34–37). The empirical data that already exist are called secondary data, and may include for instance different documents, diaries, video recordings and media texts (Eriksson & Kovalainen 2008: 77–78, 89). Eriksson & Kovalainen (2008: 125) highlight that in-depth interviews are generally utilized as a primary source of empirical data in business research and especially among case studies. Thus, also this research employs in-depth interviews with the company representatives as a primary source of data. Moreover, the research

has a cross sectional design, as the data will be collected at one point in time. This choice is justified since the purpose of the thesis is to study the current state of sustainable supply management in Finnish SMEs at a given point of time. Also, the scope of the thesis, limited amount of time and other available resources support this choice.

Interviews as a data collection method are used to produce empirical materials to best study the area of interest in the research. In addition, interviews are widely applied in business research due to their effectiveness and practicality in gathering information that is not available in an already published form. (Eriksson & Kovalainen 2008: 78–81.) Interviews are also seen as a flexible and suitable choice for various starting points and research purposes, and are therefore one of the most used methods for collecting data (Hirsjärvi & Hurme 2006: 14, 34; Hirsjärvi et al. 2009: 204–205). An interview includes both verbal and non-verbal communication by which the thoughts, attitudes, opinions, knowledge and feelings are transferred and explored (Hirsjärvi & Hurme 2006: 41–42). Eriksson & Kovalainen (2008: 81) further suggest that interviews are useful to study individuals' experiences from their perspective. This thesis aims to examine and analyse the experiences and attitudes of the firm representatives to understand the current state of sustainable supply management among the SMEs operating in the textile industry. Moreover, as the concept of sustainable supply management is rather unexplored among SMEs, interviews as a collection method are justified to clarify the answers and acquire deeper understanding of the information (Hirsjärvi & Hurme 2006: 35).

Based on how structured the interview questions are and how much the interview situation is outlined by the researcher, the interviews can vary between structured, semi-structured and unstructured interviews (Hirsjärvi & Hurme 2006: 43–44; Eriksson & Kovalainen 2008: 80–83; Hirsjärvi et al. 2009: 207–210). This research employs semi-structured, face-to-face interviews that can be considered as intermediate form between structured and unstructured interviews. The characteristics of a semi-structured interview include that some, but not all aspects of the interview are fixed; for example the order of the questions may vary or the wording of the questions may be modified. The interviews with the firm representatives proceeded based on predetermined themes, and thus may also be referred as theme interviews. (Hirsjärvi & Hurme 2006: 47–48; Hirsjärvi et al. 2009: 208.) As Tuomi & Sarajärvi (2009: 75) suggest, the themes were chosen based on the prior theory and the theoretical framework of this research.

Six small and medium-sized companies operating in the Finnish textile industry took part in the research. The firms were chosen appropriately based on their external communication and the researcher's prior knowledge about their sustainability practices. The case companies represent those that already recognize sustainability and sustainable supply management as critical part of their business and that are already investing in sustainable practices. This choice enables to obtain more detailed understanding about the applied sustainability practices and to also acquire information about the motivations and challenges behind these activities. The firms were contacted via email during February 2018. Overall, the firms were rather interested about the topic and many of them stated that sustainable supply management is really topical for their business at the moment. Only one company did not reply to the inquiry at all and one company could not participate in the research due to limited resources.

The interviews were conducted in March and April 2018. In qualitative research, the selection of the participants should be deliberate and purposeful so that they represent those individuals that have relevant knowledge and experience about the studied phenomenon (Tuomi & Sarajärvi 2009: 85–86). In order to obtain as relevant and detailed understanding about the studied phenomenon as possible, the respondents represented those who are responsible for the sustainability issues within the company. Due to the small size and limited resources of SMEs, most often the respondents were the executives of the company, but a few of the firms assigned persons exclusively responsible for sustainability issues in the supply chain. The interviews were built around six different themes, which guided the conversation. All interviews, except one that was conducted via phone, were face-to-face interviews conducted in Finnish. The duration of the interviews varied between 44 and 59 minutes. All interviews were recorded to make the analysis of the data more detailed and accurate. See the interview details in the Table 3 below. The guiding outline of the theme interviews, which was also sent to the participants approximately a week beforehand to give them enough time to prepare, is included at the end of the research as Appendix 1.

Table 3. Interview details.

Company	Company description	Position of the respondent	Duration of the interview
A	Apparel	Chief Operation Officer	59 minutes
B	Home textiles	Corporate Responsibility Manager	45 minutes
C	Apparel	Founder/Partner	52 minutes
D	Home textiles	CEO, Chief Financial Officer & Brand Manager	57 minutes
E	Home textiles, apparel	CEO	47 minutes
F	Apparel, outdoor clothing/equipment	Head of Operations	44 minutes

3.4. Data analysis

After the collection of empirical data, the data analysis, interpretation and careful drawing of conclusions can be seen as the most important and critical stages of the research (Hirsjärvi et al. 2009: 221). The data analysis refers to careful reading, organizing, classifying, outlining and deliberating of the empirical data, and aims to make sense of the content or structure of the data while considering the research problem of the study. The analysis is conducted by interpreting the empirical data and discussing and reflecting it with the prior theory and researcher's own thinking. Thus, it involves consideration of the studied phenomenon and the research questions from a specific viewpoint. (Saaranen-Kauppinen & Puusniekka 2006.)

Hirsjärvi et al. (2009: 223) suggest that the processing and analysis of data should start as soon as possible after the data collection, whereas Saunders, Lewis & Tornhill (2009: 485) highlight that the process of data analysis generally starts simultaneously as collecting the data and continues later on. In this research, the analysis of empirical data was initiated by transcribing the recorded interview data into a written format almost immediately after each interview. Transcribing the recorded data into a written format is suggested to facilitate the organization and analysis of the data (Saaranen-Kauppinen & Puusniekka 2006). Transcription was first conducted as word for word and included the entire recorded data gathered through the interviews. Saaranen-Kauppinen & Puusniekka (2006) note that the exactness of the transcription is affected by the chosen type of analysis. Regarding this thesis, the interest lies in the content of the empirical data to explain the phenomenon of sustainable supply management in Finnish SMEs in detail, rather than in the expressions or used language. Thus, the transcribed data was later cleaned up and for instance unnecessary expletives were removed to make the data

more readable and easier to organize. These transcribed interviews were then sent to the respondents to ensure the factual accuracy of the data. Preliminary analysis was initiated as transcribing the data by listening, writing and reading the interviews several times as well as by outlining the written material considering what is relevant regarding the research problem and questions of the study.

The data analysis approaches can be divided into data-driven analysis, theory-driven analysis and theory-bonded analysis (Tuomi & Sarajärvi 2009: 95–100; Saaranen-Kauppinen & Puusniekka 2006; Eriksson & Kovalainen 2008: 128–129). In data-driven analysis, units of analysis are chosen based on the empirical data considering the aim of the research, and the prior observations, knowledge or theories should not influence on the execution of the analysis. Theory-driven analysis, on the other hand, relies on a specific prior theory or model that guides the analysis of the data, and the aim is to test prior knowledge in a new context. Theory-bonded analysis can be placed between these two extremes, and is characterized by some theoretical linkages. In this approach, the units of analysis are chosen from the data but the prior theory may assist in the progress of the analysis, and as the data is categorized and conceptualized it is linked with the theoretical concepts. The theory-bonded analysis often relates to the abovementioned abductive logic, in which the researcher aims to combine the data and the prior theoretical models. (Tuomi & Sarajärvi 2009: 95–100.) This research applies the theory-bonded analysis approach, which is in line with the above justification of abductive research logic of the study.

The data analysis in this research is conducted as a qualitative, theory-bonded content analysis, which aims to study the phenomenon systematically and objectively, and produce a general description of it. Content analysis pursues to analyse the textual data and seek meanings of it through interpretation and reasoning. (Tuomi & Sarajärvi 2009: 103–108, 112.) The aim of the content analysis is to describe the studied phenomenon in a condensed form and to link the research findings with the wider context and with findings from previous studies (Saaranen-Kauppinen & Puusniekka 2006). The analysis also seeks to clarify the data so that it is possible to produce explicit and reliable conclusions about the studied phenomenon (Tuomi & Sarajärvi 2009: 108).

The content analysis is initiated by splitting the empirical data into small pieces, which are then conceptualized, grouped and finally restructured into a logical entity (Saaranen-Kauppinen & Puusniekka 2006; Tuomi & Sarajärvi 2009: 108). The transcribed interview data is examined by classifying, seeking of similarities and differences as well

as by compressing of data (Saaranen-Kauppinen & Puusniekka 2006). The data analysis in this research is based on the presentation of Tuomi & Sarajärvi (2009: 108–113) about the process of data-driven content analysis. The authors note that the theory-bonded content analysis proceeds as the data-driven analysis relying on the empirical data, but differs in a way in which the empirical data is combined with the theoretical concepts as the data is abstracted. In theory-bonded analysis, the applied theoretical concepts of the phenomenon are derived from the prior theory. (Tuomi & Sarajärvi 2009: 117.)

The data analysis started by recognizing the issues and phrases in the empirical data that are relevant considering the research question and objectives of the study. These expressions were then simplified through coding, which means splitting the data into smaller pieces (Saaranen-Kauppinen & Puusniekka 2006), and labelling these expressions to facilitate the grouping and organization of the data (Saunders et al. 2009: 492). These codes and simplified expressions were then gathered as lists from which similarities and differences of the codes were observed and analysed. Similar codes were then categorized into groups, which can be considered as subcategories, and were then labelled accordingly. The analysis was continued by combining similar subcategories with the same content, which led to formulation of the main categories. The abstraction and conceptualization of the original expressions occurred as the analysis proceeded. (Tuomi & Sarajärvi 2009: 101, 108–113.) The subcategories were formed based on the expressions and findings from the empirical data and were then combined with the theoretical concepts deriving from the prior theory by formulating the main categories. These theoretical concepts that already guided the theme interviews with the company representatives, helped to describe and analyse the central features of the empirical data (Eriksson & Kovalainen 2008: 129). Finally, all the main categories were further combined into one connective category that depicts all the abovementioned categories. These categories will eventually assist in answering to the research question and objectives of the study. (Tuomi & Sarajärvi 2009: 101.) The progress of the content analysis is illustrated in the Table 4 below with extracts from the empirical data.

Table 4. The progress of the content analysis (revised from Tuomi & Sarajärvi 2009).

Original expression	Simplified expression	Subcategory	Main category	Connective category
<i>“[...] for instance among purchases or procurement when employing a new supplier, we presume that it possess certain certificates, so that we can purchase from them in future.”</i>	Certain certificates are required from new suppliers	Supplier requirements	Supplier selection	The current state of sustainable supply management in Finnish textile SMEs
<i>“[...] if you don't conduct the audits by yourself, audit conducted by a third-party is a guarantee that things are done correctly (at the supplier's premises).”</i>	The suppliers' activities are monitored by conducting third-party audits	Third-party audits	Supplier assessment	

3.5. Reliability and validity of the study

The credibility of the research is most commonly evaluated with concepts of reliability and validity of the study. The reliability and validity of the research findings might vary due to several of reasons, and thus it is necessary to evaluate these aspects in detail. The reliability refers to the repeatability of the research findings, which means the ability of the study to give haphazard results. (Hirsjärvi et al. 2009: 231–232; Eriksson & Kovalainen 2008: 292.) Thus, reliability of the research highlights the degree of consistency in a sense that the study could be replicated by another researcher and still it would obtain similar results (Eriksson & Kovalainen 2008: 292).

Validity of the research refers to the ability of the chosen research methods to measure exactly what they are meant to measure. For instance among survey research, there is a risk that the respondents understand the questions differently than what the researcher has thought of and what is the aim of the study. This creates errors in the results, and thus the findings cannot be considered correct or valid. (Hirsjärvi et al. 2009: 231–232.) The research findings are required to be true and certain, and they also need to represent the studied phenomenon and be supported by evidence (Eriksson & Kovalainen 2008: 292). Considering this research, the participants were informed about the detailed aim of the study, the context of the study and the present state of relevant research as well as

the benefits of the research for the industry firms themselves via email at the same time than they were asked to participate in the study. Furthermore, the interview questions were sent to the participants approximately a week beforehand of the interview to give them time to prepare, and also in order to increase the validity of the data. Thus, errors occurring from confusion about the aim of the study or the interview questions were minimized. Moreover, the transcribed interviews were sent to the respondents to ensure the factual accuracy of the data, which also increases the validity of the findings.

