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Impacts of the Corporate Sustainability Due Diligence Directive (CSDDD) – A Supply Chain and Competition perspective

Supply Chain Management
Master's thesis

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The growth of international supply chains has brought significant benefits but has also had serious negative impacts in terms of human rights and environmental violations. Although voluntary initiatives and guidelines have been widely developed for the use companies, they have not led to the desired improvements in supply chain sustainability for many companies. Both the European Union and individual EU Member States have sought to fill this accountability gap by introducing various due diligence obligations. However, these existing national or EU-level obligations always focus on either a specific sector, issue or country. NGOs and trade unions, as well as certain large multinational companies, have started to call for mandatory EU-level legislation to extend the due diligence for human rights and the environment to all sectors and commodities.

On February 2022, the European Commission published a legislative proposal for EU-wide regulation on supply chain due diligence: the Corporate Sustainability Due Diligence Directive (CSDDD). The proposal aims to promote sustainable business activities in global supply chains as well as harmonize business environment for companies operating in the Union. Many scholars expect mandatory due diligence to be an effective means of tackling human rights and environmental abuses. However, the impacts of the directive on supply chains and their management as well as on the competitiveness of companies has received less attention. This study aims to contribute to filling this research gap. The research has been carried out as a mix-methods study using the Delphi method. It involved ten supply chain or sustainability experts from Finnish companies as well as advocacy organisations and NGOs.

The results of the research show that the directive is likely to increase the complexity of supplier governance and pose challenges for many companies. Difficulties are expected to arise in controlling and monitoring supply chains, obtaining reliable information from supply chain partners and reporting sustainability issues properly. Experts anticipate it to be particularly demanding to ensure that sub-suppliers comply with the due diligence requirements. Moreover, implementing and complying with the CSDDD is considered to be challenging largely due to a lack of know-how and collaboration along supply chains. The directive is expected to lead to higher costs for supply chain management and many companies may have to change their procurement strategy and increase the prices of their products.

It is therefore expected that in the short to medium term, the competitiveness of the companies covered by the directive is likely to deteriorate in the global market. In the long term, however, competitiveness may improve. In the internal market, the business environment is expected to become more unified, and European companies not covered by the directive, such as SMEs, are not considered to weaken the competitive position of companies affected by the law, especially in the long term. Ultimately, however, the companies that are estimated to benefit most from the new directive are those that have already started sustainability efforts and voluntarily set sustainability requirements for their supply chains. In the short term in particular, these companies are expected to become more competitive. In the long run, the lead of the frontrunners is likely to remain, but it is expected to level off.

Key words: due diligence, sustainability, supply chains, EU, legislation, supply chain management, corporate responsibility

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Kansainvälisten toimitusketjujen kasvu on tuonut huomattavia etuja, mutta sillä on ollut myös vakavia negatiivisia vaikutuksia ihmisoikeus- ja ympäristörikkomuksiin liittyen. Vaikka vapaaehtoisesti noudatettavia ohjeita on kehitetty laajasti yritysten käyttöön, ne eivät ole monien yritysten kohdalla johtaneet toivottuihin parannuksiin toimitusketjujen vastuullisuuden osalta. Sekä Euroopan unioni että yksittäiset EU-jäsenmaat ovat pyrkineet täyttämään tämän vastuuvelvollisuuden puutteen ottamalla käyttöön erilaisia huolellisuusvelvoitteita. Näissä jo olemassa olevissa kansallisissa tai EU-tason velvoitteissa keskitytään kuitenkin aina joko tiettyyn sektoriin, ongelmakohtaan tai maahan. Kansalaisjärjestöt, ammattiliitot ja suuret monikansalliset yritykset ovat alkaneet vaatia pakollista EU-tason lainsäädäntöä, jolla ihmisoikeuksia ja ympäristöä koskeva huolellisuusvelvoite ulotetaan koskemaan kaikkia aloja ja hyödykkeitä.

Euroopan Komissio julkaisi helmikuussa 2022 lainsäädäntöehdotuksen EU:n laajuisesta yritysten kestävää toimintaa koskevasta huolellisuusvelvoitedirektiivistä. Ehdotuksen tavoitteena on edistää vastuullista liiketoimintaa globaaleissa toimitusketjuissa sekä harmonisoida unionissa toimivien yritysten liiketoimintaympäristöä. Useat tutkijat odottavat pakollisen huolellisuusvelvoitteen olevan tehokas keino puuttua ihmisoikeus- ja ympäristörikkomuksiin. Se, miten direktiivi tulee vaikuttamaan toimitusketjuihin ja niiden johtamiseen sekä yritysten kilpailukykyyn, on jäänyt vähemmälle huomiolle. Tämä tutkimus pyrkii osaltaan täyttämään kyseisen tutkimusaukon. Tutkimus on toteutettu monimenetelmätutkimuksena Delfoi-menetelmää hyväksi käyttäen. Siihen osallistui kymmenen toimitusketjujen tai kestävän kehityksen asiantuntijaa suomalaisista yrityksistä sekä etu- ja kansalaisjärjestöistä.

Tutkimuksen tulokset osoittavat, että direktiivin seurauksena toimittajien hallinnan monimutkaisuus todennäköisesti lisääntyy ja aiheuttaa haasteita monille yrityksille. Vaikeuksia aiheuttavat luultavasti toimitusketjujen kontrollointi ja valvonta, luotettavan tiedon saaminen toimitusketjun yhteistyökumppaneilta ja kestävyysasioiden asianmukainen raportointi. Erityisen vaativaa on asiantuntijoiden mukaan valvoa, että alihankkijat noudattavat huolellisuusvelvoitteen asettamia vaatimuksia. Velvoitteen implementoinnin ja noudattamisen haasteellisuuden nähdään johtuvan pitkälti myös osaamisen ja yhteistyön puutteista toimitusketjuissa. Arvioidaan, että direktiivi tulee aiheuttamaan korkeampia kustannuksia toimitusketjujen johtamiselle ja monien yritysten on muutettava hankintastrategiaansa sekä nostettava tuotteidensa hintoja.

Näin ollen on odotettavissa, että lyhyellä ja keskipitkällä aikavälillä direktiivin soveltamisalaan kuuluvien yritysten kilpailukyky todennäköisesti heikkenee globaaleilla markkinoilla. Pitkällä aikavälillä kilpailukyky voi kuitenkin parantua. Sisämarkkinoilla liiketoimintaympäristön odotetaan muuttuvan yhtenäisemmäksi, eikä direktiivin soveltamisalan ulkopuolelle jäävien eurooppalaisten yritysten, kuten pk-yritysten, katsota heikentävän lain soveltamisalaan kuuluvien yritysten kilpailuasemaa varsinkaan pitkällä aikavälillä. Lopulta uuden direktiivin arvioidaan hyödyttävän kuitenkin eniten niitä yrityksiä, jotka ovat jo aloittaneet kestävyystoimet ja asettaneet vapaaehtoisesti kestävyysvaatimuksia toimitusketjuilleen. Etenkin lyhyellä aikavälillä näiden yritysten kilpailukyvyn odotetaan paranevan. Edelläkävijöiden etumatka säilyy todennäköisesti myös pidemmällä aikavälillä, mutta sen odotetaan tasaantuvan.

Avainsanat: huolellisuusvelvoite, vastuullisuus, toimitusketjut, EU, lainsäädäntö, toimitusketjujen johtaminen, yritysvastuu

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

1 INTRODUCTION

1.1 Background

Globalisation and the growth of international supply chains have brought great benefits but have also had serious negative impacts in terms of human rights and environmental violations, such as forced and child labour, land grabbing, environmental degradation, and corruption (European Parliament 2020a, 1). 25 million people are in forced labour globally (ILO 2017c, 5). Out of these, 16 million are exploited in the private sector, 4.8 million are sexually exploited and 4 million subjected to forced labour by state authorities. Especially women and girls are affected by forced labour. (European Union 2021, 1.) Furthermore, over the past decade, thousands of workers have died or been seriously injured in factory fires and collapses, deforestation has increased, and the eviction of local communities have become more common (BHRRC 2020, 14).

While there have been many campaigns to improve labour rights and working conditions in international supply chains, and proposals to make transnational companies responsible for their adverse environmental and human rights impacts, abuses remain widespread (Bartley 2007; Bondy et al. 2008; Mayer & Gereffi 2010; Locke 2013). Voluntary initiatives and recommendations for companies' self-regulation have failed to fill this accountability gap since they do not impose legally binding obligations and do not guarantee access to justice and efficient remedies for human rights and environmental violations (BHRRC 2020; European Parliament 2021; Schilling-Vacaflor & Lenschow 2021; Wolfsteller & Li 2022). Consequently, scholars and policy makers have increasingly called for new public policy approaches to address the negative impacts of global supply chains (Lenschow et al. 2016; Moser & Leipold 2021).

To address these concerns, new mandatory supply chain regulations have increasingly emerged in EU (ECCJ 2022). While such supply chain regulations have been widely regarded as essential measures to strengthen corporate accountability, the laws adopted have been criticised for their lack of stringency, comprehensiveness, and enforcement (Partzsch 2020; Moser & Leipold, 2021). The laws are selectively targeted at specific sectors, issue areas or countries, resulting in a fragmented regulatory framework (Schilling-Vacaflor & Lenschow 2021, 4). Thus, non-governmental organizations (NGOs), trade unions and certain large multinational companies have started to call for mandatory EU-level legislation to impose human rights and environmental due diligence on all sectors and commodities (Smit et al. 2020, 169).

On February 2022, the European Commission published a legislative proposal for EU-wide regulation on supply chain due diligence: the Corporate Sustainability Due Diligence Directive (CSDDD) (COM/2022/71 final). The proposal aims to promote sustainable business activities in global supply chains as well as unify business environment for companies operating in the Union. (European Commission 2022c.) Several studies evaluating different regulatory options for due diligence obligations suggest that mandatory due diligence is expected to be the most effective in addressing adverse impacts on human rights and environment (COWI, Ecofys, Milieu 2018; Smit et al. 2020).