However, above concepts mostly originate from quantitative research, and thus have received criticism among qualitative research due to their lack of clarity and inappropriateness with unique qualitative studies. Even though part of the qualitative research seeks to avoid the use of terms reliability and validity, the credibility of the research should be evaluated by some means. In qualitative research, above all, detailed description in every phase of the research about how the study has been conducted increases its reliability. This includes describing the circumstances in which the data was gathered, time spent in the interviews, possible disturbing factors as well as misinterpretations during the interviews. Altogether, the progress of the research and the choices regarding the research should be as truthful and transparent as possible to the reader. (Hirsjärvi et al. 2009: 232.) Also Saaranen-Kauppinen & Puusniekka (2006) suggest that, especially in case study research, by describing the data and the analysis of data as exhaustively as possible, the significance and validity of the research findings can be strengthened. These aspects were recognized and considered also among this thesis, and the choices regarding the methodological questions, research strategy as well as data collection and analysis are justified in detail. Moreover, the progress of collecting and analysing the data is represented as in detail as possible to increase the reliability and validity of the research findings.

An aspect that can be considered to affect the credibility and quality of the study is that one of the case firms does not meet the criterion of SMEs about the independency. It was revealed only after the firm agreed to participate in the study that over 25% of the company is owned by a firm that do not meet the criterion of SMEs. However, the case company meets all the other criteria of an SME considering the number of employees, turnover as well as the balance sheet total, and also during the interview the firm representative continuously referred to the firm as a small company. Moreover, the answers by the firm representative were mostly aligned with the other respondents' answers. Taking all these aspects into account, the issue of independency in this case is not considered as a major factor affecting the credibility of the study.

4. FINDINGS AND DISCUSSION

The aim of this thesis is to examine the current state of sustainable supply management in SMEs that operate in the Finnish textile industry. The research seeks to investigate how the small and medium-sized enterprises as buyer firms manage sustainability in relation to their suppliers. This chapter introduces the case companies of the research and presents the findings from the analysis of the empirical data gathered through the interviews with the company representatives. The findings are further combined and discussed with the findings from previous research on the phenomenon of sustainable supply management, taking also the nature of the textile industry as well as the characteristics of small and medium-sized enterprises into consideration.

4.1. Introduction of the case companies

As the aim of the study is to examine and obtain a comprehensive understanding about the current state of sustainable supply management in Finnish SMEs operating in the textile industry, the case companies were selected appropriately to meet these criteria. The study employs a research strategy of extensive case study and thus multiple cases were analysed to study the phenomenon of sustainable supply management. Six Finnish companies that operate in the textile industry and that meet the criterion of small and medium-sized enterprise presented in the chapter 2.4.1. participated in the research. Furthermore, in order to obtain a detailed and as relevant understanding as possible about the industry firms' perceptions on sustainability and practices of sustainable supply management, the firms were selected to represent those that already consider sustainability and the management of sustainable supply as critical and integrated part of their business.

Majority of the case companies have operated in the textile industry for decades. However, two of the firms were founded only during the 21st century. All case companies operate in the textile industry but their main focuses vary. Three of the case companies focus mainly on apparel and clothing as their main business area whereas two other companies operate in the field of home textiles. The product portfolio of one of the case companies represents a mix of both, clothing and home textiles. To secure the anonymity of the firms, company names are not mentioned in the analysis but are referred as company A, B, C, D, E and F. Table 5 below represents the characteristics of the case companies. The information is gathered from the latest publicly available

financial statements. Based on the below characteristics of the companies, it can be concluded that companies B and F represent medium-sized companies whereas companies A, D and E are small companies. Company C represents the only micro company of the research.

Table 5. Characteristics of the case companies.

Company	Number of employees	Turnover	Balance sheet total
Company A	< 50	≤ 10 million €	≤ 10 million €
Company B	< 250	≤ 50 million €	≤ 43 million €
Company C	< 10	≤ 2 million €	≤ 2 million €
Company D	< 50	≤ 10 million €	≤ 43 million €
Company E	< 50	≤ 10 million €	≤ 10 million €
Company F	< 250	≤ 50 million €	≤ 43 million €

4.2. Views on sustainability in the textile industry

Based on the interviews, the textile industry is not considered as the most sustainable or the most “green” line of business, and the respondents recognized the rather poor reputation of the industry considering sustainability aspects. This is in line with the previous research about the pollutive nature of the industry (Boström & Micheletti 2016; Shen et al. 2017; Diabat et al. 2014) and regularly exposed non-compliance to sustainability requirements by the industry firms (Freise & Seuring 2015). Moreover, especially questions about the ethical and social aspects of sustainability were seen to be common due to the bad reputation of the industry, especially when operating in the third world countries. The importance of social dimension such as human rights and working conditions in the production chains was highlighted by the respondents and recognized as aspects that are of interests to the consumers in particular. Also the environmental aspects were mentioned to increasingly draw attention in the industry. One of the respondents highlighted that the sewing process in fact represents a rather small part of the product’s life cycle and that the largest environmental effects derive from the production of the fibre and from the consumption of water and chemicals during the use of the product.

Overall, the respondents commonly recognized the increasing interest towards sustainability in the industry. Sustainability was seen as an increasing trend, and better

and more sustainable solutions were stated to be continuously searched for. Transition towards sustainable practices was considered to be rapid, and one of the respondents suggested that all the industry firms will eventually transfer to sustainable business, but the question is only when. Being in line with the previous research about increasing consumer awareness towards sustainably produced textiles (Goworek 2011; Zimon & Domingues 2018), sustainability aspects were stated to be increasingly discussed and the customers were recognized to be better aware of how to demand more sustainable alternatives from the firms. The increasing attention towards more sustainable actions was seen to eventually compel the industry firms to change their actions, and companies who act irresponsibly and cover up were not believed to survive in the long run.

“[...] the whole trend is about constantly searching for better and greener solutions.” (Company D)

Goworek (2011) and Boström & Micheletti (2016) suggest that it is common in the textile industry that the production is outsourced to developing countries. Also the case firms of this study represent the brand holders and wholesalers that do not own factories or production processes, but the production is generally carried out by external supply partners. This was recognized to increase challenges among the sustainability issues, as the companies are not able to directly control the production processes of the upstream supply chains. Company C represents an exception to this, as the firm seeks to transfer its operations under a subsidiary in India in the near future. Furthermore, it was noted by the respondents that the upstream supply chains in the textile industry are generally located outside the EU. Even though some of the case companies stated to have some production also in Europe and to have recently transferred the production chains closer to their primary market area, majority of the products are still manufactured in risk and developing countries such as Turkey, China, Pakistan and India. Thus, the location of the production chains was recognized as a significant factor increasing the role of sustainability in the industry.

Moreover, the respondents highlighted the global nature of the industry as the firms are in continuous interaction with partners operating in various countries, both in their upstream and downstream supply chains. The globally stretched and fragmented nature of the textile supply chains is recognized also in the previous research (Oelze 2017; Köksal et al. 2017; Boström & Micheletti 2016) as factor that may increase challenges in managing sustainability and especially in ensuring the transparency of the supply chain.

4.2.1. The role of sustainability in the business operations

The interviewed firms generally considered sustainability as an integral part of the firm identity, the brand and firm values. When asking the respondents about the meaning of sustainability for their firms, sustainability was seen as an intrinsic and obvious part of the business. Also Ageron et al. (2012) suggest that the role of sustainability as an integral part of the firms' strategic goals is continuously increasing.

"In our firm, sustainability is actually, we seek to include it in everything we do. And is actually really important part of our activities, it is one of our values, and we are strongly a values-led company, so everything in the firm starts from there."
(Company B)

"[...] sustainability is a part of our strategy, it is included in our values [...]"
(Company F)

Moreover, sustainability as a firm value and part of the case companies' strategies was considered to strongly guide the business operations of the firms. Sustainability was generally seen as the basis for firms' operations and processes. Instead of seeing endeavours towards sustainable business as a separate project, sustainability was rather considered as a course of action and a mentality of the firm. One respondent highlighted that it is difficult to consider sustainability as a separate issue since it is strongly related to every aspect of the business.

"[...] it is a basis for everything we do. We understand sustainability as a rather broad factor guiding the operations [...]" (Company C)

Quality of the products was also seen as an aspect increasing the role of sustainability. Based on the interviews, the basis for the case firms' business is to design and produce textiles that are durable and of high quality. One respondent highlighted that due to the relatively small size of the firm compared to the larger players in the industry, it is not possible to compete with the price. Thus, high quality of the products is necessary to stay in the competition. Contrary to the prevailing trend of fast fashion and cheap clothing in the textile industry (Zimon & Domingues 2018), the respondents commonly emphasized that the firms' products are not designed to be "fast-fashion" but rather to last time, season after season.

"[...] primarily we design clothing that are made to last time considering the design as well as the quality of the products. On no account we make that kind of season's fast fashion." (Company A)

4.2.2. Background for sustainable actions in the industry

The personal values and internal aspiration of firms were emphasized as the main drivers for sustainable actions during the interviews. Aspiration to engage in sustainable activities was considered to primarily begin from inside the firm. One of the respondents stated that the firm's employees desire to act and live responsibly, which guides the business operations starting from the product design. Moreover, other respondent highlighted especially the role of the firm management and their commitment to sustainable actions as an important contributor. The personal values, motivation and commitment of the firm management have also been recognized in the prior research (Pedersen 2009; Perry & Towers 2009; Battisti & Perry 2011) as critical contributors of sustainability especially among SMEs.

"[...] it all starts from the top management [...] they are strongly committed and always highlight that it is part of everyone's tasks to ensure that things are done sustainably, and we continuously aim to improve the operations into better direction." (Company B)

One respondent further highlighted the aspiration to be a desired employer in areas in which the firm operates as a reason why the firm seeks to act sustainably.

"[...] we want to be the best workplace in areas where we operate" (Company C)

Moreover, critical issues such as depletion of natural resources and climate change have been recognized to influence firms' efforts to act more sustainably (Pagell & Shevchenko 2014). Also based on the interviews, responsibility for the wider surrounding environment and society can be seen to encourage the industry firms to engage in sustainability. One of the respondents stated that respect for humanity and nature represents the basis for the entire operations of the firm. The company considers being responsible for its environmental and economical footprint and respecting of people. Moreover, concerns about the conditions for the future generations emerged during the interviews.

"[...] I think it is self-evident that we do things to improve and to leave sort of a reasonable world for people also after us." (Company F)

Sustainability is also increasingly seen as a source of competitive advantage among the industry firms. One of the respondents stated that the company seeks to prove that it is possible to do profitable business while acting both environmentally and ethically

sustainably. Moreover, the case companies recognized the positive impact of sustainable actions on the economic benefits. It was highlighted by one of the respondents that for instance paying attention to the energy consumption or packaging waste will lead to cost savings. These findings are consistent with the findings of Funk (2003) and Giunipero et al. (2012) who indicate that instead of considering sustainability as a source of additional costs, sustainability initiatives are increasingly seen as source of competitive advantage and increased profits.

“And it is great in a way that you are able to do good things that will also benefit the business.” (Company D)

“Sustainability will also increasingly become a competition factor in future.” (Company D)

The industry firms are to a greater extent also influenced by the external pressure to act more responsibly. One of the respondents highlighted that in the beginning of the firm's sustainability work the level of external pressure was rather slight. However, as commonly noted by the respondents and being consistent also with previous research (Lintukangas et al. 2015; Goworek 2011; Zimon & Domingues 2018), sustainability aspects of the firms are increasingly drawing attention among the public, and especially the awareness of the consumers was recognized to have grown during recent years. One of the respondents highlighted that the external pressure has considerably changed to heavier and tougher only during the last six or twelve months. Consumers are willing to know more about the actions of the firms and their sustainability aspects. Thus, the role of consumers' expectations was considered to have a strong impact on the business, as the firms are commonly required to react to the consumers' demands. Only one respondent stated that the firm receives only little pressure and demands from the consumers.