However, less attention has been paid to the impact of the new directive on supply chains and supply chain management. When the directive enters into force, many companies operating in EU will face new requirements for their business. How will companies adapt their business to meet the new requirements and what challenges might this pose to supply chain management? And what will happen to the competitiveness of companies in the global market? Concerns have been raised about the impact of the directive on the competitiveness of EU businesses, but the EU Commission's responses have remained vague and there is very little previous research on the issue. All EU companies covered by the CSDDD should, for their own benefit, be aware of what to expect in the coming years and how to prepare for these changes. It has been recognised that the expected impacts of the proposed due diligence regulation needs to be carefully assessed and complex interactions require further empirical and theoretical research (Schilling-Vacaflor & Lenschow 2021; Kolev & Neligan 2022). This research aims to contribute to filling this identified research gap.

1.2 Research questions and structure

This study examines the impacts of the Corporate Sustainability Due Diligence Directive (CSDDD), published by the European Commission in February 2022, on supply chains and supply chain management. The new CSDDD directive applies to the following companies (European Commission 2022c, 45–46):

- **EU companies:**
    - Group 1 – All EU limited liability companies that have more than 500 employees and a net worldwide turnover of more than EUR 150 million.
    - Group 2 – Other limited liability companies that do not reach the thresholds of Group 1, but have more than 250 employees and a net worldwide turnover of at least EUR 40 million, provided that at least 50% of the net turnover is generated in pre-defined sectors with a significant environmental impact (see p. 35–36).
- **Non-EU companies operating in EU with a turnover in the EU that meets the thresholds of groups 1 and 2.**

The aim of the study is to identify the challenges that the EU companies covered by the CSDDD will face when the directive enters into force and how it will affect supply chains and supply chain management. In addition. the wider competitive implications of the directive are also investigated. Based on the research objective, two main research questions (RQ1 and RQ2) and one sub-question (RQ1.1) have been formulated as follows:

- ***RQ1:*** *How will the EU-wide Corporate Sustainability Due Diligence Directive (CSDDD) impact on supply chains and supply chain management?*
    - ***RQ1.1:*** *What challenges will the CSDDD impose on supply chain management?*
- ***RQ2:*** *What will be the competitive impacts of the CSDDD on companies?*

To answer to these questions, mixed-methods research is conducted including literature review and empirical study using Delphi method. A total of 10 sustainability or supply chain management experts will be involved in the Delphi study. Overall, this thesis consists of seven Chapters. Chapters 2–4 serve as a literature review and provide theoretical background on the retrieved phenomena. Chapter 5 introduces the scientific methodology, data used and methods of the analysis. Chapter 6 presents the results of the empirical research conducted, and finally Chapter 7 connects the results to the academic literature and previous research.

2 SUSTAINABILITY IN SUPPLY CHAINS

In this first Chapter of the literature review, the concepts of sustainable supply chain and sustainable supply chain management are examined through the academic literature. In addition, section 2.3 reviews sustainable supply chain management practices using a theoretical framework. The literature suggests that these practices enable a shift towards more sustainable supply chain management.

2.1 Concept of supply chain sustainability

Sustainability, the combination of environmental, social and economic responsibilities, has become a critical issue for businesses and society (Carter & Rogers 2008, 361). While the growth of international supply chains has had substantial positive effects, it has also had severe negative impacts in terms of human rights and environmental abuses, such as forced and child labour, environmental degradation, land grabbing, and corruption (European Parliament 2020a, 1). Moreover, increased transparency and the free flow of information have contributed to greater awareness of what is happening in global supply chains. As a result, businesses have more and more pressure to address environmental and social concerns in addition to providing economic benefits. (Meixell & Luoma 2015, 69.) Today, sustainability performance should be improved at the supply chain level, not just within own operations, which is one of the most significant changes in the way companies address sustainability issues (Kogg & Mont 2012, 154).

Supply chain sustainability focuses on the basic idea that a supply chain performance should be measured not only in terms of profits but also in terms of its environmental and social impacts (Gladwin et al. 1995; Jennings & Zandbergen 1995; Starik & Rands 1995). Pagell and Wu (2009, 38) define sustainable supply chain as ‘one [supply chain] that performs well on both traditional measures of profit and loss as well as on an expanded conceptualization of performance that includes social and natural dimensions’. This 'conceptualization of performance' is called the triple bottom line (TBL) (Elkington 1998). The concept of TBL was originally developed in 1994 by John Elkington. He argues that the visible return in terms of cash flow will not be enough to guarantee business success in the future, and therefore attention must also be paid to the environmental and social aspects (Elkington 1999, 73).

2.2 Sustainable supply chain management

Whereas a sustainable supply chain is one performing well in each three dimensions of the TBL, sustainable supply chain management (SSCM) is measures that are taken to achieve more sustainable supply chain (Pagell & Wu 2009, 38). In a comprehensive and widely used definition by Seuring and Müller (2008, 1700) SSCM is defined as follows:

> *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.*

This definition considers TBL, recognizes information sharing between organizations as an essential element for management and includes the stakeholders as a vital part of SSCM (Beske & Seuring 2014, 323). There are a range of other SSCM definitions available but what most of them have in common is that they incorporate the TBL approach. Consequently, SSCM has a broader definition compared to the basic concept of supply chain management as the performance has been extended to cover all dimensions of sustainable development (Svensson 2007, 263). Since SSCM includes the TBL performance objectives into its decision-making processes, it is at the forefront of sustainability in business (Meixell & Luoma 2015, 70).

Both supply chain sustainability and SSCM have been extensively studied in the literature over the last 20 years (Linton et al. 2007; Meixell & Luoma 2015). Although economic, environmental, and social elements are interdependent, most empirical studies treat these dimensions as independent components and focus specifically on one component (Montiel 2008, 259). The environmental aspects of supply chain management have been at the centre of the research, while the social dimensions have received less attention (Ciliberti et al. 2008; Seuring & Müller 2008; Carter & Easton 2011; Ashby et al. 2012; Yawar & Seuring 2017). To some extent, researchers and managers have even used the terms 'sustainability' and 'environment' interchangeably. However, as research has evolved, the concept of sustainability has increasingly been understood to encompass all dimensions of TBL. (Carter & Easton 2011, 54.) Environmental or green supply chain management (GSCM), in turn, focuses specifically on the environmental component of

SSCM, that is the minimisation of adverse environmental impacts in supply chains (Walker & Jones 2012, 15). Srivastava (2007, 54–55) defines GSCM it as follows:

> *integrating environmental thinking into supply chain management, including product design, material sourcing and selection, manufacturing processes, delivery of the final products to the consumers, and endlife management of the product after its useful life*

The social component of SSCM has been defined from the perspective of corporate social responsibility (CSR) (Ciliberti et al. 2008; Spence & Bourlakis 2009; Carter & Easton 2011). Yawar and Seuring (2017, 621) further point out in their study that combining supply chain management and CSR allows strategies and performance outcomes to be explored with a focus on social aspects. Spence and Bourlakis (2009, 291) refine the earliest and most comprehensive definition of CSR by Davis (1973, 312) into supply chain context and define corporate social responsibility in supply chains as follows:

> *chain wide consideration of, and response to, issues beyond the narrow economic, technical and legal requirements of the supply chain to accomplish social (and environmental) benefits along with the traditional economic gains which every member in that supply chain seeks*

Over the last 10 to 20 years research on social sustainability has been increasing (Tang & Zhou 2012; Feng et al. 2017) and the least research has been done on multidimensional practices (Seuring & Müller 2008; Pagell & Wu 2009; Yawar & Seuring 2017). Partly to fill this gap, this study focuses on SSCM, taking into account all the dimensions of TBL.

There are number of internal and external drivers for SSCM, such as legislation and regulation, stakeholder and customer requirements, reputational risks and competitiveness (Seuring & Muller 2008, 1703). Numerous studies also point out that top managers are one of the most important internal drivers for adopting SSCM practices (Foerstl et al. 2010; Carter & Easton 2011; Walker & Jones 2012). However, despite the drivers, adverse human rights and environmental impacts in supply chains remain widespread (Bartley 2007; Bondy et al. 2008; Mayer & Gereffi 2010; Locke 2013). In the end, compliance with legislation is always the minimum requirement for supply chain sustainability (Seuring & Muller 2008, 1704).

On the other hand, the greatest barrier for companies to integrate sustainability into their supply chains is the higher costs of sustainable practices (Seuring & Muller 2008, 1704). Companies that are committed to sustainable materials and environmentally friendly production as well as care about fair wages and working conditions throughout all stages of their supply chains, must bear substantially higher costs compared to companies that are not committed to these aspects (BHRRC 2020, 21). In most jurisdictions, the primary role of companies is to maximise shareholder value. Hence, the sustainability efforts may conflict with the objective of maximising profits: directors have a legal obligation to maximise profits but not a legal obligation to eliminate adverse human rights and environmental impacts. Thus, the legal framework applicable to multinational companies can also hamper the achievement of sustainability objectives. (Ireland 2017, 120–121.) Nevertheless, while the costs may be high, companies fail to see that there are clear financial benefits to be gained from improved sustainability performance and also clear financial risks if companies decide not to meet certain sustainability expectations and standards (Kogg & Mont 2012, 162).

Ultimately, achieving sustainability can be very difficult. Implementing social and environmental dimensions in global supply chains has proven to be a great challenge in practice (Schulze & Bals 2018, 1). This is, for example, due to a lack of coordination and insufficient communication between different stakeholders (Multaharju et al. 2017, 1354). Implementing SSCM practices in supply chain is also time consuming and problems are likely to arise during the process that can discourage managers from continuing the implementation process (Zimon et al. 2020, 232). Chapter 4 looks in more detail at the challenges that moving towards SSCM can pose when companies are forced by legislation to change their business practices.

2.3 Sustainable supply chain management practices

Despite the barriers to SSCM, there are practices that enable a shift towards more sustainable supply chain management. Beske and Seuring (2014, 324) have built a framework of practices through which a more sustainable supply chain can be achieved. In their framework, these practices are divided into five different categories 1) orientation, 2) continuity, 3) collaboration, 4) risk management, and 5) proactivity. Further, the categories and SSCM practices are structured into three hierarchical levels: strategic values, structure and processes. The framework is shown in Figure 1 on the next page.

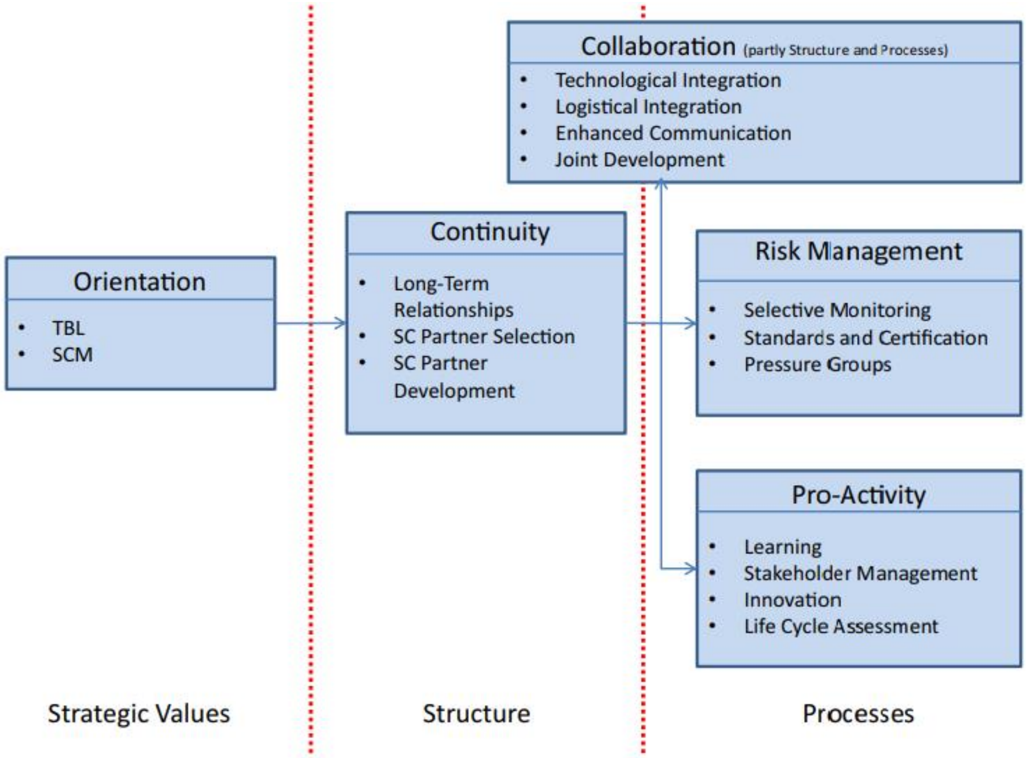


Figure 1 Sustainable supply chain management practices (Beske & Seuring 2014, 324)

In the following sub-sections, SSCM practices are reviewed by category. As noted in the previous section, SSCM is broadening of traditional supply chain management (SCM), and therefore these practices are partly aligned with SCM. Pagell and Wu (2009, 52–53) also state that well performing traditional supply chain forms the basis for a sustainable supply chain.

2.3.1 Orientation

Managerial orientation is a precursor to SSCM (Pagell & Wu 2009, 51). Orientation implies that SSCM must be integrated into both company's business strategy and values, which requires dedication to both SCM and TBL. The role of senior management is emphasized in this category, as support from the top makes it much more likely that the sustainability values will spread and be accepted throughout the organization. (Beske & Seuring 2014, 324.) As noted in section 2.2, numerous studies show that top managers are one of the most important internal drivers for adopting SSCM practices. Carter and Easton (2011, 47) also point out that supply chain managers are particularly well placed to influence environmental and social performance, for example through supplier selection and supplier development, transportation choices and routing, location decisions and packaging preferences.

Ultimately, achieving SSCM requires dedication and active involvement from all supply chain parties involved, who together create value, provide options for day-to-day tasks and inform strategic decisions (Zimon et al. 2020, 232). Organizational culture among all employees must be changed so that good daily decisions are the ones that enhance social, environmental and economic performance (Pagell & Wu 2009, 53).

2.3.2 Continuity

As the name of the second hierarchical level of the framework 'structure' implies, the supply chain structure is created at this level. This refers mainly to how the different partners work together. In this context, the category 'continuity' emphasises the continuous management and development of supply chain partnerships with the goal of creating long term relationships. In a long-term relationship, trust between supply chain partners usually deepens and common structures and objectives are easier to develop. (Beske & Seuring 2014, 325.)

Trust and commitment are essential prerequisites for SSCM and building them requires collaboration, stakeholder involvement and supply chain partner development ('SC partner development'), for example through training and education (Yawar & Seuring 2017). Yawar and Seuring (2017, 637) further argue that capacity building for supply chain partners should take place at the workers' level in supplier factories, where the key is to encourage, empower and involve upstream actors in supply chains.

Management of supply chain partnerships also includes supply chain partner selection ('SC partner selection'). Appropriate supplier selection procedures including supplier assessment capabilities are critical to ensure sustainable business practices throughout supply chain (Foerstl et al. 2010; Reuter et al. 2012, 279). Environmental and social sustainability criteria must be considered in the selection process, beyond mere economic criteria. A transparent selection process and related defined sustainability criteria can also demonstrate dedication to SSCM to customers and other stakeholders. (Reuter et al. 2012.)

Capability to assess suppliers against defined selection criteria in turn helps to mitigate sustainability risks as it prevents high-risk suppliers from being included in the supplier base. With the supplier assessment capabilities, companies can also categorize supplier relationships based on the sustainability criteria. (Foerstl et al. 2010.) Classification can be helpful, for example, when it is necessary or desirable to reduce the number of suppliers. Reduced supplier base can also contribute to better sustainability performance. Namely, a large supplier base raises the likelihood that one or more suppliers are not complying with standards or changing social expectations. (Vachon & Klassen 2006, 803.)

2.3.3 Collaboration

Collaboration is closely related to continuity and placed at both structural and operational ('processes') levels of the framework. The organisational structure and, for example, the IT infrastructure enable and facilitate collaboration, but ultimately it can only be achieved at the operational level. (Beske & Seuring 2014, 326.) Building trust and commitment and thus pursuing SSCM requires collaboration with different of stakeholders (Tsoi 2010, 402). Companies need to operate transparently not only by reporting to their stakeholders, but also by actively engaging them and leveraging their feedback and input to ensure acceptance and support, and to improve supply chain processes (Carter & Rogers 2008, 367).

Enhanced communication, joint development as well as logistical and technological integration (i.e. common IT interfaces and database structure) are all practices that facilitate information sharing and thus better collaboration. (Beske & Seuring 2014, 326.) Logistical integration, for example, can improve the interaction between the buyer company and logistics service providers, facilitating adaptation of environmentally friendly transportation technologies and thus improving environmental performance in supply chain (Evangelista et al. 2013, 458). Scholten and Schilder (2015, 473) see not only the exchange of information but also mutual benefit as well as the sharing of rewards and risks as the basis for collaboration. Improved supply chain collaboration will increase visibility and flexibility along supply chain, and thus also facilitate SSCM (Scholten & Schilder 2015, 473–474).

2.3.4 Risk management

Sustainability-related risk management has become essential due to the increase in global sourcing, outsourcing, information availability as well as overall demand for sustainable business. Neglecting sustainability risks can quickly lead to serious negative consequences. (Hofmann et al. 2014, 169.) Standards and certifications are common practices in risk management and also facilitate selective monitoring in supply chain (Beske & Seuring 2014, 327). However, standards and certificates are often found to be insufficient to ensure compliance with sustainability requirements (Schilling-Vacaflor et al. 2021, 10). New technologies such as satellite data on deforestation or blockchain technology open up opportunities for better supply chain monitoring (Brack & Ozinga 2020; UNECE 2021). Therefore, innovations play also important role in SSCM, which will be further discussed next sub-section.

Furthermore, companies must respond to the demands of stakeholders and pressure groups, at least to minimise reputational risks (Seuring & Muller 2008, 1703–1704). However, pressure groups, such as NGOs, can also help with risk identification (Beske and Seuring 2014, 327). Hence, collaboration with SC partners plays vital role in managing sustainability risks. In addition, by reducing the number of suppliers and engaging in long-term partnerships with the remaining ones (continuity), companies can reduce the risks associated with individual suppliers, albeit at the cost of greater dependability on fewer suppliers (Beske & Seuring 2014, 327).

2.3.5 Proactivity

In SSCM, proactive action is necessary as companies need to innovate new ways of working as well as new sustainable products and services, including life cycle assessment in the design process. This also requires investment in new technologies. (Beske & Seuring 2014, 327.) Company's ability to innovate is even considered a prerequisite for SSCM, but proactive action will only be effective if there is alignment between the business model and the elements of sustainable development (Pagell & Wu 2009, 51).

Innovation and efforts to produce data to facilitate monitoring and risk identification, for example, need to be further reinforced in order to achieve fully sustainable supply chain. Increasing stakeholder collaboration and supporting relevant civil society or government initiatives in knowledge production can help to achieve such objective. (Schilling-Vacaflor & Lenschow 2021, 12.) Moreover, stakeholders' knowledge of customers, supply base as well as products and services is valuable in order to proactively respond to demand and conduct appropriate product development. Therefore, stakeholder management and involvement is also essential for proactivity and SSCM. (Beske & Seuring 2014, 327.)

3 DUE DILIGENCE

This second chapter of the literature review examines the concept of due diligence through the academic literature, reviews the best-known voluntary due diligence guidelines and the existing mandatory due diligence laws in Europe, and finally presents in section 3.4 a new proposal for a directive on EU-wide mandatory Corporate Sustainability Due Diligence.

3.1 Concept of due diligence

The concept of due diligence is rather broad and context-specific and, thus, has different meanings depending on the context. In the context of international law, due diligence basically provides a standard of care against which fault can be assessed. It usually refers to a duty of conduct instead of a duty of result meaning that the focus is on the behaviour of the accountable rather than on the outcome of that behaviour. (ILA Study Group 2016, 2.) The concept of due diligence as a standard of care already emerged in Roman law, according to which a wrongdoer was held liable for failure to comply with the standards of behaviour (Bray 1967, 157). This principle of complying with a specific standard of care to not to harm anyone is still widely recognized in the legal systems of EU countries (Van Dam 2011, 237). Consequently, due diligence has important background in international law, recognising the desirability that states comply with certain behavioural standards without specifying the exact outcome or time limit (ILA Study Group 2016, 46).