“[...] firms are required one way or another to react [to the external pressure] and be involved. And the earlier and the more spontaneously you are involved, I think the better it will serve you as a firm in the long run [...]” (Company A)

In the previous research, legislative pressure has been recognized as one of the most dominating incentives to engage in sustainable practices, especially among sustainable supply chain management (Holt & Ghobadian 2009; Ghadimi et al. 2016), and the previous findings suggests that firms' sustainability efforts are still commonly driven by compliance to laws and regulations (Giunipero et al. 2012). However, obeying the laws and regulations did not receive considerable attention among the respondents

considering the sustainability aspects, but it was noted that the businesses overall are regulated by the laws and regulations of the areas in which the firms operate, such as the REACH regulation on chemical substances, which the firms are primarily required to obey with. REACH is a regulation of the EU that aims to ensure the protection of human health and the environment by assessing and managing the risks posed by different chemicals (European Commission 2018b; ECHA 2018). However, one of the respondents noted that it is rather difficult to predict the legislative pressures to come in the next three to five years related for instance to different sustainability aspects, and thus it was suggested that the best companies start operating better and more sustainably spontaneously and voluntarily.

Furthermore, based on Battisti & Perry (2011) and Holt & Ghobadian (2009), the low visibility and lower external pressure of small and medium-sized companies might restrain them from proactively engaging in voluntary sustainability initiatives. However, the suggestion that SMEs might be less willing to engage in voluntary sustainability work did not resonate in the interviews. On the contrary, the case companies' sustainability work seems to be at a more demanding level than the relevant legislation. Furthermore, one of the respondents suggested that the firm aims higher than the largest and most common certification organizations. Thus, it can be concluded based on the interviews that the legislative factors are considered more as self-evident that the firms are required to comply with, but not as contributors that would drive the voluntary sustainability efforts forward in the industry. This supports the notion of Perry & Towers (2009) that ultimately sustainability initiatives aim to go beyond solely obeying the laws and regulations imposed towards the firms.

“And in everything we do we seek to act responsibly and sort of at a more demanding level than what the legislation requires.” (Company F)

Moreover, the risk perspective emerged during the interviews as a factor driving sustainability forward in the case companies. The respondents were asked about the perceived consequences if the firm disregards the efforts towards sustainable operations. One of the respondents emphasized that due to the fact that the firm's operations are strongly based on acting fairly and sustainably considering the environmental and ethical aspects, irresponsible actions would result in a situation where the firm would lose its operational preconditions. Also the reputational risk was recognized as a consequence if neglecting sustainability in business operations. One of the respondents further stressed that reputational risk will directly lead to business risk. The role of risk

management was further emphasized by the increasing role of social as well as traditional media in exposing unsustainable actions of businesses, as the mistakes reach the public faster than ever. This can be considered to be in line with Porter & Kramer (2006) who also highlight the role of the media in compelling companies to engage in sustainability among their operations.

4.2.3. Towards systematic sustainability work

As highlighted by Winter & Knemeyer (2013), sustainability is at rather early stages of its development. Novelty of sustainability among business operations emerged also during the interviews as the respondents stated that the firms have only recently started to focus on planning and executing sustainability more systematically. Development of systematic sustainability work of company B was initiated a few years ago as the new owners acquired the firm. The firm also launched a sustainability strategy that sets directions and targets for the firm's activities and sustainability work. The direction in the industry is clearly towards more careful planning, implementation and setting of targets for sustainability initiatives. Also company D launched its sustainability targets last year and is planning to announce its first sustainability programme during summer 2018. Company F stated to have initiated its sustainability work inside the firm already in 2009 by establishing a team responsible for driving sustainability issues forward, but only some years ago started to engage for instance its suppliers into socially and environmentally sustainable practices. In addition to careful planning and integration of sustainability into the firm strategies, the attention seems to be increasingly paid also on concrete actions and measures of sustainability as well as on achieving the targets.

Moreover, the responsibilities among the implementation of sustainability initiatives have been discussed in the previous literature (Pagell & Wu 2009). The evidence from the interviews is two-sided. On the other hand, the case firms stated not to have separate teams responsible for sustainability issues due to the small size and limited resources of firms, and the sustainability work was commonly seen to be at one person's responsibility. This supports the view of Baden et al. (2011) that due to limited resources of SMEs, the sustainability activities are often a responsibility of the owner-manager in addition to a large number of other tasks. Also among the case firms, the person responsible for sustainability, especially in relation to the suppliers, generally hold the position of the executive, CEO or the owner of the firm. Only two of the largest case companies have assigned persons whose main responsibility sustainability is. These persons hold the title of *Head of Operations* and *Corporate Responsibility*

Manager. Thus, the size of the company may be considered as a factor influencing the sustainability responsibilities within the firms.

On the other hand, the respondents indicated that in practice sustainability is at a responsibility of all the employees. It was considered as part of everyone's task within the firm to make sure that things are done sustainably. Also based on Pagell & Wu (2009), responsibility for sustainability needs to be shared between all employees and integrated in everyone's tasks. Moreover, being in line with Funk (2003) who suggests that sustainability issues concern all angles of business operations, various functions such as the product design, procurement as well as marketing were considered to be closely involved in the concrete daily activities related to the implementation of sustainability. The role of purchasing teams in particular was highlighted by the respondents among the management of sustainability in relation to the suppliers, which supports the view of Yang & Zhang (2017) that the firm's procurement function has a critical role in the successful implementation of sustainability. Purchasing teams were considered to influence the practical sustainability work through procurement practices, seeking of new materials as well as starting and ending of cooperation with the suppliers.

"[...] but of course everyone is involved by their own tasks." (Company B)

Also objectives and visions that the case firms aim to achieve by applying sustainable business practices emerged during the interviews. One of the respondents highlighted the firm's aspiration to be able to give more than the business consumes, both ethically and environmentally. Another respondent suggested that the aim of the firm is, within the limits of the firm size in the textile industry and of commercial boundaries, to act as sustainably as possible. One respondent brought forward the firm's vision to be the most transparent company of the home textile industry in the world.

4.2.4. Emphasis on different dimensions of sustainability

The economic dimension of sustainability was considered to act as a starting point for other dimensions of sustainability among the case companies. Moreover, the respondents highlighted the economic responsibility as a basis for the firms' operations. Continuous focus on the economic responsibility of the business was seen critical to ensure the functioning of the firm and securing of jobs. Moreover, one of the respondents strongly emphasized that the fundamental purpose of the firm is to make

profit for its shareholders. This view is present also in the previous research as the economic dimension of sustainability is commonly seen as the most traditional as well as the most applied (Winter & Knemeyer 2013).

"[...] without the economic responsibility we wouldn't have the whole business that we could develop, and thus it is of course the basis for everything we do because we don't want to do these things at a loss." (Company B)

As highlighted above about the poor reputation of the textile industry considering the social sustainability in particular, the importance of wellbeing of the employees, working conditions and human rights were considered to become increasingly emphasized in the industry. Moreover, one of the respondents noted that the systematic sustainability work of the firm was initiated by paying particular attention to the unfair and poor working conditions at the suppliers' factories. Another respondent emphasized the firm's responsibility over its employees and noted that all of them need to be treated equally. Furthermore, the focus especially on sustainability among the firms' supply chains was highlighted. The labour-intensive nature of the textile industry as well as frequently exposed issues regarding the labour standards, especially when operating in the developing countries, have been recognized also in the previous research (Köksal et al. 2017; Shen 2014; Khurana & Ricchetti 2016) and seen as reasons increasing the importance of social sustainability in the industry (Freise & Seuring 2015).

"[...] the priority is clearly on the issues concerning human rights and working conditions of the supply chains." (Company B)

However, sustainability was commonly seen as a unity in which all dimensions are considered equally important. In addition to the economic dimension, the attention towards environmental and social aspects was seen to increasingly emerge in the industry, and one respondent further emphasized the importance of balancing between all these dimensions. When asking the respondents about the emphasis on different dimensions in the industry and in their own firms, all categorized these differently emphasizing varying aspects of sustainability. For some respondents, it seemed to be rather difficult to divide sustainability under different categories.

"I think it is more or less a bit artificial, everything is part of the same whole." (Company A)

What can be considered as remarkable regarding the attitudes towards sustainability and sustainable practices is that the interdependency between different dimensions of

sustainability seems to be recognized among the case companies. Sustainable actions were not only considered as extra expenses, but the investments into social and environmental sustainability were rather seen to be financially profitable for the case firms. One of the respondents further emphasized the fact that economic responsibility of the firm does not mean that the actions could not simultaneously be socially and environmentally sustainable. This view supports the model of Carter & Rogers (2008) who emphasize that firms should engage in activities in which all three dimensions of sustainability intersect, and thus not only in those that influence positively on the environmental and social sustainability but that also has long-term financial benefits.

"In my opinion, economy and ecology mainly go hand in hand. The less you use resources the more you save money. In this regard, it is really financially worthwhile to do things that are ecologically sustainable, because you save materials, you save water, you save energy and among all of that you simultaneously save also money." (Company A)

"[...] of course the economic responsibility is continuously present in the firm in order the business to run and people to have jobs so that is important. But it doesn't exclude that the things are done fairly regarding the social and ecological aspects." (Company F)

When asking the respondents about the practical choices by which the companies seek to change their operations to be more sustainable, environmental aspects in particular were highlighted. Especially searching and selecting of more sustainable materials to be used in firms' products were emphasized among the concrete sustainable actions in the case companies. The firms were stated to increasingly utilize sustainably produced cotton and fibres of circular economy such as recycled polyester and natural fibres in their products. Furthermore, renewable energy sources are increasingly utilized; three of the respondents mentioned that at least part of their energy comes from solar panels. The companies have also started to pay increasing attention to more sustainable alternatives considering modes of transportation. One respondent stated that the firm has started to utilize the railway connection from Asia instead of sea transportation and aviation. Other firm on the other hand was mentioned to replace its traditional cars with hybrid vehicles. Moreover, based on the respondents, increasing attention is paid also on waste treatment, recycling and energy savings.

4.3. Managing sustainability in relation to the suppliers

This chapter aims to find answers to the research objectives of the study; what are the motivational factors of SMEs to manage sustainability in relation to their suppliers, what kind of challenges they may face when implementing sustainable supply management in relation to their suppliers as well as how do SMEs manage sustainability in relation to their suppliers in practice.

4.3.1. Motivational factors and perceived challenges

Based on the interviews, especially demands and questions from customers and consumers in particular were commonly recognized as factors that encourage the firms to manage sustainability in relation to their suppliers. The increased consumer awareness, including for instance interest in the working conditions at the production facilities and origin of the raw materials, was seen to be reflected not only to the focal firms but also to the firms' partners and suppliers. Moreover, as the end customers were stated to guide the operations of the buyer firms, the firms were considered to be responsible also for directing the demands and expectations forward to their own suppliers and down to their upstream supply chains. Thus, the concept of *extended upstream responsibility* highlighted also in the previous research (Boström 2015) can be considered to be strongly present in the case firms as their responsibility for sustainability issues is recognized to extend also beyond the firms' own borders and direct control.

Regarding the extended upstream responsibility, it was also suggested by one of the respondents that if the suppliers act unethically or irresponsibly, it has a direct impact on the buyer firm's business and reputation. Also the previous research suggest that since the outsourced activities are increasingly seen as part of the buyer firm's responsibility, the firms are held responsible for their suppliers' actions regarding sustainability issues (Jorgensen & Knudsen 2006; Akhavan & Beckmann 2017). Thus, the risk perspective can be considered to further encourage firms to manage their suppliers' sustainability, partly due to the wider perceived responsibility of the buyer firm.

“Even though we don't manufacture the products by ourselves, but if it is our product that is produced at the factory, then it is a clear business risk and reputation risk for us.” (Company B)

Moreover, acquiring of information as well as being able to provide honest information to the customers and to answer their questions seem to motivate the industry firms to integrate sustainability into their supply management. The aspiration to provide as much information as possible to the customers about the firms' products and to increase their confidence that the firm has done its best in ensuring the sustainability of its production chains were seen as starting points to manage sustainability in relation to the suppliers. Overall, convincing the customers that the firm's products have been manufactured in decent working conditions and from ethically produced raw materials was seen crucial. Thus, it can be concluded based on the analysis that the consumers play a critical role in the buyer firms' efforts towards more sustainable supply management. This finding is consistent with the view of Ageron et al. (2012) that customer pressure is one of the most influential factors promoting sustainable supply management among firms.