In a business context, on the other hand, due diligence is generally understood to be an investigation process carried out by a company to identify and manage risks to the business. Its purpose is to establish the facts of a commercial transaction in order to assess its value, price and risk. (Martin-Ortega 2014, 51.) Hence, the idea of due diligence in business has traditionally been different from how it is understood in international law.

The concept and terminology of due diligence has also been widely adopted in the UN Guiding Principles on Business and Human Rights (UNGPs) and is used as the standard by which companies are expected to measure their human rights and environmental impacts (Smit et al. 2020, 23). Bonnitcha and McCorquodale (2017) argue in their study that UNGPs, on the other hand, invoke the two different concepts of due diligence mentioned above, the concept of due diligence as a process to manage business risks and the concept of due diligence as a legal standard of care.

Similarly, in this research, due diligence should be understood as a combination of the two concepts. It should be understood as legal standard of care expected from companies to meet their responsibility. To meet the standard of care, companies need to ‘identify, prevent, mitigate and account for’ risks or adverse impacts on human rights and the environment (United Nations 2011, 17). However, unlike in a traditional business context, companies must primarily consider the risks to rightholders rather than the risks to the business itself. It is not a precise, pre-investment process to identify and evaluate legal, financial, or operational risks but rather a continuous, dynamic and comprehensive process to manage negative impacts on human rights, environment and corporate governance (IFLR 2022). In this research, due diligence is defined by the European Parliament (2020a, 12) as follows:

> *Process put in place by an undertaking in order to identify, cease, prevent, mitigate, monitor, disclose, account for, address and remedy the risks posed to human rights, including social and labour rights, to the environment, including climate change, and to governance, both by its own operations and its business relationships.*

This concept of due diligence, forming the basis of this research, was first established by the UN Guiding Principles on Business and Human Rights (UNGPs), then incorporated into the OECD Guidelines for Multinational Enterprises (OECD Guidelines) and finally extended to other areas of responsible business in the ILO Tripartite Declaration of Principles concerning Multinational Enterprises and Social Policy (MNE Declaration). (Smit et al. 2020, 9.) This evolution and expansion of due diligence is reviewed more closely in the next section.

3.2 Due diligence guidelines

So far, most companies have been encouraged to conduct due diligence on a voluntary basis. International guidelines and frameworks have been established to help companies integrate due diligence strategies into their supply chains. The following sub-sections shortly review the most common and applied international guidelines: The United Nations Guiding Principles on Business and Human Rights (UNGPs), The OECD

Guidelines for Multinational Enterprises (OECD Guidelines) and ILO Tripartite Declaration of Principles concerning Multinational Enterprises and Social Policy (ILO MNE declaration).

3.2.1 UN Guiding Principles on Business and Human Rights

In 2011, the UN Guiding Principles on Business and Human Rights (UNGPs) created the first global framework defining the responsibility of governments and companies for human rights impacts of international business. UNGPs consist of 31 guiding principles and are based on three pillars that define how states and businesses should implement them (United Nations 2011):

Pillar I: The state duty to protect human rights

Pillar II: The corporate responsibility to respect human rights

Pillar III: Access to remedy

This tri-pillar UN 'Protect, Respect, Remedy' framework and its principles apply to all countries and all companies, regardless of their size, sector, location, ownership or ownership structure (United Nations 2011, 1). They were intended to combat corporate-related human rights violations by closing governance gap in unregulated global business environment (Ruggie 2013, 15). Pillar II, the corporate responsibility to respect human rights, requires companies to (United Nations 2011, 14):

(a) Avoid causing or contributing to adverse human rights impacts through their own activities, and address such impacts when they occur; and

(b) Seek to prevent or mitigate adverse human rights impacts that are directly linked to their operations, products or services by their business relationships, even if they have not contributed to those impacts.

Pillar II also demand companies to comply with human rights due diligence, a process to assess human rights impacts, acting on them as well as monitoring and communicating responses (United Nations 2011, 17). The UNPG places particular emphasis on the importance of transparency. The management of human rights risks should always be openly communicated.

Pillar II of the UNPGs has spread awareness and urged companies to assess their labour and human rights impacts. The number of companies committed to implementing human rights due diligence processes has risen considerably since the introduction of the guiding principles in 2011. (Favotto & Kollman 2021, 37.) They have also succeeded in shifting the focus of debate on business and human rights away from controversies over ex post liability for corporate abuses towards establishing processes necessary to prevent negative human rights impacts (Simons & Macklin 2014, 315). However, the accountability practices of most companies remain limited to the implementation of procedural mechanisms rather than transparent, strategic and comprehensive impact assessment. (Favotto & Kollman 2021, 37.)

3.2.2 The OECD Guidelines for Multinational Enterprises

The OECD Guidelines for Multinational Enterprises (OECD Guidelines) were originally introduced in 1976 but have been revised many times. The latest update was upon the adoption of the UNGPs when the OECD (Organisation for Economic Co-operation and Development) revised its guidelines to include a new human rights chapter in line with the UNGPs as well as a new approach to due diligence and sustainable supply chain management. (European Parliament 2020a, 3.)

The OECD Guidelines set out principles and standards for responsible business conduct in line with applicable laws and internationally recognised standards, including recommendation to conduct due diligence (OECD 2011, 17, 20). They clarify and further develop the UNGPs' concept of due diligence by extending its applicability to environmental issues. In addition, the OECD Guidelines cover range of other relevant areas of corporate responsibility, such as human and labour rights, bribery, consumer protection, science and technology, competition, disclosure and taxation. (OECD 2011.)

In 2018, OECD also established *The OECD Due Diligence Guidance for Responsible Business Conduct* including practical assistance for companies on the implementation of OECD Guidelines. According to these practical guidelines, effective due diligence process consists of a six-step framework (OECD 2018):

1. *Embed responsible business conduct into policies and management systems*
2. *Identify and assess actual and potential adverse impacts associated with the enterprise's operations, products or services*

3. *Cease, prevent and mitigate adverse impacts*
4. *Track implementation and results*
5. *Communicate how impacts are addressed*
6. *Provide for or cooperate in remediation when appropriate*

In addition, even more detailed supply chain due diligence guidelines are provided for certain sectors: conflict minerals, the agricultural sector, the garment and footwear sector, multi-stakeholder engagement in the extractive sector, institutional investors and export credit agencies (OECD).

3.2.3 ILO Tripartite Declaration of Principles concerning Multinational Enterprises and Social Policy

As early as 1977, the Governing Body of the ILO (International Labour Organization) adopted the ILO Tripartite Declaration of Principles concerning Multinational Enterprises and Social Policy (MNE Declaration), which has since been amended several times. The principles set out in the MNE Declaration provide multinational companies, governments as well as employers' and workers' organisations with guidelines for sustainable business practices, covering areas such as employment, training, conditions of work and life, industrial relations and general policies. (ILO 2017a.) This declaration is the only global instrument on corporate social responsibility and sustainable business practices that has been developed and adopted in a tripartite process by governments, employers and employees from around the world. (ILO 2017b.)

More than forty years after the original MNE Declaration was adopted, multinational companies remain a key driver of globalisation. Their activities have an impact on the working and living conditions of people around the globe, and they continue to play a crucial role in promoting economic and social progress. The most recent revision, in March 2017, aligned the MNE Declaration with the UNPGs, and offers guidance on due diligence processes to achieve decent work, sustainable enterprises, more inclusive growth and better sharing of the benefits of foreign direct investment, which is particularly relevant to achieving Sustainable Development Goal 8 in the 2030 Agenda for Sustainable Development. (ILO 2017b.)

This revision sought to better respond to new economic realities, such as increased international investment and trade, and the growth of global supply chains. Under the guidance of MNE Declaration, companies should be able contribute to the realization of decent work worldwide. The role of governments and the importance of social dialogue in promoting decent work are also emphasised in the declaration. (ILO 2017b.)

3.3 Existing mandatory due diligence legislation

In addition to voluntary initiatives, the EU has introduced mandatory due diligence legislation to tackle human rights and environmental abuses in certain sectors that are traditionally worst affected. Moreover, several European countries have adopted their own mandatory due diligence obligations at national level. These national obligations, however, tend to focus on specific issue, such as child or forced labour. Therefore, almost all mandatory due diligence laws in Europe focus either on specific sectors or on particular human rights abuses, as shown in the Table 1 below.

Table 1 Overview of due diligence legislation in Europe

Year of adoption	Year of entry into force	Scope	Due diligence law	Type	Focus of the regulation
2010	2013	EU-wide	Timber Regulation	Sector-specific	Human rights and environment
2015	2015	United Kingdom	Modern Slavery Act	Issue-based	Human rights
2017	2017	France	Duty of Vigilance Law	Cross sectoral	Human right and environment
2017	2021	EU-wide	Conflict Minerals Regulation	Sector-specific	Human rights
2019	*2022*	Netherlands	Child Labour Due Diligence Law	Issue-based	Human rights
2021	2022	Norway	Transparency Act	Issue-based, broader scope	Human rights
2021	*2023*	Germany	Supply Chain Due Diligence Act	Cross sectoral	Human rights and environment
2022	2022	Switzerland	Conflict Minerals and Child Labor Due Diligence Legislation	Sector-specific & Issue-based	Human rights

The only cross-sectoral and non-issue based national due diligence regulation has been established and entered into force in France (European Parliament 2020a, 5). In 2021, Germany also adopted such cross-sectoral and non-issue based national due diligence law, but it will not enter into force until 2023 (FIDH 2021). Furthermore, Norway's national due diligence law, which entered into force in July 2022, also addresses human rights risks and impacts more broadly than previous issue-based laws but remains limited to human rights only (Lovdata.no 2021).

All due diligence laws shown in the Table 1 have entered into force except for the German and Dutch laws, whose estimated year of entry into force is shown in italics in the table. Mandatory due diligence regulation is increasingly under discussion in many other European countries as well, including Finland, Sweden, Austria, Belgium, Luxemburg and Denmark (BHRRC 2020, 5; Smit et al. 2020; 41, European Parliament 2021, 19). The following sub-sections briefly review the current adopted mandatory due diligence provisions, both at the EU level and in individual European countries.

3.3.1 EU-wide sector-specific due diligence legislation

The EU Timber Regulation (EUTR) (No 995/2010) came into force in 2013. It is part of the EU's action plan on Forest Law Enforcement, Governance and Trade (FLEGT) to combat illegal logging in the world's forests. Under the regulation, buyers who place timber products on the EU market must integrate due diligence system into their operations to evaluate the risk of timber being logged log or traded illegally. The due diligence system must include three parts: access to information about the origin of wood, risk assessment and mitigation. The aim is to minimize the risk of illegally harvested timber being placed on the internal market. (European Union 2010, 2, 9).

EUTR is the first legal instrument at EU level including mandatory due diligence, which the Commission considers 'a key principle for corporate sustainable responsibility in line with the United Nations Guiding Principles on Business and Human Rights' (European Commission 2018). However, Schilling-Vacaflor and Lenschow (2021, 8) show in their study that the implementation of the EUTR in Brazil, for example, has been deficient.

In addition to the risks of the timber industry, the extractive industry has traditionally been very vulnerable to human rights abuses. Precious metals and metal ores cause conflicts both inside and outside mining areas, which in turn has allowed rebel groups to fund military operations. Such activities are linked to serious human rights violations, affecting miners as well as local communities. (European Parliament 2020a, 4.) To prevent such action, Conflict Minerals Regulation (No. 2017/821) was established by EU, and it came into force in January 2021. EU importers of minerals or metals from conflict and risk areas must comply with supply chain due diligence requirements, i.e., ensure that the minerals or metals they purchase do not contribute to conflict, forced labour or any illegal activities. (European Union 2017.)

3.3.2 National due diligence legislation

In some European countries there has been a stronger need and willingness to make businesses more sustainable compared to other countries which has led to the adoption of national due diligence legislations (European Parliament 2021, 19). Next a brief overview of the national and mandatory due diligence laws in force in Europe is provided.

In 2015, the UK passed the Modern Slavery Act, which requires all companies with a domestic turnover of more than £36 million to prohibit all forms of slavery, including human trafficking, from their business. Companies covered by the legislation need to prepare and publish annual statement on the steps they have taken to ensure that slavery does not occur in their business and supply chains. If the organisation does not comply with the obligation, an unlimited fine may be imposed. (Legislation.gov.uk 2015.) In 2019, the Act was reformed to expand reporting requirements and remedies, and now also covers public bodies with budgets of more than £36 million. Following the reform, it has become mandatory to report on due diligence activities related to slavery and human trafficking, for example, which was previously voluntary. (Bird & Bird 2020.)

France was the first European country who adopted cross-sectoral mandatory due diligence law at national level in 2017. The French law on the duty of vigilance requires all large French firms to comply with due diligence through their supply chains by creating a 'vigilance plan' in consultation with trade unions. This plan should contain measures to identify and prevent risks on areas covered by the core humanitarian principles – on human rights, on health and safety, and on the environment – caused by activities of the company, its subsidiaries, sub-contractors or suppliers. In detail, the plan must contain 1) a mapping of risks; 2) regular risk assessment procedures; 3) adequate risk mitigation and prevention measures; 4) an alert mechanism; and 5) monitoring mechanism. Companies are liable to penalties and payment of damages if they do not fulfil their due diligence obligations. (Legifrance.gouv.fr 2017; European Parliament 2020a, 5–6.)

In ETUI (European Economic, Employment and Social Policy) policy brief Clerc (2021, 2) states that the Duty of Vigilance Law is the most advanced due diligence legislation to date, requiring companies to comply with core humanitarian principles, not only by the company itself but also by its suppliers, subsidiaries and subcontractors. However, an assessment of the application of the law by the French government (Economie.gouv.fr 2020) discovered that while some companies have made substantial progress, others are not yet applying the law efficiently. Companies that fail to comply with the law can be held civilly liable, but the fines originally provided for in the draft directive have been repealed as unconstitutional (Economie.gouv.fr 2020). According to BHRRC (2020), however, the Duty of Vigilance at least provides evidence that a mandatory law is more effective than voluntary guidance, particularly for companies that have not yet incorporated sustainable business practices into their strategy, due to the higher reputational and legal risks. On the other hand, the regulation supports companies that have already adopted SSCM practices and encourages them to strengthen such business (BHRRC 2020, 28–30).

In the Netherlands, the Child Labour Due Diligence Act was passed in May 2019. The law obligates all companies doing business in the Dutch market to investigate whether the products or services supplied have been produced by child labour and, if there is reason to suspect this, to adopt and implement an action plan. To this end, companies must issue a statement announcing that they have exercised due diligence to prevent the presence of child labour in their supply chain. (zoek.officielebekendmakingen.nl 2019.) Non-compliance can result in substantial administrative fines and criminal sanctions. However, the law was not expected to come into force until mid-2022, and has now been delayed further, to give companies time to review their supply chains. (Allen & Overy 2020.)

Norway adopted Transparency Act in 2021 and it came into force in July 2022. The law imposed extensive new due diligence obligations on large enterprises selling products and services in Norway. It requires companies to account for their human rights and fair labour practices not only for direct or tier 1 suppliers, but also for all indirect sellers and subcontractors in their supply chain. (Lovdata.no 2021; Ecovadis 2022) As the due diligence obligation extends to all levels of the supply chain, the law is much more demanding than most due diligence regulation in force elsewhere in Europe, making it much more challenging for companies to comply (Ecovadis 2022).

The German Act on Corporate Due Diligence Obligations in Supply Chains was published in July 2021 and will enter into force in January 2023, marking the first time that the responsibility of German companies to respect human rights in global supply chains has been brought to a legal footing. Under the law, companies with their central administration, principal place of business, administrative headquarters, statutory seat or branch office in Germany are obliged to respect human rights by executing due diligence. This involves setting up a risk management system to identify, prevent or minimise the risk of human rights violations and environmental damage. Complaints procedures, policy statement, preventive and corrective actions, and proper reporting and documentation are also required. (Bgbl.de 2021; Csr-in-deutschland.de 2021.)

These due diligence requirements apply to a company's own business area, to the actions of a contractual partner and to the actions of other direct and indirect suppliers covering the entire supply chain. Initially, the law will apply to companies with at least 3000 employees and later, from 2014, to companies with at least 1 000 employees in Germany. (Bgbl.de 2021; Csr-in-deutschland.de 2021.)

In December 2021, Switzerland adopted a final Ordinance setting out new due diligence and reporting obligations on conflict minerals and child labour. Companies whose registered office, central administration, or principal place of business is in Switzerland have to comply with the new obligations in their supply chain when handling conflict minerals and metals in Switzerland or supplying them to the Swiss market. Moreover, companies must comply with due diligence requirements when offering goods or services suspected of being linked to child labour. (Fedlex.admin.ch 2021; Pinsent Masons 2022.)

All companies covered by the law must have an appropriate management system in place, including a supply chain policy, a supply chain traceability system, risk assessments and mitigation procedures. Their suppliers and the public must also have access to this information. In addition, companies are required to publish reports on their due diligence and heavy fines can be imposed for misrepresentation or failure to comply with reporting obligations. (Fedlex.admin.ch 2021; Pinsent Masons 2022.) However, the legislation is narrower than the recently adopted due diligence laws in Germany and Norway, for example, which apply to human rights risks more broadly.

3.4 New EU-wide Corporate Sustainability Due Diligence

Existing due diligence guidelines and regulations are all steps towards more sustainable supply chains. Yet, in many countries or sectors, there are still no mandatory due diligence regulations, especially those that cover both human rights and environmental issues. The UNGPs, the OECD Guidelines and the ILO MNE Declaration all state that businesses have a duty to respect human rights and the environment and, thus, should undertake due diligence in an effective manner. However, voluntary initiatives and recommendations for companies' self-regulation cannot fill the accountability gap since they do not impose legally binding obligations and do not guarantee access to justice and efficient remedies for human rights and environmental violations (BHRRC 2020, 5–6; European Parliament 2021, 9–10; Schilling-Vacaflor & Lenschow 2021; Wolfsteller & Li 2022; 2).

Companies that voluntarily commit to respect human rights are often vague and selective in their commitment to human rights standards, and significant behavioural change is uncommon (Favotto & Kollman 2021; Hofmann 2018). Research by Smit et al. (2021) shows that when firms take voluntary action, they tend to focus on the first link in the supply chains while adverse human rights and environmental impact occurs often further down in the supply chain. Moreover, many companies will only engage in rigorous supply chain due diligence when they expect to gain directly measurable short-term economic benefits, or when they are legally obliged to do so (Hofmann et al. 2018, 136).

Parent or lead companies should be able to be held liable for the damage caused by their subsidiaries and suppliers under their control, or who are economically dependent on them (BHRRC 2020, 16). If a company at the top end of the supply chain is able to manage and control the size, design, quality and quantity of a product or service, and has potential leverage effects on the working conditions of those producing them, it is both fair and effective to align that power with legal responsibility (Nolan 2017, 46). In addition to the negative impacts on people and the environment, the Business and Human Right Resource Centre's research (BHRRC 2020, 20) find that irresponsible companies create competitive disadvantages for companies that are taking steps to fulfil their responsibility. Consequently, a number of scholars have stated that public policy is needed to strengthen corporate accountability by forcing companies to comply with sustainability requirements (Lenschow et al. 2016; Moser & Leipold 2020; Schilling-Vacaflor & Lenschow 2021). Regulations that include sanctions for non-compliance with due diligence obligations are more likely to be effective deterrent than those that do not (Nolan 2017, 46).

Working towards sustainable supply chains is one of the main pillars of the EU's recent trade strategy. On February 2022, the European Commission published a legislative proposal for EU-wide regulation on supply chain due diligence: the Corporate Sustainability Due Diligence Directive (CSDDD) (COM/2022/71 final). The proposal aims to promote sustainable business activities in global supply chains as well as unify business environment for companies operating in the Union. The Directive also recognises that voluntary measures have not led to large-scale improvements in all sectors, resulting in negative externalities from EU production and consumption both inside and outside the Union. (European Commission 2022c.)