“It is difficult to say anything about the product to the customer if not even we have the information of what has happened along the way.” (Company A)

“We want to provide as much information as possible to the customers, and the confidence to the customer that if you buy our product you can be sure that we have done our best for the sustainability of the production chain” (Company B)

Managing sustainability in relation to the suppliers was considered as critical also in order the firm itself to ensure what has happened in each phase of the production chain. Moreover, ensuring the transparency of the supply was seen as a necessity, especially when supplying from the risk countries.

“[...] we cannot say we are transparent if we don't know everything that happens in the production chain [...]” (Company B)

“We want to ensure that our entire supply chain is transparent from the third world and risk countries. And then we are able to indicate our suppliers' actions ethically and also on the product level.” (Company D)

Furthermore, one of the respondents considered that by being transparent and providing information honestly to the customers the firm could also be able to differentiate itself from other industry firms. This is consistent with the findings of Porter & Kramer (2006) who suggest that reinforcement of sustainability issues may distinguish the firm from its rivals and lead to differentiation.

In addition to the external pressure and drivers, internal commitment and aspiration of firms to promote sustainability among their supply chains arose during the interviews.

Concerns about the current state of the textile industry and courses of actions in particular emerged as factors that encourage the companies to manage sustainability in relation to their suppliers and to reconsider their operations. The issues resulting from the fashion-driven, pollutive and extremely labor-intensive nature of the industry have been recognized also in the previous research on the state of sustainability in the textile production (Boström & Micheletti 2016; Shen et al. 2017; Diabat et al. 2014; Köksal et al. 2017; Shen 2014). Overall, the current structure of the textile industry was seen unsustainable, and one respondent especially highlighted the firm's quite ambitious aspiration to transform the structure of the entire textile industry to be environmentally and ethically sustainable.

“This kind of common understanding about the state of the world, meaning that it cannot continue like this. Things are required to start doing differently.” (Company C)

“[...] we want to be a fair player and not to exploit anyone with our actions, and that is the basis for everything.” (Company B)

Moreover, sustainability was seen to be strongly interrelated with the quality of the firms' products. Poor working conditions as well as poorly treated employees and sources of raw materials were considered to likely result in a bad quality of products. Furthermore, firms were stated to engage in sustainable supply management to ensure that the products meet the original design and purpose and that the company can proudly stand behind its products. These aspects further emphasize the internal aspiration of firms to promote sustainability in their supply chains.

“[...] the better the social and other responsibilities in the firm, the better is also the quality as well as the actions overall.” (Company E)

Regarding the challenges that SMEs operating in the textile industry may face as managing sustainability in relation to their suppliers, especially acquiring of information from suppliers was perceived as a common challenge among the case companies. One of the respondents further emphasized that it is challenging to receive unbiased and transparent information from the suppliers about the social responsibility in particular, and the suppliers were considered to be less unprompted to communicate about the aspects related to the social dimension. Also Oelze (2017) emphasize the resistance from the suppliers' side to share information as a critical challenge for the buyer firms that may hinder the successful implementation of sustainable supply management practices. Furthermore, also the role of the buyer firms' confidence in their

suppliers was emphasized during the interviews due to the fact that the buyer firms are unable to continuously monitor their suppliers' activities, and trust in that sense was seen as a critical challenge.

“Occasionally it is challenging to obtain the information.” (Company A)

“And we can never be one hundred per cent sure that things are well somewhere if we are not present 24/7, and that is a challenge that we still need to trust our partners that they manage things well.” (Company B)

The challenge of acquiring reliable information was emphasized by the respondents especially due to the length of the upstream supply chains in the textile industry. The challenges resulting from the globally stretched and fragmented textile supply chains are recognized also in the previous research (Oelze 2017; Köksal et al. 2017; Boström & Micheletti 2016), and due to the length of the supply chains consisting of several actors from different countries, the point of origin of the raw materials is often several steps far from the focal brand, and thus the transparency of the supply chain may suffer (Köksal et al. 2017; Khurana & Ricchetti 2016). Based on the interviews, the industry firms are well aware where their products are manufactured and sewed. However, the respondents stated it to be rather challenging to make sure the actual length of the production chains. Thus, it was seen challenging for the buyer firms to go further and acquire information also about the origin of the raw materials and sources of the fibres since the traceability of the materials may not be available all the way from the beginning of the chain.

Moreover, usually the buyer firm signs the contract with the assembling firm that is not involved in weaving or colouring processes of the fabric, and thus especially in the beginning of the cooperation it was considered to be challenging to acquire information for instance about the environmental effects of the whole production chain. However, ensuring the traceability of the upstream supply chains was seen as increasingly important, and one respondent further highlighted the firm's current focus on unravelling the production chains of its entire product portfolio.

“Often those chains are so long that it is not necessarily possible for us to get down to the original source of the fibre, maybe we get down to the fibre manufacturers and sewers, but not necessarily to the fibre spinner or origin of the fibre at all.” (Company A)

“[...] Currently we strongly pursue to clarify what is happening in which part of the world, and we aim to unravel the entire production chains of each products all the way from the cotton plants, which is really challenging [...]” (Company B)

Furthermore, the challenges resulted from the small size of the case firms were commonly emphasized during the interviews. Especially a lack of negotiating power due to the small size of the companies was suggested to create challenges as seeking to influence the suppliers' operations considering the sustainability aspects. Lack of negotiating power was considered to restrain firms from demanding things from the suppliers, and as small players the effectiveness of the firms was considered to be rather minor. These findings are supported also by previous research about the challenges faced by SMEs due to the small size and small purchase volumes of the firms (Ayuso et al. 2013; Jorgensen & Knudsen 2006). Especially negotiations about specific certification processes with the suppliers were considered to be rather challenging for the case firms. Thus, one respondent highlighted that bigger firm size would increase the effectiveness of the company in relation to its suppliers, and mentioned that the aim of the firm is to expand so that the effectiveness and the agility of the firm would be in balance.

“[...] one big challenge that we have because we are an SME [...], is that we don't have much negotiating power to start demanding things from our suppliers [...]” (Company B)

In addition to challenges derived from the small size of the buyer firms, also the small size and limited resources of the suppliers were seen as factors that may hinder sustainable supply management. Especially large investments and resources needed for the certification processes were considered to create challenges for small suppliers. The respondents highlighted that some partners may not be able to audit themselves and acquire certificates due to the heavy cost structure of the processes and limited resources of the firms. This may result in abandoning the supplier completely due to the lack of certificates, or alternatively create more responsibilities for the buyer firm to monitor the supplier more comprehensively due to the inability to obtain a third-party confirmation about the state of affairs.

“Chances of engaging those small firms for instance into the certification of the working conditions is rather weak because it is such a large process and often also so expensive process [...] then you have to control the issue by yourself.” (Company E)

Convincing of suppliers about the importance of sustainability and sustainable actions was also considered as a challenge by some of the respondents. One respondent noted that especially when the firm initiated its sustainability work a few years ago, the suppliers were rather astonished about new inquiries and courses of action. Due to the possible scepticism of the suppliers, the industry firms face challenges in convincing them about the benefits of sustainable actions for the business. Also Oelze (2017) emphasize the resistance of the suppliers to follow the instructions and guidelines due to the lack of understanding about the necessity. However, as also Ageron et al. (2012) emphasize, it is a critical task for the buyer firms to support their suppliers to really acknowledge the importance of sustainability issues. One of the respondents highlighted especially the challenge of convincing the suppliers about the importance of some specific voluntary certifications and explaining the benefits of the certificates despite the large investments.

“And then they are somewhat surprised at why we want them to act like this or why we want to guide them. That kind of scepticism about where this all will lead to and if it is away from them.” (Company F)

Moreover, differences in cultures and firm values between the buyer firm and its suppliers were seen to create challenges in managing the suppliers. Engaging a new supplier was highlighted to be a long process due to differing set of values between the firms. Thus, it was suggested to take time to find a way to combine the firms' values so that both parties understand and engage in the courses of action and applied policies. The challenges in sustainable supply management derived from cultural differences between the firms is also emphasized by Oelze (2017) who suggests that often suppliers might consider the various requirements and standards as extra costs without a link to their core business. Again the support and efforts from the buyer firm to explain the necessity of the sustainability issues can be highlighted.

4.3.2. Selecting the right suppliers

In line with the previous research (Ageron et al. 2012), the respondents generally recognized the critical role of supplier selection among sustainable supply management. Principally selecting those suppliers that are willing to collaborate with the buyer firm and that share the same values and principles was seen crucial in managing the sustainable supply in the textile industry. As highlighted by one of the respondents, due to the low negotiating power, it is extremely critical for an SME to select right partners that are prepared to cooperate with the buyer, develop the relationship and share

information openly. Thus, it can be concluded, as also Bai & Sarkis (2010) emphasize, that supplier selection is more and more a critical partnering issue. Selecting the right suppliers was also seen to minimize challenges related to the management of suppliers' sustainability in the long term. Thus, the respondents commonly emphasized that they prefer to select those suppliers that already have high standards regarding sustainability issues.

"[...] if we primarily select those that have already come a long way in their own sustainability work, it is of course always easier for us [...]" (Company B)

A fit in values between the buyer firm and its suppliers was seen as an important criterion when selecting new suppliers. The respondents considered it to be critical that the partners share the same values and have the same objectives regarding sustainability. One respondent emphasized that it is the firm's value judgement to ensure to only collaborate with those good-quality partners that share the same values.

"[...] I think it's the be all and end all that we primarily select the good partner that is willing to cooperate and that shares the values." (Company B)

"[...] we don't collaborate with firms that don't share the same values and strive for the same outcome [...]" (Company C)

Replacing existing suppliers was not considered common, but the respondents noted that as the product and material portfolios continuously grow, new partners are selected. However, the procurement was still stated to be rather narrow. Based on the respondents, a number of suppliers in the case firms vary between a few main partners to tens of global suppliers, but each case firm stated to have less than hundred partners worldwide. One of the respondents emphasized that the firm has reduced its supplier portfolio during recent years and aims to establish long-term partner collaborations with their ten or so suppliers. Overall, small amount of suppliers was generally considered to increase the controllability of the supply base and to increase the efficiency of the firm's operations. This supports the findings of Beske & Seuring (2014) who indicate that firms are able to reduce risks and uncertainty by decreasing the number of suppliers.

Furthermore, the proper size of a supplier for the small and medium-sized companies operating in the textile industry was discussed during the interviews. It was highlighted by one of the respondents that the supplier needs to fit to the firm, its brand and its size and is primarily required to meet the firm's needs. It was considered to be essential that the chosen suppliers are not too large, but it was noted that they cannot be too small

either. Challenges in collaboration with really large companies were recognized since even though they might have all the required certifications and decent standards regarding their sustainability work, it is challenging to influence their operations as a small company when representing only a really small proportion of their customer portfolio with relatively small amount of orders. On the other hand, it was emphasized that too small size of a supplier may also create challenges, as the supplier might be unable to manage the orders without outsourcing part of the production. Including the consideration of the size of the suppliers into the supplier selection criteria has been recognized in the previous research (Ageron et al. 2012), and proper size of the suppliers was seen critical also by the case firms in order to maximize the firm's influence on the supplier's activities. However, the size of the suppliers received inconsistent opinions among the respondents. Another respondent stated to collaborate only with really large suppliers and saw this as a benefit, and further highlighted that it would increase the challenges if it had a large supply base consisting of small suppliers.