The new rules in the CSDDD require companies to improve their sustainability performance throughout their global supply chains and prevent adverse impacts on human rights and the environment. More specifically, CSDDD obliges companies to conduct the following actions, each of which is further defined in Annexes 5–11 of the Directive (European Commission 2022c, 53):

1) *integrating due diligence into their policies*
2) *identifying actual or potential adverse impacts*
3) *preventing and mitigating potential adverse impacts, and bringing actual adverse impacts to an end and minimising their extent*
4) *establishing and maintaining a complaints procedure*
5) *monitoring the effectiveness of their due diligence policy and*
6) *publicly communicating on due diligence*

In practice, this means more effective protection of the human rights and environment included in international agreements. For example, safe and healthy working conditions must be guaranteed for employees. Companies must also have the right to share resources and information within their respective groups and with other legal entities for the purposes of due diligence, in accordance with applicable competition law (European Commission 2022c, 53).

The CSDDD builds on the UNGPs and OECD Guidelines and is in line with internationally recognised human rights and labour standards. The rules of the proposed Directive will apply to the following companies (European Commission 2022c, 46–45):

- **EU companies:**
  - Group 1 – All EU limited liability companies that have more than 500 employees and a net worldwide turnover of more than EUR 150 million.
  - Group 2 – Other limited liability companies that do not reach the thresholds of Group 1, but have more than 250 employees and a net worldwide turnover of at least EUR 40 million, provided that at least 50% of the net turnover is generated in the following sectors:
    i. the manufacture of textiles, leather and related products
    ii. agriculture, forestry, fisheries, the manufacture of food products, and the wholesale trade of agricultural raw materials, live animals, wood, food, and beverages
    iii. the extraction of mineral resources regardless from where they are extracted, the manufacture of basic metal products, other non-metallic mineral products and fabricated metal products (except machinery and equipment), and the wholesale trade of mineral resources, basic and intermediate mineral products
- **Non-EU companies operating in EU with a turnover in the EU that meets the thresholds of groups 1 and 2.**

Group 1 companies will be subject to the rules two years after entry into force and Group 2 companies four years after entry into force. In addition to aforementioned obligations, Group 1 companies must have a plan to make sure that their business strategy supports the goal of limiting global warming to 1.5 degrees under the Paris Climate Agreement. (European Commission 2022c, 33, 60.)

Contrary to the recommendations of the European Parliament (A9-0018/2021), the Commission excluded small and medium-sized enterprises (SMEs) from the scope of the directive (European Parliament 2021, 51). The companies covered by the CSDDD must exercise due diligence with respect to their own operations, the operations of their subsidiaries as well as the operations of their other partners with whom they have an established business relationship. Established business relationship is defined as '*a business relationship, whether direct or indirect, which is, or which is expected to be lasting, in view of its intensity or duration and which does not represent a negligible or merely ancillary part of the value chain'.* (European Commission 2022c, 46, 51.) The directive therefore covers companies' supply chain, from the sourcing of raw materials through design and production to distribution and disposal – in terms of established business relationships. The concept of 'established business relationships' is used to limit the scope of due diligence and is taken from the French Duty of Vigilance Law but differs significantly from international standards (BSR 2022).

Nolan (2017, 46) points out that due diligence can be a useful tool to use the leverage of lead companies to enhance working conditions in supply chains only if it penalizes companies that do not comply. In the end, laws are only as strong as their enforceability, whether national or international. When it comes to CSDDD, fines and sanctions can be imposed for non-compliance. In addition, victims can take legal action for damages that could have been avoided by taking appropriate measures in accordance with the due diligence. (European Commission 2022c, 58, 63–64.)

3.4.1 Differences between the proposals for directives of the European Parliament and the European Commission

The European Commission's proposal for a directive (CSDDD) differs in some respects from the resolution approved by the European Parliament earlier in March 2021, which contains recommendations on the content of a CSDDD for the European Commission. The EU Parliament's proposal is more ambitious in its subjective scope compared to the Commission's proposal, which excludes many companies, such as small and medium-sized enterprises (SMEs). Following the example of the French and German legislation, the Commission's legislative proposal sets thresholds regarding the number of employees and the company's net turnover. (IFLR 2022.) Only the largest companies selling products or services in the EU are required to comply with the due diligence obligation. In addition, the obligation would apply to large companies in high-risk sectors such as textiles, agriculture and minerals. This excludes approximately 99% of companies from regulation. In Finland, for example, the law would only apply to about 300 largest companies, and most clothing and textile companies would be exempt from the due diligence due to their size. (Fairtrade Finland 2022.)

Also, when looking at national laws, Kolev and Neligan's (2022) research indicates that up to one third of one thousand German companies will not need to take any action when the German due diligence law comes into force, as they will not be directly or indirectly affected by the law. The thresholds of CSDDD are somewhat broader than in the German Supply Chain Due Diligence Act but, as noted earlier, many companies still fall outside of its scope.

According to Josetta Nousjoki (2022), Sustainability Manager at Fairtrade Finland, SMEs should be covered by the new regulation. Most European companies are SMEs and there are also serious violations of human rights and environmental obligations in their supply chains. Nousjoki (2022) argues that all companies must be held accountable. Supply chain due diligence can be adapted to the size and structure of companies and facilitated by, for example, advice from authorities. Furthermore, according to Nousjoki (2022), ignoring SMEs would also be unfair from a competition perspective. She continues that it is in the interests of sustainably operating SMEs that competitors should no longer depress prices by ignoring the use of child or forced labour or other human rights violations in their supply chains. (Fairtrade Finland 2022.) Moreover, a recent survey conducted by Business Finland (2022) shows that as many as 96% of more than 500 SMEs perceive that sustainable development actually brings business benefits to their company. One might think that such view of SMEs themselves could also contribute to their inclusion in the scope of the law on sustainable supply chains.

However, Kolev and Neligan (2022, 19) argue that the level of new EU-wide due diligence regulation should in any case not be higher than the level of regulation under the German Supply Chain Due Diligence Act. In their opinion the directive should only target companies with evidence of abuses or poor production standards in third countries. The CSDDD would, however, target even more companies under lower thresholds than the German national law, making the CSDDD's level of regulation in this respect higher, not to mention the Parliament's directive proposal. According to Kolev and Neligan (2022, 19), while national rules lead to various barriers to trade and distortions of competition in the internal market, too broad a scope can have negative effects on the EU economy and on third countries. The potential impacts of the directive are further examined in the next Chapter.

Usually civil society actors, left-wing and green parties have argued for more comprehensive and stringent regulation, while business players as well as conservative and liberal parties have called for less stringent and less enforceable regulation (European Parliament 2020b; European Parliament 2020c; Smit et al. 2020). Thierry Breton, the Commissioner for the Internal Market in EU, states that the Commission's proposal will ensure that large market players take a leading role in mitigating the adverse impacts in their supply chains, but it also supports smaller companies to adapt to the same change (European Commission 2022a).

All in all, it remains to be seen whether the CSDDD drafted by the European Commission will enter into force in its current form, or whether it will be amended to be more stringent. The differences between the proposals for directives of the European Parliament and the European Commission foreshadow that some amendments are likely to be made to the final version of the directive.

4 IMPACTS OF THE CORPORATE SUSTAINABILITY DUE DILIGENCE ON SUPPLY CHAINS

This third and final Chapter of the literature review aims to identify and explore the expected outcomes of successful CSDDD integration on supply chains, the challenges it can pose to supply chain management, the measures needed to be taken in supply chains to overcome these challenges, and how these measures may affect the competitive position of companies. Finally, the theoretical framework is presented at the end of this Chapter. It should also be mentioned that the impacts of the directive will be assessed precisely in terms of the companies and supply chains covered by the law.

4.1 Expected impacts of successful integration of the CSDDD

The main objective of the new EU-wide CSDDD is for companies to improve their sustainability practices in their supply chains to minimise adverse impacts on human rights and the environment (European Commission 2022c, 1–3). If successful, due diligence developments can make a significant contribution to achieving sustainable development goals (Villiers 2019, 565). Several studies evaluating different regulatory options for due diligence obligations suggest that mandatory due diligence is expected to be the most effective in addressing adverse impacts on human rights and environment, but the effectiveness of the measures will depend on the existence of sanctions for non-compliance as well as state monitoring (COWI, Ecofys, Milieu 2018; Smit et al. 2020). Schilling-Vacaflor and Lenschow (2021, 9) also conclude that mandatory due diligence would have the greatest positive impact on human rights and the environment if properly monitored and enforced. The CSDDD identifies these conditions and requires Member States to designate at least one national supervisory authority as well as to impose 'dissuasive, proportionate and effective' sanctions for breaches of the directive. The supervisory authorities shall be public in nature, independent of the companies covered by the directive or other market interests and free of conflicts of interest. (European Commission 2022c, 42.)

Furthermore, Union-wide due diligence legislation would for the first time create a level playing field and common rules on sustainable supply chain management for companies within the Union, reducing legal fragmentation and uncertainty resulting from Member States acting independently (European Commission 2022c, 3). As discussed in Chapter

3, there are wide variations between countries and companies in the due diligence measures they have put in place, either on a mandatory or voluntary basis, if any. Differences between national rules on companies' due diligence obligations have a direct impact on the functioning of the internal market. If more and more Member States were to adopt divergent national laws, the number of different and partially incompatible requirements would multiply, distorting competition and free flow of goods and services within the Union (European Commission 2022c, 11–13). Schilling-Vacaflor and Lenschow's (2021, 9) study found that most individual companies were in favour of a mandatory due diligence obligation in order to develop legal certainty while respondents from industry organizations prefer voluntary measures and were critical of a mandatory due diligence. However, research by McCorquodale et al. (2017, 223) confirmed that companies generally prefer clearer rules over uncertainty and inconsistency.

As discussed in Chapter 2, risk management is one of the practices of SSCM. Due diligence, in turn, is essentially a risk management process aimed at preventing risks to rights holders. Therefore, as due diligence is part of SSCM as well as risk management, compliance with it can also be expected to reinforce risk management in supply chains. A successful implementation of and compliance with due diligence can clarify the view of companies' supply chain operations, raising awareness of their adverse impacts. Risks to rights holders, but also reputational risks, can be more easily identified at an early stage (European Commission 2022b.) Proactivity is also one of the SSCM practices and, similarly, companies engaging in sustainability practices are considered to be more proactive (Pagell & Wu 2009). Consequently, successful integration of the directive can increase supply chain resilience (European Commission 2022c, 2). As a recent example, companies that had integrated social, environmental and health considerations into their business strategies coped with the Covid-19 crisis better, and their stock prices had a minor drop during the pandemic than the companies who had not (European Commission 2022b).

The CSDDD also regulates companies to meet the growing sustainability expectations of consumers and investors (European Commission 2022c, 2). Consumers increasingly prefer products that are produced in an ethical and environmentally sustainable way when making purchasing decisions. Products sold by a socially responsible company, such as ethical cocoa, are perceived to offer more benefits and value. (European Commission 2022b.) Failure to meet the expectations of investors, consumers and other stakeholders exposes a company to significant reputational risk (Petersen & Lemke 2015, 502–503). This risk can be expected to increase as legal requirements and control become more stringent.

Operating in an environmentally and socially sustainable way and demonstrating it openly, on the other hand, can improve a company's reputation. The reputation of a company is how its image is perceived by consumers and other stakeholders. A good reputation can bring substantial economic and competitive advantages and is therefore a valuable asset for a company. (Petersen & Lemke 2015, 496.) Reputational damage, in turn, can lead to serious negative consequences. Reputational risks are even considered to be the greatest threat to businesses. (Nobanee et al. 2021, 4.) Furthermore, research by McCorquodale et al. (2017, 223) shows that companies integrating due diligence processes are more confident to deal with possible legal claims because they can demonstrate the extent of the measures they have taken. People cannot accuse companies of doing nothing if they take internal initiatives and proper action, develop policies, activate stakeholders and report those activities publicly.

An improved reputation and the other potential positive impacts of CSDDD mentioned above can ultimately bring economic benefits to businesses. According to the European Commission (2022b), the economic benefits of the integration of the due diligence are expected to come through higher returns. SSCM can also improve financial performance, for example by reducing waste, designing for reuse and disassembly, developing new innovations, lowering health and safety costs as well as reducing labour turnover costs due to safer transportation and warehousing and better working conditions (Carter & Rogers 2008, 370–371; Zimon et al. 2020, 219). Furthermore, according to a survey conducted by Business Finland, a majority of respondents perceive that sustainable business practices improve competitiveness, secure business for the future as well as increase brand value and sales (Business Finland 2022).

4.2 Expected challenges with the successful integration of the CSDDD

However, as mentioned in Chapter 2, achieving sustainable business practices throughout the supply chain, and thus meeting due diligence requirements, can be very difficult. Companies must extend to the lower tiers of their supply chains and assess the performance of all suppliers within their group with whom they have an established business relationship, regardless of the country in which they are located. This can be very challenging given the difficulties in controlling large supply chains consisting of parties operating in different social, political, legal, cultural and geographical contexts (Pedersen & Andersen 2006, 228, 229–230). Yet, Ireland (2017, 128) notes that while states are territorially and jurisdictionally limited, multinational companies are in fact well placed to control and influence their supply chains.

According to research by McCorquodale et al. (2017), a key challenge in exercising due diligence relates specifically to the management of third parties in supply chains. The fragmentation and globalization of production processes has led to an increasing number of layers of suppliers in supply chains. While companies may be able to control first-tier suppliers, it is more difficult or even impossible to do so for the distant upstream actors involved (Hofmann et al. 2018, 130). However, Hofmann et al. (2018, 130) point out that it is not only downstream actors who suffer from complexity. Even companies that are at arms-length to raw material stages are overloaded by having to perform analytical practices for numerous actors.

Effective control is usually hampered by a lack of reliable information from suppliers. Especially downstream companies face difficulties in collecting the necessary information from globally distributed multi-level supply chains. (Hofmann et al. 2018.) Information on third party or country-specific sustainability risks may not be easily available, and information may be concealed and undetectable during an audit (McCorquodale et al. 2017, 222). Lower-level suppliers may fear competitive drawbacks from sharing information and therefore prefer withholding it (Hofmann et al. 2018, 120). Mutual trust and commitment are therefore essential prerequisites for transparent communication and SSCM, and thus compliance with the CSDDD, as pointed out in Chapter 2. Building them requires collaboration, stakeholder involvement as well as the development of supply chain partners.

Certainly, promoting transparency throughout the supply chain and thus carrying out due diligence requires the involvement of all the geographically dispersed actors (Hofmann et al. 2018, 129). Due diligence is not a process that can be conducted in isolation from those who have influenced in their outcomes but requires continuous involvement of and communication with stakeholders (Villiers 2019, 565). Collective approach can make a big difference where the actions of a single company are unlikely to lead to change. This not only facilitates engagement, but also gives the company the opportunity to tackle the problems at its own factories, and within the country’s industry as a whole. (McCorquodale et al. 2017, 215.) The guidance documents published by the OECD also emphasises that due diligence is a dynamic process involving feedback loops and ongoing communication, and that it is based on stakeholder engagement (OECD 2018, 17–19).

The importance of collaboration and involvement of all stakeholders is also explained by the fact that due diligence does not directly concern the business enterprise or the risks to the business but the environment and people who are affected by its activities. These people are relevant to the due diligence process and can make valuable contributions to the quality and effectiveness of the process. Transparent communication can reduce information asymmetries and enable weaker parties to participate more effectively and make it easier to hold business actors accountable. (Villiers 2019, 565.) Furthermore, the quality of the information flowing through the supply chain depends heavily on the skills and training of the supply chain (Hofmann et al. 2018, 130). Thierry Breton, the Commissioner for the Internal Market, points out that while complex global value chains make it particularly difficult for companies to get reliable information on the activities of their suppliers, a uniform legislation can speed up the adoption of good practices for information gathering (European Commission 2022a). The study by McCorquodale et al. (2017, 214) also found that companies carrying out dedicated due diligence are significantly more likely to use sustainability experts, and thus more likely to identify sustainability risks.

In addition to accessing the reliable information, there may be challenges in reporting and publishing them. Tran-Nguyen et al. (2021) found in their study that Finnish companies publish little information on their human rights responsibilities and how they are performing in this area, partly because companies find sustainability reporting difficult. Both clear recommendations on how reporting should be conducted, and more resources are needed. Yet, McCorquodale et al. (2017, 223) point out that there has at least been a shift away from earlier concerns that increased reporting would lead to increased accountability towards more transparency in sustainability processes. According to the study by Tran-Nguyen et al. (2021), barriers to open sustainability reporting also include a lack of demand for it as well as a lack of commitment from senior management. However, the CSDDD, once enacted, will create a legal demand, and require precisely managers to introduce due diligence, monitor compliance and embed it in the business strategy.

In any case, collective action and the creation of new SSCM practices are needed, which takes time and resources. Didier Reynders, the Commissioner for Justice, states that the CSDDD will radically change the way companies do business at different stages of their global supply chains. Ultimately, compliance with the CSDDD is likely to impose transition costs on companies due to the establishment and implementation of new due diligence processes and procedures. Companies need to invest in improving the sustainability of their own operations throughout supply chains to meet CSDDD requirements. (European Commission 2022a.) New requirements can impose a significant information management burden on companies, as assessment, monitoring and analysis should include not only internal evaluations and consultation of publicly available information, but also wider stakeholder involvement and advice from external experts. Depending on a company's supplier portfolio and how exposed it is to human rights or environmental issues it can be very costly to conduct due diligence properly. (Fasterling & Demuijnck 2013, 807.)

For example, around 1500 direct and indirect suppliers are used in the production of microwave ovens (ZVEI 2020, 7). Closer collaboration, wider risk management and proactive engagement with 1500 suppliers, and thus obtaining reliable information from all the suppliers and reporting it properly, will inevitably require a lot of resources. Felbermayr et al. (2021, 41) argue that it is more than questionable that it would be possible for companies to monitor so many suppliers. However, in the CSDDD, due diligence must only be carried out on established business relationships, i.e. out of these 1500 suppliers, for example, suppliers that do not 'represent a negligible or merely ancillary part of the value chain' can be excluded. Nevertheless, costs per supplier relationship for companies are expected to increase, as each supplier within the scope of the law must be both once analyzed regarding human rights and environmental risks when the law enters into force, and then regularly audited and documented accordingly. However, it is difficult to estimate the level of increased costs, as it can vary widely depending on the type of business. Yet, downstream companies with many suppliers are likely to be most affected. (Felbermayr et al. 2021, 40.)

In the end, the extent of the changes and investments will naturally depend on the sustainability measures already in place in supply chains when the law enters into force. According to a survey by Kolev and Neligan (2022), including 1000 German companies, 16% of companies do not have to take any action when the German due diligence act enters into force since they already comply with the new requirements. Nevertheless, for most companies, the integration of supply chain due diligence is expected to be costly and should also consider negative impacts. Furthermore, changes to the supply chain structure may be necessary to maintain profitability. The following section focuses on possible adaptation measures to address the challenges identified in this section, as well as further potential impacts of these measures.

4.3 Adaptation measures to integrate the CSDDD

The CSDDD will impose a legal obligation on the companies within its scope to comply with the sustainability requirements. While many companies are expected to face some challenges in successfully integrating the CSDDD, as highlighted in the previous section, they will have to adapt to the requirements if they wish to continue to do business. Controlling and monitoring of multi-tier supply chains as well as other increased efforts to identify and address adverse human rights and environmental impacts will require more resources, which will also increase compliance costs. The additional costs of compliance, on the other hand, may require companies to make significant changes to the supply chain and production structure (Kolev & Neligan 2022, 19). International Financial Law Review (IFLR 2022) also writes that fundamental changes in organisation, business models, procurement strategies and supply chain management, as well as in the definition and prioritisation of investments, may be needed.

Felbermayr et al. (2021, 40) present in their study that as supplier governance costs increase, companies are likely to reduce the number of their suppliers. Namely, if a company needs to identify and address adverse human rights and environmental impacts for each supplier and it sources the same intermediate product from two different suppliers, removing the other one would reduce the supplier governance costs under the directive. Moreover, the greater the penalties that can be imposed for failure to comply with due diligence obligations, the greater the incentives for companies to reduce this risk of exposure. As brought out in Chapter 2 a large supplier base raises the likelihood that one or more suppliers are not complying with standards or changing social expectations. Hence, the reduced supplier base can also contribute to better sustainability performance. (Vachon & Klassen 2006, 803.)