"[...] we buy from really large suppliers. From really large suppliers on a global scale that sell to really large chain stores around the world, and that are audited really heavily several times a year by the world's largest buyers." (Company D)

When asking the respondents about the aspects that are taken into consideration when selecting new suppliers, they commonly mentioned issues such as quality, price as well as suppliers' knowhow and abilities to manufacture the firm's products, which are recognized as the more traditional criteria in the previous research (Yang & Zhen 2017; Chen et al. 2006; Bai & Sarkis 2010). However, also suppliers' courses of action related to social and environmental aspects were stated to have an increasing importance in the supplier selection process. Especially decent working conditions, wellbeing of employees and decent compensation at supplier's premises were considered as critical aspects. However, for some respondents it seemed to be rather difficult to specify the sustainability related aspects in detail that are taken into consideration when selecting new suppliers. One respondent noted that sustainability cannot be viewed as a separate issue but it is rather considered as an integral part of the entire selection process.

"[...] and it is not compatible with our values that we would only search for the cheap price, but we rather search for the integrated whole." (Company F)

Considering the most critical supplier requirements in the supplier selection process, the respondents highlighted the need for the suppliers to engage in the ILO Declaration on Fundamental Principles and Rights at Work as well as in the REACH Regulation and its

list of restricted substances. Thus, it can be concluded that at a minimum the suppliers are required to obey with some of the most common sustainability regulations and standards in order to be selected as partners. As also Boström (2015) suggests, lists of restricted substances are rather common in the textile industry in particular. Overall, the suppliers were considered to be well aware and used to the requirements related to the sustainability aspects deriving from Western customers, and the buyer firms did not see the requirements and criteria as such exceptional that that the selection process would fall down to those.

Moreover, most of the case companies stated to have some kind of written agreements for the new suppliers to be signed before initiating the collaboration. Only one respondent mentioned that the firm does not utilize any written agreements but establishing a new supplier relationship is more based on a personal interaction and agreement. However, as Oelze (2017) suggest, it is rather common in the textile firms to set specific sustainability criteria and requirements for the suppliers by applying a Code of Conduct. Also majority of the case firms stated to utilize a Code of Conduct, by which the firm instructs its suppliers considering the sustainability and quality aspects as well as communicates the firm's values and principles to the suppliers. Codes of Conduct employed by the case firms were stated to include aspects related to abuse of labour force, child labour, discrimination, working hours and compensation, which is in line with Yu (2008) who indicate that majority of the codes are based on the core conventions of ILO. Some of the case firms stated to have their own Codes of Conduct, but most of the firms mentioned to apply the Code of Conduct of amfori BSCI. Amfori Business Social Compliance Initiative is an auditing collaboration model that seeks to support its member firms in advancing the responsible practices among their supply chains (Finnish Textile and Fashion 2018).

“We have our own Code of Conduct, such a [Company A]-manual in which we give instructions to our supplier regarding the quality and sustainability aspects. They are required to sign the agreement before we initiate the collaboration with them.” (Company A)

Moreover, the buyer firms may also select suppliers based on the certifications and certain sustainability standards in order to ensure the state of the suppliers' performance regarding sustainability issues (Ageron et al. 2012) and to increase the efficiency of the supplier selection process (Yang & Zhang 2017). However, the case companies seem to have varying opinions about the certifications required from the suppliers. Some of the respondents highlighted that the starting point in the selection process is that the

suppliers have specific certifications, which means that they have already been audited by a certification body. A few respondents saw it as a necessity that the suppliers have been audited, when considering suppliers from the risk countries in particular. Especially amfori BSCI qualification and auditing program was seen as a common and critical factor in the selection process of a new supplier. One of the respondents highlighted that the firm will not collaborate with a supplier that is not already a member of BSCI, or that is not willing to engage in the process of acquiring a certification.

“[...] considering a risk country supplier, it would be good that it would already be involved in either SA 8000 or BSCI audits. But of course we consider the suppliers on a case-by-case basis.” (Company B)

Even though certifications were overall viewed as a good method to obtain a third party approval on the suppliers' actions considering sustainability, some of the case firms stated not to necessarily require specific certifications from the potential suppliers. As highlighted by some of the respondents, especially the small partners might not have possibilities to acquire certifications due to a large amount of resources required for these processes. As highlighted also in the previous research, it may be really expensive to engage in the sustainable supply management practices, and thus the high initial investment costs may become a critical challenge restraining the efficient implementation of sustainable supply management (Giunipero et al. 2012; Oelze 2017), in this case on the supplier side. Moreover, one respondent emphasized that primarily mutual agreements between the firms have been proved to work well in collaboration with the partners. However, this may require more efforts from the buyer firm itself to observe and evaluate the suppliers considering the sustainability aspects. One respondent, that stated not to require certain certificates from its suppliers, highlighted that since not all firms have a possibility to obtain certificates, the buyer firm is required to “certify by own eyes” and observe the supplier's operations itself.

“[...] it is not meaningful [for the small family firms] to acquire certain certificates since they are rather expensive, and it doesn't necessarily improve their operations that considerably that it would be reasonable for us to deliberately require it from them.” (Company A)

Furthermore, some respondents suggested that references from existing customers of the potential suppliers might assist in confirming the state of sustainability when selecting new partners. One of the respondents further emphasized that sharing experiences with

other industry firms about a specific country or product group might help in the assessment of potential partners.

“[...] their other customers might be good references also considering sustainability [...] then we know that they are cooperating with these customers so they must have certain issues at a good level already.” (Company A)

Moreover, a few of the respondents stated that the firms visit their suppliers' premises in the early stages of the collaboration to examine the state of affairs. However, this requires large resources from the buyer firm, and thus one respondent highlighted that visiting the suppliers before the established co-operation relationship is a too heavy process for the firm since even ordering samples from a supplier might not lead to a business relationship. Thus, in some cases relying on the certifications and third-party approval in the selection process might require fewer resources from the buyer firm, and thus represent a more attractive choice especially for SMEs that are often influenced by their lack of resources (Ciliberti et al. 2008).

4.3.3. Active supplier development

“The world is changing all the time and of course companies are required to keep up with the change.” (Company A)

Based on the interviews, suppliers were commonly considered as the basis for firm operations, and continuous development of the suppliers was seen as a necessity. The respondents also highlighted the buyer firms' responsibility for directing the suppliers into the right direction and setting targets for them. Moreover, one of the respondents emphasized that the firm aims to be a forerunner in the industry and fulfil its obligations as well as possible, and thus is motivated to further develop also its suppliers' activities.

“[...] it is the starting point that the activities need to be developed all the time.” (Company C)

One respondent further emphasized that partners are not those that are replaced, but those that are actively developed. Overall, majority of the respondents highlighted perseverance in the supplier relationships, and thus active supplier development was seen to have a critical role. Furthermore, as the firms' businesses were stated to continuously grow, the development and improvement of the operations to follow were considered to be necessary. Even though selecting the suppliers that are already operating at a decent level considering sustainability was seen to have a crucial role in

sustainable supply management, many of the case companies stated to also invest in active supplier development.

As emphasized above, the case companies stated to face challenges regarding the lack of negotiating power due to the small size and small purchase volumes, that were also considered to restrain firms from demanding things from their suppliers. However, the respondents indicated that buyer firms globally are increasingly interested about the sustainability issues and also increasingly require attention towards these issues from their suppliers. Thus, the respondents commonly recognized the role of group pressure from the buyer firms in driving supplier development forward and requiring the suppliers to act more responsibly, and also simultaneously increasing the effectiveness of an individual firm. Overall, pressure, inquiries and needs especially from Western customers were seen to induce the suppliers to develop their operations.

”Of course we are a rather small player, but together with other players [...] we can jointly direct these suppliers.” (Company E)

One of the respondents further highlighted that being a member of amfori BSCI increases the leverage against the suppliers since often many member firms operate and manufacture their products in the same factory, and this assists in driving the values and sustainability aspects forward as a larger community. Moreover, due to the small size of the firms, it was considered to be easier for an SME to require and drive sustainability issues forward together with other industry players, as the effectiveness will be higher. This view is consistent with Boström (2015) who indicates that individual firms may be able to overcome the challenges resulted from the small size and low negotiating power by joining to different associations and networks and by developing requirements jointly.

“[...] Amfori, which is like a large community and often many Amfori members are involved in the same factory, so in collaboration all parties drive the same value forward which leads to a rather considerable leverage.” (Company F)

Moreover, centralizing the supply was also recognized to increase the firm’s volumes among certain suppliers, which is suggested to increase the firm’s negotiating power and ability to influence its suppliers. Also Köksal et al. (2017) suggest that especially SMEs may better integrate sustainability into their supply management by sourcing from small supplier base, which is also indicated to enable long-term supplier relationships.

“[...] of course we are able to influence differently where we have large purchasing volumes compared to if we are just initiating the relationship or in which we have smaller volumes or smaller categories.” (Company D)

Moreover, considering the optimal size of the suppliers and also the size of the other customers that the suppliers are serving, a few respondent suggested that it can be viewed as a positive thing that the firm’s suppliers also serve those really large customers since the larger players usually have more influence over the suppliers’ operations as well as the ability to demand more sustainable actions from them. This was seen to facilitate the state of sustainability also in the SMEs’ supply chains.

“And sometimes the fact that there are those big players assists [...] so we are able to get forward perhaps even easier regarding many issues.” (Company D)

Activities employed by the buyer firm such as training, education and coaching are recognized to improve the performance and capabilities of the suppliers (Holt & Ghobadian 2009; Yang & Zhang 2017; Ghadimi et al. 2016). During the interviews, the environmental aspects of the development practices received perhaps the most attention and the buyer firms stated to give instructions to their suppliers regarding for instance the use of energy, waste treatment and use of chemicals. Due to the pollutive nature of the textile industry and its major impact on the environmental sustainability (Boström & Micheletti 2016), these aspects are widely recognized also in the prior research among other environmental issues (see e.g. Köksal et al. 2017; Khurana & Ricchetti 2016; Shen et al. 2017).

A few of the respondents also recognized areas of improvement among the social dimension of sustainability such as long working hours and overtime work of the suppliers. Moreover, one of the case firms stated to have built for instance proper lunch rooms, showers and living areas at the supplier premises to develop their conditions. Furthermore, some respondents stated to forbid their suppliers to acquire materials from certain countries to be used in the firm’s products due to the political situation or problematic nature of the countries such as use of child and forced labour. As highlighted by Khurana & Ricchetti (2016) and Freise & Seuring (2015), the social issues related to labour standards and working conditions of the employees are rather common in the textile industry, and thus the case firms’ efforts to address these issues can be seen critical to drive social sustainability forward in the industry.

When asking the respondents about the responsiveness of the suppliers towards the development initiatives of the buyer firm, the suppliers' reactions were stated to be mainly positive. It was suggested that the suppliers are rather receptive and ready to share information, which was considered as a necessity among the development work. The criticality of information sharing between the partners is also recognized by Li et al. (2006) who suggest that changing information enables the firms to for instance work more closely together. However, two of the respondents noted that the development initiatives might influence on the price of the suppliers' offerings, especially if the firm is the only one demanding for instance new courses of action or new material choices. This may refer to the fact that development initiatives concerning sustainability are unfortunately still seen more as a cost burden than sources of innovation and business opportunity.

“If we are the only one who wants to have some particular thing, the supplier may quickly state that “it’s ok but it costs this much”, and thus can be a challenge.” (Company E)

“Overall they react rather well. Sometimes they can mention that it affects the price. And it can be noticed that all of these have an effect on the price. And when the price is affected, in most cases it is only to one direction.” (Company D)

Moreover, the initiative of the suppliers regarding the development aspects was emphasized during the interviews. One respondent highlighted that also the suppliers are required to be unprompted for instance to search for new, more sustainable materials and solutions. Overall, most of the case companies seemed to be rather positively surprised about how conscious the suppliers already are regarding sustainability aspects, and how they spontaneously and actively search for and provide better, more sustainable alternatives. Especially for the recent years, suppliers were suggested to more actively drive their own sustainability work forward and also to more promptly inform the buyer firms about new, more sustainable solutions and materials that they have started to employ, such as zippers made from recycled plastic.

“It has been marvellous to notice [...] that they develop sustainability by themselves and report on it and on the new things that they do.” (Company E)

“And we have been surprised also about how conscious the factories have been and how those alternatives are already available or under consideration.” (Company D)

Krause et al. (2007) indicate that direct involvement development activities between the firms, such as visits to suppliers' sites and training, will lead to efficient transferring of knowledge as well as improved performance. Also the respondents commonly emphasized the role of direct and close relationships with the suppliers in driving sustainability forward in the upstream supply chains. In major pressures for change, long and trustful relationships as well as shared history with the suppliers were considered to enhance the communication so that also the suppliers would be more responsive to the changes. Furthermore, direct supplier relationships without intermediaries were seen as an efficient way to convey the firm values to the suppliers and to also influence the partner firms' opinions, values and views on sustainability issues. This is in line with Akhavan & Beckmann (2017) and Krause et al. (2007) who suggest that by employing supplier development practices such as knowledge sharing and asset investment the buyer firm is able to get directly involved with the supplier's business.

"[...] such a close and direct contact is an extremely useful way to drive those values forward." (Company F)

Overall, the development initiatives were stated to be mainly designed and implemented in a close cooperation with the suppliers. The active communication and discussion with the suppliers were considered to be the best way to drive sustainability issues forward and develop the suppliers' operations. Furthermore, making the partners feel that they are offered support and assistance in implementing sustainability initiatives was also considered important since it was noted that often the suppliers do not have the know-how of how things should be done. Even though commanding of suppliers was not seen efficient, one respondent noted that the firm might in some cases base its demands on the fact that it is a paying customer, but highlighted that today the development work is mostly based on collaboration without juxtaposition between the parties.

"From my perspective maybe the best way to drive the issue forward is to discuss about things [...]. In my opinion direct commanding won't work." (Company F)

The development initiatives were recognized to often be time-consuming projects that require plenty of explaining, exchange of views and also understanding of the suppliers' perspective. Also Krause et al. (2007) recognize the large investments required from the buyer firm, and thus suggest that the firm should focus on those supplier development investments that have potential to add value.

4.3.4. Close and long-term collaboration

Sancha et al. (2016) refers to the supplier collaboration as an approach that aims to jointly improve the performance of the buyer firm and the supplier. Collaboration between the partners is recognized to be crucial in order to enhance the sustainable performance of the entire supply chain (Ageron et al. 2012). All respondents highlighted the importance of perseverance and long-term orientation of the collaboration in managing sustainability in relation to the suppliers. Majority of the respondents emphasized that they have collaborated with their partners for several years, and thus the habits and demands of both parties have become familiar. Overall, long-term and close supplier relationships were considered to be necessary in the textile industry, since the rather complex design and patterns of the textiles alone were stated to require long-term orientation and intensive partnerships with the suppliers. One respondent further emphasized that the firm does not only seek the cheapest price or fastest delivery time, but rather a comprehensive big picture that consist of several different components and that is possible to achieve only with long-range orientation. The role of long-term orientation and depth of supplier relationships has been recognized also in the previous research, as also Krause et al. (2007) highlight that performance improvements regarding sustainable supply management are possible to achieve only by engaging in long-term supplier relationships.

“We strive for sustained, long-term co-operation relationships because then we have strong confidence in the other party, and then you are also able to do the product development and sustainability work persistently and trust the partner.”
(Company A)

Long-term partnerships were also recognized to increase trust between the parties and to enable the perseverance in research and development as well as in the sustainability work. The criticality of trust was further emphasized in developing the collaboration between the buyer firm and its suppliers. As also Beske & Seuring (2014) emphasize, trust is crucial in the relationship between the partners since lack of it can make the collaboration more challenging. Moreover, increased trust is suggested to also improve the quantity as well as quality of the shared information between the partners (Beske & Seuring 2014; Miemczyk et al. 2012) and thus enhance the collaborative activities. One respondent further noted that as the collaboration with the suppliers evolves, business is increasingly conducted together without juxtaposition between the firms.

Furthermore, long-term orientation was seen important to also give time for the suppliers to learn and understand the set of values driven by the buyer firms, which might differ greatly from the suppliers' own values. Thus, the case firms seem to recognize the need for common understanding about the policies and objectives of the business. As also Suering & Müller (2008a) suggest, shared understanding on what needs to be achieved regarding sustainability is a critical part of the collaboration and overall sustainable supply management, and thus the buyer firms should support and assist the suppliers in internalizing the values and principles driven by the buyer firms. Moreover, the respondents commonly saw it essential that the values, prerequisites and demands of the buyer firm are communicated to and agreed with the suppliers so that they are aware of the limits in which to operate and know the objectives of certain procedures.

"[...] all of those that we cooperate with are either in our own hands or are our partners, with whom we have clearly agreed what our objectives are and in which direction we are going." (Company C)

"[...] of course it is nicer to primarily do those things together so that also they [the suppliers] understand why we want to develop these issues." (Company B)

However, contrary to the long-term aspect, one of the respondents noted that in some cases new partners might after all be more receptive to new views and initiatives regarding sustainability than the old suppliers that have accustomed to previous courses of action.

"[...] we do have long-term partners, but I don't think it makes us blessed, meaning that things might even go much more smoothly with our newest partners since they might primarily be more prepared for these new ideas." (Company B)

Based on the interviews, sustainability was seen as an integral part of the overall collaboration as well as part of the everyday routines with the suppliers. One respondent emphasized that sustainability is a part of the business, which means that it is discussed as any other issues with the suppliers. Majority of the respondents highlighted the role of constant interaction with the suppliers, and the discussions and negotiations between the parties were stated to be rather active and regular. Overall, managing sustainability in relation to the suppliers was recognized to require active sharing of information as well as transparency of the information. This is in line also with the previous research, which suggests that especially sharing of information and know-how are required to

build collaborative supplier relationships (Beske & Seuring 2014; Yang & Zhang 2017; Sancha et al. 2016).

Furthermore, face-to-face meetings including visits to suppliers' premises were seen as critical and integral part of the collaboration and management of sustainability in relation to the suppliers. All of the case firms stated to make personal and regular visits to their suppliers' premises and factories as a part of the supplier management and collaboration, again highlighting the importance of close and direct cooperation (Li et al. 2006). However, in some cases, the visits were considered to rely on the purchasing functions of the firms that visit the suppliers mainly concerning the operational aspects, but it was noted that if required, the attention is paid also to the sustainability aspects. Moreover, the frequency of the supplier visits was noted to depend on the partners and the size of the volumes supplied, but the importance of regular visits to the main partners' premises in particular was recognized.

"And we are there at least every other month [...], and thus we are present quite much." (Company C)

"We visit all the suppliers [...], our key suppliers we visit two or three times a year." (Company D)

Two of the case companies stated to also invite their suppliers to visit Finland and the buyer firm's premises to get to know the procedures and way of working, and by this to convey the firm's values and principles to the suppliers. This further emphasizes the intimacy of the supplier relationships among the case SMEs.

"Many of our suppliers have visited also here in Finland, on the spot to see what is the firm like and what kind of stores we have here in Finland, how we do business here." (Company A)

The findings from previous research suggest that joint research and development practices, such as co-development of new materials, between the partners will promote the achievement of the sustainability objectives (Yang & Zhang 2017; Sancha et al. 2016; Beske & Seuring 2014; Pagell et al. 2010). Also the practical collaboration projects between the case firms and their suppliers regarding sustainability issues were seen to commonly concern the product development side of the business, and the respondents highlighted especially the importance of co-development of materials and products. The case firms stated to collaborate with their suppliers for instance in seeking for and developing more sustainable materials and solutions, such as sustainably grown

and produced cotton and other raw materials used in their products. Also Shen (2014) recognize the negative environmental impact of the traditional way of growing cotton, and suggest that firms may utilize for instance reused materials such as recycled cotton and recycled polyester to save energy and water and to reduce the greenhouse gas emissions.

"[...] those projects that we have at the moment are related to the products and materials used in the products, and to the joint development of some new material for instance to be used in our product." (Company B)

Otherwise, the case firms did not seem to have any other larger collaboration projects with their suppliers concerning sustainability. As one of the respondents noted, the firm as an SME does not have an opportunity or resources to initiate larger sustainability projects for instance related to water usage or growing of cotton, and also the effectiveness of these initiatives was considered to be rather low. Again, the lack of resources of SMEs can be seen to hinder the firms' efforts of integrating sustainability into their supply management (Ciliberti et al. 2008).

Moreover, it was suggested by one of the respondents that due to the small size of the firm, it is not always possible to cooperate that closely with the suppliers due to the fact that the firm often represents only a really small portion of the suppliers' customer portfolios. Also Boström (2015) indicate that developing close supplier relationships might be challenging especially for small firms due to the frequent and repeated interactions that it requires.

"[...] but they often have dozens of customers which means that really close cooperation is not necessarily always even possible because we are such a small player." (Company B)

Supplier collaboration is also suggested to involve technological as well as logistical integration between the buyer firm and its suppliers (Beske & Seuring 2014; Seuring & Müller 2008a) as well as to promote mutual planning and problem solving (Li et al. 2006). However, integration between the case firms and their suppliers did not receive notable attention during the interviews. Only one respondent mentioned that the firm will soon initiate an IT project related to product development and information that also the suppliers have access to, and which is suggested to enable the information flow and enhance the communication between the partners. Moreover, the role of mutual planning between the partners did not either draw attention during the interviews. Only one respondent indicated that they as a buyer firm have an opportunity to influence their

suppliers' working conditions and working hours by systematically planning the operations and orders. By this, also the suppliers are then able to better organize their production and decrease the pressure for overtime work.

"[...] all of us that are having the products made somewhere else should also understand that our own doings influence also their doings, which then affect the conditions of all people involved in there." (Company F)

Touboulie & Walker (2015) suggest that the lack of alignment of systems and technologies between the partners often acts as a main barrier in promoting collaboration and working in a unified manner. On the other hand, Perrini & Tencati (2006) emphasize that many of the tools and methods, such as this kind of technological integration, are not applicable in SMEs due to their complexity and lack of flexibility.

4.3.5. Monitoring and assessment of the suppliers

In addition to the recognized importance of cooperative development initiatives as well as long-term collaborative relationships in managing sustainability in relation to the suppliers, the respondents also considered the supplier assessment to be a critical part of the firms' sustainability work. Various benefits of supplier assessment such as more efficient risk management (Beske & Seuring 2014) and increased information exchange between the partners (Yang & Zhang 2017) are recognized in the previous research. Furthermore, the geographical location of the suppliers was considered to have a strong impact on how notable role the buyer firm needs to take in monitoring and assessing its suppliers. For instance, one of the respondents suggested that if the partner is located in Europe rather than in the risk countries, monitoring of the supplier needs to have a much smaller role in the overall management of sustainable supply.

Yang & Zhang (2017) suggest that firms should apply sustainable supplier monitoring and assessment practices to confirm the suppliers' performance regarding the requirements and guidelines as well as to recognize the improvement areas and to provide feedback of how the suppliers can develop their activities regarding sustainability aspects. As indicated in the previous research, supplier assessment include activities such as on-site visits (Gimenez & Tachizawa 2012, Akhavan & Beckmann 2017), inspections and audits conducted by the buyer firm itself (Yang & Zhang 2017; Ayuso et al. 2013) as well as audits conducted by a third-party (Mamic 2005). Assessment of suppliers carried out by the company itself was commonly considered to include on-going observation and interaction. One of the respondents suggested that

continuous presence and interaction are the most important aspects in monitoring and assessing the suppliers. Also possible development areas were recognized to emerge by having conversations with the partners. Furthermore, the readiness of suppliers to share information and give answers about their actions was considered to be a good measure in evaluation of the suppliers' performance.

Moreover, in addition to abovementioned visits to supplier premises among collaborative activities, case firms also stated to pay regular visits to their suppliers for the purpose of monitoring and inspections. Mamic (2005) refers to this as internal monitoring. Case firms stated to conduct audits to verify that things are in a right shape and in accordance with what was planned. One respondent further highlighted that close interaction and regular supplier visits are the only guarantee to confirm the state of suppliers' actions. Also Boström (2015) views internal audits as an efficient way to evaluate the suppliers' performance thoroughly regarding the buyer firm's guidelines and requirements such as the Codes of Conduct. Moreover, the respondents commonly emphasized that during the visits, in addition to the conference rooms, they aim to visit and assess also the factories where the products are manufactured, and examine for instance the working conditions and safety aspects of these premises.

“We ourselves pay visits to our partners' premises annually, and during these visits we seek to visit also the assembly plants, and to conduct so-called first audits [...]” (Company A)

“And we conduct really careful inspections to those factories to know exactly where something is made and how it is made.” (Company F)

However, as emphasized by Boström (2015), monitoring activities such as on-site visits can be really expensive and require substantial resources from the buyer firm, which again creates considerable challenges especially to the small firms to conduct comprehensive supplier assessments due to the lack of resources. Thus, some firms stated to mainly rely on the audits conducted by third parties because as small firms, own audit systems regarding sustainability issues would require considerable resources.

Overall, applying third-party assessment and audits among the evaluation of the suppliers' activities and sustainability of their operations was seen to be rather common among the case firms. The respondents commonly mentioned the amfori BSCI qualification and auditing program to be employed in the third-party audits. However, only two of the case firms stated to be members of amfori BSCI, and two other case

firms mentioned to consider about different alternatives at the moment regarding the various initiatives and voluntary programmes. Yet, majority of the respondents indicated that their suppliers and factories, especially those operating in the risk countries, are audited based on amfori BSCI. Overall, it was suggested to increase confidence in the suppliers' operations when they have been audited by some kind of qualification and auditing program. One of the respondents further highlighted that third-party audits act as a guarantee that things are done correctly and as planned. Another respondent noted that the audits conducted by a third party are exhaustive including checking of the working hours as well as interviewing the employees about their working conditions, and thus the respondent stated that it would not be possible for the firm itself to conduct that exhaustive audits due to the amount of required resources.

"[...] and we utilize a third-party to ensure issues in our operations, so it is not only about what we ourselves imagine and believe, but we ensure it by conducting third-party audits [...]" (Company F)

Moreover, it was indicated by the respondents that even though some firms themselves are not members of amfori BSCI, they are able to obtain the needed documents about the regularly conducted audits straight from the suppliers that may go through several audits annually. Receiving the documents and reports from the third-party audits was considered to have an important role in assessing the suppliers' sustainability. By the audits, the case firms were stated to be able to receive information about the possible development areas and the aspects that require improvement, but also become aware of the aspects that the suppliers are already managing well.

"[...] especially BSCI is useful because I get to read all those reports and to see what kind of salaries are paid in there and how those are paid, and I'm able to see everything rather exhaustively from the reports, and thus it is the best way to assess how the suppliers are really doing." (Company B)

However, as highlighted already above, the audits and certification processes can be extremely expensive and not every firm have the required resources to have themselves audited and obtain certain certifications. One of the respondents further emphasized that the fact that a supplier does not have a certification might not necessarily mean that there are something wrong with the supplier's operations, but the supplier just might not have been audited. Furthermore, another respondent indicated that the firm is not counting excessively on certifications, but rather consider that the most efficient way to do things is as correctly and transparently as possible. The effectiveness of audits is widely discussed also in the previous research, and for instance Köksal et al. (2017)

criticize the beforehand announced audits in a sense that it is possible for the suppliers to prepare their facilities and activities for the audits. This concern was recognized also among the case firms as one of the respondents emphasized that it is possible for the suppliers to prepare and embroider their activities for the audits, and thus the reliability of the audits can be questioned.

Furthermore, the respondents were asked about the firms' reaction if it was revealed that a supplier had not followed the instructions and guidelines agreed with the buyer firm or had violated the agreements. One of the respondents highlighted that among the audits conducted according to amfori BSCI, there must be really glaring violations in order the supplier to fail the audit. Overall, rapid contacting of the suppliers and active communication were recognized to have a critical role in deviations or shortcomings in the suppliers' actions regarding sustainability. Majority of the respondents highlighted that among possible misconducts, the activities need to be developed and improved in collaboration with the suppliers, and again the buyer firms were viewed to have the responsibility for guiding the suppliers in the right direction and supporting them in the development work. This is in line with Mamic (2005) who suggest that the buyer firms are expected to provide assistance for the suppliers to support the remediation of their activities.

“And if there is something wrong, then we need to improve it.” (Company C)

Moreover, it was highlighted that cooperation with the suppliers is not terminated easily even if some development areas emerged in the suppliers' operations, and the case firms stated to have an aspiration to solve the issues and improve the shortcomings quickly so that the collaboration would continue also after the misconduct. Furthermore, active supplier development after the misconduct was considered to have an important role in instructing the supplier about the approved courses of action, and termination of the contract in revealed shortcomings was recognized most likely to lead to more faults in the suppliers' operations. This view is consistent with Boström (2015) who suggest that replacement of the supplier in case of non-compliance is not considered as the most responsible choice by the buyer firm.

“So we encourage them that we are not leaving anywhere even though some improvement areas are revealed.” (Company B)

”[...] mistakes always happen, and the way that we would immediately terminate the cooperation would probably lead to a situation in which they do more mistakes.

But if we take the corrective actions, it would maybe instruct them that it is not acceptable to operate like this.” (Company F)

Sancha et al. (2016) highlight that the supplier assessment activities should also lead to actual improvements among the suppliers’ performance, and for instance the critical role of corrective action plans has been emphasized in the previous research to promote the performance improvements according to the revealed results from the audits (Yang & Zhang 2017; Köksal et al. 2017). Also majority of the respondents emphasized the importance of systematic development plan of how to improve the operations after misconduct and how to prevent the issues from occurring in the future. Overall, it was considered to be necessary to recognize the areas that need to be improved and also the corrective actions that need to be implemented, as well as to determine the time span in which the supplier is required to achieve the required level of improvement.

Thus, conducting the supplier audits was not considered as sufficient, but based on the findings from the audits, conducting a development plan, implementing the corrective actions as well as monitoring the process were considered to be necessary in driving sustainability forward in the suppliers’ operations. These findings support the view of Gimenez & Tachizawa (2012) who suggest that supplier assessment alone is not adequate, but also collaborative activities are needed to develop the suppliers’ operations regarding sustainability aspects.

”[...] when the audit has been conducted, then there comes this plan to be made after the audit, and among that we go those issues through. And then we monitor that by the next audit those issues are taken care of, or at least by the deadline the issue needs to be taken into consideration and clarified and the improvement has been made.” (Company F)

Even though the respondents stated the firms to provide support for the suppliers in determining the needed corrective actions and among the overall development work, the suppliers were considered to have the main responsibility for conducting the development plan as well as implementing the corrective actions and improving their actions.

“[...] we go all those parts through and try to think of how they could improve those issues. They do the development work of course by themselves, but if they have something to ask they usually ask from me how the things should be done.” (Company F)

Furthermore, the responsibility of the buyer firm was considered to mostly include monitoring the suppliers' advancement regarding the development plan. The firms being members of amfori BSCI emphasized to place more emphasis on the development work of the partners' that they have a special responsibility for determined by BSCI, but considering other suppliers, they stated to mainly focus on the monitoring of the suppliers' improvements regarding the plan.

“And then I monitor that they follow the plan, and then it is usually possible to see in the next year's audits that the issues have been improved.” (Company F)

”[...] if we are only one firm among others and if we don't have a special responsibility defined by BSCI, then we only monitor that the development plan appears in the system and that things develop. We are not necessarily involved in the development work in this case.” (Company B)

Yang & Zhang (2017) suggest that supplier assessment practices should lead to the identification and possible abandoning of those suppliers that perform poorly and do not comply with the requirements. Also Akhavan & Beckmann (2017) suggest that supplier assessment should be reinforced with efficient sanction systems. The respondents indicated some issues that could lead or have led to termination of the procurement contract. The use of child labour or forced labour was recognized as serious misconducts, and stated to most probably lead to the termination of the contract. However, none of the firms had yet detected issues related to child labour or forced labour among their suppliers. In addition, violation of the Code of Conduct was considered as a breach of contract by one of the respondents that would lead to radical actions within the business relationship. Moreover, the violation of the laws and regulations, such as the REACH Regulation, was seen as a serious misconduct. Some of the respondents also highlighted that if the supplier is reluctant to collaborate with the buyer firm and unable to develop its operations in a certain time span, the buyer firm needs to consider the replacement of the supplier.

”[...] but if the supplier is not willing to cooperate, we cannot do business with that kind of partners if they are reluctant to everything we want to know and develop [...]” (Company B)

5. CONCLUSION

The purpose of this thesis is to examine how the SMEs operating in the Finnish textile industry manage sustainability in relation to their suppliers. More precisely, the main focus of this research is on the dyadic relationship between the buyer firm and the supplier, and the phenomenon is studied from the buyer firm's point of view. This chapter summarizes the main findings of the study and introduces the theoretical and managerial contribution of the research. Finally, the limitations of the study are discussed and suggestions for further research are provided.

In order to obtain a comprehensive understanding about the phenomenon of sustainable supply management in Finnish SMEs operating in the textile industry, three research objectives were applied: 1) *What kind of motivational factors do SMEs have to manage sustainability in relation to their suppliers in the textile industry?* 2) *What kind of challenges do SMEs face as implementing sustainable supply management in the textile industry?* and 3) *How do the textile SMEs manage sustainability in relation to their suppliers in practice?*

With the help of these research objectives, the study aims to finally answer to the main research question of '*What is the current state of sustainable supply management in Finnish SMEs operating in the textile industry?*'.

The recognized research gap in the field, topicality of the phenomenon as well as the researcher's own interest in the topic acted as the starting points for this research. Sustainability has received an increasing attention in the business world during recent years (Yang & Zhang 2017). Moreover, due to the globalization and the significant increase in outsourcing (Bask et al. 2013), the firm's responsibility is increasingly considered to extend beyond its own borders and direct control (Gimenez & Tachizawa 2012), as firms are increasingly held responsible also for their supplier actions regarding sustainability (Akhavan & Beckmann 2017). Thus, increasing attention has also been paid on how to integrate sustainability into the firms' supply chain management (Pagell & Shevchenko 2014). However, the previous research focus mostly on the sustainability efforts of the large multinationals (Ayuso et al. 2013), and the research on sustainable supply management among SMEs remains limited (Pedersen 2009). Thus, this thesis seeks to obtain new insights about the phenomenon among small and medium-sized enterprises focusing on the firms that operate in the Finnish textile industry.

This thesis employs a research strategy of extensive case study, which means that multiple cases were analysed to study the phenomenon. The data was collected by interviewing the representatives of six small and medium-sized enterprises operating in the Finnish textile sector during March and April 2018. The interviews were based on the predetermined themes, and the data analysis was conducted as a theory-bonded content analysis.

5.1. Main findings of the study

Internal aspiration of firms, including personal values and commitment of the firm employees as well as top management, was emphasized by the respondents to promote sustainability among the case firms. The respondents recognized the firms' responsibility for the wider environment and society, and especially concerns about the current state of textile industry as well as conditions for future generations were indicated to motivate the industry firms to integrate sustainability also into their supply management. Furthermore, the interdependency between sustainable actions and economic benefits was recognized, and thus sustainability is increasingly considered also as a source of competitive advantage.

The findings from previous research (Battisti & Perry 2011; Holt & Ghobadian 2009) suggest that due to the low visibility, lower external pressure as well as lower reputational risk, SMEs might be less willing to engage in voluntary sustainability initiatives. However, this view is not supported by the findings of this study. Instead, in addition to the internal drivers, the case firms also considered to face increasing external pressure regarding the sustainability issues. Especially the demands and expectations from customers were stated to compel the industry firms to promote sustainability in their own operations as well as in relation to their suppliers. Moreover, the respondents also recognized the risk perspective of sustainable supply management, as negligence of sustainability was considered to lead to risks regarding the firm reputation as well as the overall business. Thus, the concept of extended upstream responsibility of the buyer firm (Boström 2015), that extends the responsibility for sustainability beyond the firm's own borders, can be seen to motivate firms to engage in sustainable supply management. Moreover, managing sustainability in relation to the suppliers was considered critical also to ensure the transparency of the upstream supply chains and to provide transparent information to the customers regarding the sustainability impact of the business. Overall, it can be concluded that the customer demands and expectations

play a critical role in the industry firms' efforts towards more sustainable supply management.

Regarding the perceived challenges, especially the demanding nature of the textile industry as well as special characteristics of SMEs were recognized to influence the firm's efforts towards sustainable supply management. The fact that textile production is commonly outsourced was recognized as a factor hindering the management of sustainability in relation to the suppliers since firms are not able to directly control the production. Furthermore, the textile supply chains are often located outside the EU, generally in risk countries, which increases the role of sustainability in the industry and the challenges regarding sustainable supply management. Due to the fragmented nature and length of the textile supply chains, obtaining unbiased and transparent information from the suppliers was also considered as a challenge. Moreover, the challenges resulting from the small size of the case firms, such as low negotiating power against the suppliers, were recognized to decrease the firms' influence over the suppliers' sustainability performance. In addition to the small size of the buyer firms, also small size and limited resources of the suppliers were recognized to influence the suppliers' capability to engage in sustainable actions, and thus hindering the overall sustainable supply management. Moreover, in some cases differences in cultures and firm values between the partners were seen to create challenges among the supply management as it was considered critical to combine the firm values so that both parties would understand and engage in the applied policies.

The practices that the buyer firms employ in managing sustainability in relation to their suppliers were identified as supplier selection, supplier development, supplier collaboration as well as supplier assessment. Especially the critical role of selecting the partners that are willing to collaborate, share the same values and that already have high standards regarding sustainability was emphasized by the respondents. This is crucial among SMEs in particular because of their low negotiating power that may hinder them from demanding things from the suppliers at later phases of the collaboration. Overall, the procurement in the industry SMEs seems to be quite narrow, which was considered to increase the controllability of the supply base. Moreover, when selecting new partners, the proper size of the suppliers was considered critical to ensure that the partner fits the buyer firm's size and the brand. Generally new suppliers were stated to be at minimum required to obey with the most common sustainability regulations and standards, such as the core conventions of ILO and the REACH Regulation. Moreover, the suppliers are also commonly required to engage in the Codes of Conduct that aim to

instruct the suppliers about the buyer firm's values and principles regarding sustainability. The buyer firms may further confirm the suppliers' state of sustainability by requiring certain certificates, utilizing references from the existing customers or by visiting the supplier premises before initiating the cooperation.

Moreover, suppliers were considered as the basis for firm operations, and thus continuous supplier development was seen as a necessity. The role of direct and close relationships with the suppliers was commonly emphasized in driving sustainability issues forward in the upstream supply chains, in conveying the buyer firm values to the suppliers and in developing the suppliers' sustainability performance. The respondents commonly indicated that primarily suppliers are those that are developed, not replaced. Moreover, group pressure from the industry firms together was highlighted to drive supplier development forward and to increase the effectiveness of an individual SME. Thus, the industry firms may overcome their low negotiating power and increase their ability to influence their suppliers by joining different associations and making joint requirements. Overall, the suppliers were considered to be rather conscious about the sustainability issues and to also actively search for more sustainable alternatives.

Considering the collaborative activities that aim to jointly improve the performance of both the buyer firm and the supplier (Sancha et al. 2016), the respondents highlighted the importance of perseverance and long-term orientation. Long-term and close supplier relationships were considered to be critical in the textile industry due to the complex design and patterns of the textiles that alone require rather intensive partnerships, as well as to give time for the suppliers to understand the set of values driven by the buyer firms. Overall, constant interaction and active sharing of information were seen as integral parts of the collaboration between the partners. The collaboration projects between the partners regarding sustainability issues were mainly stated to concern the product development side of the business, and the respondents highlighted especially the efforts for co-development of more sustainable materials, products and solutions to be used in the firms' products. Otherwise, due to the limited resources of SMEs, the case firms did not seem to have any larger collaboration projects with their suppliers concerning sustainability.

In addition to the more collaborative activities between the partners, also the supplier assessment seems to have an important role in the overall sustainability work of the industry firms, especially when cooperating with the risk country suppliers. In order to ensure the suppliers' compliance to the agreed requirements and standards, case firms

were stated to employ practices such as on-going observation and interaction with the suppliers, regular monitoring and inspections conducted by the buyer firm as well as third-party audits. However, supplier assessment practices were also considered to require extensive resources; on the other hand exhaustive internal monitoring require large resources from the buyer firm which creates challenges especially for the SMEs, but it was also highlighted that not all suppliers have the required resources to audit themselves and obtain certain certifications. Moreover, consistent with the findings from previous research (Gimenez & Tachizawa 2012), assessment practices alone were not considered to be sufficient. The role of collaborative activities and joint development was emphasized by the respondents if non-compliance with the agreed requirements was revealed among the suppliers. Overall, the case firms stated not to terminate the cooperation easily, but rather emphasized the opportunity to instruct the suppliers about approved courses of action.

As highlighted also by Goworek (2011) and Zimon & Domingues (2018), consumers' awareness regarding the sustainability issues is growing and they increasingly demand more sustainable alternatives from the industry firms. Thus, firms are compelled to integrate sustainability not only into their own operations but also promote sustainability among their suppliers' activities. Overall, the case firms viewed sustainability as an increasing trend in the textile industry. The firms have started to more systematically focus on sustainability issues during recent years, and today sustainability is considered as an integral part of the case firms' identity, brand and firm values. The direction of sustainability in the textile industry seems to be towards more systematic planning, implementation and monitoring. Overall, the aspiration to engage in sustainable activities is primarily considered to begin from inside the firm rather than from the compliance to laws and regulations. Thus, despite the various challenges derived from the demanding nature of the textile industry as well as the special characteristics of the SMEs, the case firms seem to rather proactively engage in sustainable supply management through careful supplier selection, active development, close and long-term collaboration as well as continuous assessment. Thus, the view of Ageron et al. (2012) that SMEs would mainly employ reactive practises regarding sustainability is not supported by the findings of this research.

5.2. Theoretical and managerial contribution of the research

This thesis contributes to the existing research on sustainable supply management among small and medium-sized enterprises. As emphasized above, the previous research focusing on how SMEs can manage sustainability in relation to their suppliers remains scarce (Ciliberti et al. 2008). By interviewing the firm representatives, this study was able to obtain a rather profound understanding of how the industry SMEs manage sustainability in relation to their suppliers in practice, as well as addressed the motivational factors and the perceived challenges behind the firms' efforts towards more sustainable supply management. Moreover, the context of this thesis introduces new insights into the field of research since limited attention has been paid on how to implement sustainable supply management in the textile industry in particular (Oelze 2017; Zimon & Domingues 2018).

The findings of the previous research (Holt & Ghobadian 2009; Ghadimi et al. 2016) suggest that legislative pressure is one of the most dominating incentives that encourage firms to manage sustainability in their upstream supply chains. However, the role of legislative pressures was not considered significant among the industry SMEs as obeying the laws and regulations did not receive considerable attention as a factor driving voluntary sustainability initiatives forward in the industry. On the contrary, the case firms' sustainability work seems to be at a more demanding level than the relevant legislation. Overall, the SMEs' motivation to manage sustainability in relation to their suppliers mainly derives from the personal values and internal aspiration of the firms as well as the increasing consumer awareness. Moreover, Baden et al. (2011) suggest that SMEs may be less willing to engage in voluntary sustainability activities that do not possess direct business benefits. However, the case firms seem to commonly recognize the positive impact of sustainable practices on the economic benefits of the business, and sustainability is increasingly seen as a source of competitive advantage among the industry SMEs.

Considering the managerial contribution of this study, it is crucial for the industry firms to recognize the increasing customer awareness regarding the sustainability issues as well as their growing demand for sustainably produced textiles. Based on the findings of this research, increasing attention towards sustainability will compel the industry firms to change their actions, as companies who neglect sustainability aspects of their business are not believed to survive in the long-term. However, the industry firms should take the challenges, mainly deriving from the demanding nature of the textile

industry as well as from the unique characteristics of the SMEs, into consideration as integrating sustainability into their upstream supply management. This study provides some suggestions of how the textile SMEs may overcome the low negotiating power and increase the ability to influence the sustainability performance of their suppliers. Primarily, the industry SMEs should carefully select those partners that already have high standards regarding sustainability, that are willing to cooperate with the buyer firm as well as share the same values. The SMEs may also centralize their supply by decreasing the amount of partners, which is suggested to increase the firm's negotiating power and ability to influence its suppliers. Overall, the firms should aim at developing direct and close relationships with the suppliers with a long-term orientation to efficiently drive sustainable development forward in the industry. Moreover, SMEs may further increase the effectiveness of an individual firm and the leverage against the suppliers by driving sustainability issues forward together with other industry players.

5.3. Limitations of the study and suggestions for further research

The methodological choices employed in this thesis create some limitations for the research. As qualitative research pursues contextual explanations, interpretation and understanding of different perspectives (Hirsjärvi & Hurme 2006: 22), this research aims to obtain a deeper understanding about the phenomenon of sustainable supply management among SMEs through experiences, attitudes and perceptions of the firms' representatives. Thus, the aim of this thesis is not to produce generalized results. Moreover, since the perceptions and experiences of the firm representatives are highly dependent on the context (Eriksson & Kovalainen 2008: 13–14), the findings of the research can be utilized in the SMEs operating in the textile industry, but cannot be directly transferred to other contexts or industries. However, these findings provide a rather extensive overall understanding about sustainable practices in SMEs, and act as good starting point for further research. As highlighted by Perry & Towers (2009), the research on sustainability among SMEs remains scarce, and thus it could be useful to study the phenomenon of sustainable supply management among SMEs operating in a different industry or in different geographical context, or perhaps compare the applied sustainable supply management practices between industries.

Moreover, to obtain a detailed understanding about the applied sustainable supply management practices among SMEs, as well as about the motivations and challenges behind them, the case firms were appropriately selected to represent those that already

recognize sustainability and sustainable supply management as a critical part of their business. However, this choice may affect the findings of the study, and thus may not be applied to all SMEs operating in the textile industry. The future research could examine the motivational factors and challenges among firms that do not yet consider sustainability as an integral part of their operations to obtain more versatile results about the overall state of sustainable supply management. Furthermore, this study examines the phenomenon from the buyer firm's perspective. This may result in biased results as the research reflects only the experiences and attitudes of the buyer firms, leaving aside the views of the suppliers. The future research could examine the effectiveness of the applied practices of sustainable supply management by taking the perspectives of both parties into consideration.

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APPENDIX 1. Guiding outline for the theme interviews.

The purpose of the research:

The aim of the thesis is to examine how the Finnish SMEs operating in the textile and clothing industry consider to be able to influence their suppliers' sustainability, what kind of factors motivate the firms to manage sustainability in their supply chains and what kind of challenges they may face, as well as how the industry SMEs seek to manage sustainability in relation to their suppliers in practice. The thesis aims to also investigate how the firms view sustainability in their own operations as well as how the different dimensions of sustainability are emphasized in the industry SMEs' activities in relation to their suppliers.

1) Sustainability in the SMEs operating in the textile and clothing industry

- What does sustainability mean in your firm? How does sustainability show in your company's activities?
- Why the firm pursues to act sustainably?
- How the different dimensions of sustainability are emphasized in the industry? How about in your own company?

2) Managing sustainability in relation to the suppliers

- Which factors motivate your company to manage sustainability in relation to the suppliers?
- What kind of challenges your company faces when managing sustainability in relation to the suppliers?

3) Selecting the suppliers

- How important is the role of supplier selection for your company among sustainable supply chain management?
- On which grounds your company selects the suppliers? How is sustainability taken into consideration when selecting new suppliers?
- Where are the firm's suppliers located? How many suppliers does your firm have?

4) Development of the suppliers

- How important is the role of supplier development for your company among sustainable supply chain management?

- How does your firm seek to develop the suppliers' sustainability? What kind of activities you utilize in practice?

5) Collaboration with the suppliers

- How important is the role of supplier collaboration for your company among sustainable supply chain management?
- How does your firm collaborate with the suppliers to promote sustainability?
- How does your firm view long-term and close supplier relationships in promoting sustainability?

6) Monitoring and assessment of the suppliers

- How important is the role of supplier monitoring and assessment for your company among sustainable supply chain management?
- Does your company utilize any supplier requirements or instructions regarding sustainability aspects?
- How does the firm evaluate the sustainability of the suppliers' activities and that the suppliers follow the requirements and instructions?
- How does your firm react if the supplier does not comply with the requirements and instructions related to sustainability?