However, a reduction of suppliers increases imports from the remaining suppliers, which can increase supply bottlenecks and thus deteriorate supply chain resilience. Moreover, such ‘monopolization of suppliers’ can strengthen suppliers’ market power, which can lead to higher prices for intermediate goods for European companies. (Felbermayr et al. 2021, 40, 44.) It was also mentioned in Chapter 2, that while companies can reduce the risks associated with individual suppliers by reducing the number of suppliers, this comes at the cost of greater dependence on the fewer suppliers (Beske & Seuring 2014, 327). However, while some scholars argue that single sourcing increases vulnerability and potential impact of a disruption (Christopher & Peck 2004; Jüttner 2005; Pettit et al. 2010), others suggest that increased collaboration and information sharing, which are more prevalent in single sourcing relations (Skjott-Larsen et al. 2007), in fact enhance supply chain resilience, as they help to speed up risk management processes (Ergun et al. 2010). The OECD (2020) also stresses that companies implementing due diligence are likely to build more long-term value and resilience.

Scholten and Schilder's (2015, 482) research shows that the longer companies have been working together, the more resilient they become thanks to increased visibility and velocity. Consequently, referring to the framework by Beske and Seuring (2014, 324) presented in Chapter 2, continuity becomes an increasingly important factor in achieving SSCM and thus in meeting the requirements of the CSDDD without losing resilience. Even if there are fewer suppliers in a supplier portfolio, if there is a long-term relationship and trust between the partners, it is easier to develop common structures and objectives and also to negotiate, for example, possible price increases. It is also important for continuity that long-term relationships are fostered with suppliers who have undergone appropriate supplier selection procedures, including supplier evaluation, especially with regard to sustainability aspects.

Companies may also increasingly relocate their supply chains to Europe or other countries with high human rights and environmental standards, where compliance with the law is easier and less expensive to monitor (Felbermayr et al. 2021, 40). According to Kolev and Neligan’s (2022, 19) research on the expected impact of the German due diligence regulation, almost one in five companies intends to buy intermediate products only from countries with high human rights and environmental standards. While some governments may start to work harder on improving production standards in their country, in other countries the overall level of such standards will remain unchanged or even deteriorate if EU companies decide to move their production out of these countries concerned.

Furthermore, Kolev and Neligan (2022, 19) found that many firms are likely to withdraw their operations from countries with weak governance due to the high cost of compliance. This in turn would have negative impact on the jobs previously created by companies, the production standards they have brought as well as the capital they have invested: ‘If 12 percent of the companies withdraw their activities from countries with weak governance, then roughly every tenth job created by EU enterprises in those countries could be endangered’. However, especially for large companies, it can be difficult to replace suppliers from these countries. (Kolev & Neligan 2022, 4, 18–19.)

It is also possible that companies move all their production back to Europe (Felbermayr et al. 2021, 41). In Kolev and Neligan's (2022, 19) study, less than 5% of respondents intend to relocate foreign production back to their home country. Nevertheless, according to Felbermayr et al. (2021, 41), if there is even a partial relocation of supply chains to Europe or other OECD countries, it may lead to a shift from labour-intensive to capital-intensive production. Shortening or relocating supply chains Europe also increases production costs for companies, as the advantages of specialization will be lost, and intermediate products are no longer produced in the most cost-effective site (Eaton & Kortum 2002; Caliendo & Parro 2015). Alternatively European companies could invest more and more abroad and set up their own production facilities, making them easier to monitor and control. However, such change in the supply chain structure would also entail higher costs for European companies, even though it would be more beneficial for the importing countries affected. (Felbermayr et al. 2021, 40.)

In addition to structural changes, companies may seek to compensate for the increased costs of compliance by raising product prices or reducing employees’ wages. When companies are forced to improve safety standards, they may have no choice but to reduce the wages they pay in order to remain competitive (Felbermayr et al. 2021, 43). In this case, even if working conditions improve, workers' living standards may fall, especially in developing countries. According to Kolev and Neligan’s (2022) survey, in turn, one in five companies plan to raise their product prices to finance the extra costs of complying with the German due diligence law. In the best case for businesses, consumers are then willing to pay the extra costs as they value products made in an ethically and environmentally sustainable way.

As stated earlier, one of the expected positive impacts of successful integration of CSDDD is precisely the improved reputation of companies that makes them more attractive to customers. However, it is uncertain to what extent compliance with the directive will improve the reputation and attractiveness of companies in the eyes of consumers, and thus to what extent they can increase their prices without losing sales. Only a minority of German businesses believe that their customers are willing to pay extra for the higher costs of compliance (Kolev & Neligan 2022, 18). The following table summarises possible measures to adapt the supply chain to the requirements of the CSDDD and the potential impact of these measures. The further competitive impacts will be discussed in the next section.

Table 2 Possible measures to integrate the CSDDD and their potential impacts

SUPPLY CHAIN STAGE	MEASURE	POTENTIAL IMPACTS
SUPPLIERS	Decrease the number of suppliers	+ Reduces costs + Facilitates monitoring & controlling - Increases supply bottlenecks - Increases suppliers' market power & makes intermediate products more expensive
SUPPLIERS	Change suppliers to those with high human rights and environmental standards	+ Facilitates monitoring & controlling - If many suppliers, can still be difficult/costly to monitor & control
PRODUCTION	Relocate production to Europe or other OECD countries	+ Facilitates monitoring & controlling - Increases costs
PRODUCTION	Establish own production sites abroad	+ Facilitates monitoring & controlling - Increases costs (investment)
CUSTOMERS	Raise product prices for customers	+ Customers are willing to pay higher prices → Increases returns OR - Customers are not willing to pay higher prices → Decreases returns
EMPLOYEES	Lower wages for employees	+ Reduces costs - Lowers living standards for employees

Furthermore, from the supplier countries point of view, export costs are likely to rise if proof of compliance with due diligence standards needs to be provided. Smaller companies, especially in developing countries, may not be able to afford this, and suppliers may reduce their exports or withdraw from the market altogether. If this were to happen, people would lose their jobs or move to informal labour market, where wages are often lower and working conditions worse. (Felbermayr et al. 2021, 46.) It is therefore possible that a directive aimed at improving human rights and environmental responsibility may in fact harm companies in developing countries that comply with above-average standards (Felbermayr et al. 2021; Kolev & Neligan 2022). Hannu Ylänen from Confederation of Finnish industries also sees problems with the CSDDD, although many Finnish companies support the directive. According to Ylänen, European companies are in practice unable to influence third countries in such a way that the real problems there would disappear. He says that the problem is global, and it is impossible to solve it at European level, he says. (Yle 2022.)

Kolev and Neligan (2022) argue that in order to achieve the desired outcome of contributing to the SSCM by improving production standards in developing countries, it is crucial to target cases where lower human and labour rights as well as environmental standards are misused without imposing unnecessarily high compliance costs on other firms. They suggest that a possible approach could be based on the US Tariff Act of 1930 which forbids the importation of goods produced by forced labour. The key difference between the CSDDD and the US law is that the latter only applies to cases where information reasonably indicates that forced labour may be involved in the production of the imported goods and not to all importers of goods imported from abroad.

4.4 Competitive impacts of the integration of the CSDDD

It was already noted in Chapter 2 that the higher costs of sustainable practices are considered to be the main barrier preventing companies from engaging in SSCM. However, when the CSDDD comes into force, managers will have a legal obligation to eliminate adverse human rights and environmental impacts in addition to the profit maximization. Changes to a company's business practices, supply chain structure or price levels in the supply chain to comply with the directive are likely to affect its profitability and therefore its competitiveness. If production costs will become higher for downstream companies and consumer prices are increased, competitiveness will be reduced accordingly (Felbermayr et al. 2021, 44). Business and Human Right Resource Centre (BHRRC 2020, 21–22) has also concluded that the higher costs of sustainable companies can put them at a structural competitive disadvantage. According to BHRRC (2020, 21–22), however, the CSDDD is therefore needed to reduce the competitive disadvantage of companies that already operate sustainably throughout their supply chains. Yet, while the directive aims to create a more level playing field for companies operating within the EU, SMEs fall still outside its scope. As discussed in section 3.1.4, some argue that it would be fairer from a competition point of view to also include them in the scope of the law.

Furthermore, if common regulation within the EU will at least to some extent harmonise the competitive environment and reduce competitive disadvantages intra-EU companies, the question arises as to how the new directive will affect the competitiveness of companies in foreign markets. The European Commission (2022b) responds to this concern by asserting that the competitiveness of companies increasingly depends on their ability to ensure sustainable practices throughout their supply chains, as consumers and investors now prefer sustainable companies when making purchasing or investment decisions. As mentioned in the previous section, in the best-case scenario, a company could pass on the extra costs to customers in the form of price increases without losing competitiveness. The European Commission (2022b) further states that it is the current variety of due diligence rules and the numerous voluntary initiatives that create legal uncertainty for companies across the EU and fragmentation of the single market, leading to additional costs and complexity. If more and more Member States were to adopt divergent national laws, the number of different and partially incompatible requirements would multiply, distorting competition and free flow of goods and services within the Union (European Commission 2022c, 11–13).

However, Felbermayr et al. (2021, 12) criticise the EU Commission's failure to address how EU-based companies can remain competitive after the directive has been enforced against competitors in countries without due diligence regulations. Countries without mandatory due diligence requirements are likely to continue doing business with suppliers that have a proven track record of failing to protect human rights and the environment. For example, China and other emerging economies in between developed and developing countries are unlikely to introduce due diligence regulation, at least not as stringent. Depending on the competitive situation, European firms are therefore likely to be at a disadvantage in international competition. (Felbermayr et al. 2021, 12, 42.)

However, a study by Kolev and Neligan (2022, 17) reveals the opposite: most companies do not believe that the introduction of supply chain due diligence will weaken their competitiveness in global markets.

Nevertheless, while the CSDDD will create a more level playing field for companies operating in the EU, other companies at global level are not covered by the law. However, it is also possible that the directive will become a model worldwide on sustainable supply chains (European Commission 2022b). According to Heidi Hautala, Vice-President of the European Parliament and MEP, such a directive is being discussed not only in Europe but also in the United States and Asia. It is increasingly recognised that the way foreign companies treat employees there is unethical. (Yle 2022.) Where CSDDD may worsen the short-term competitive conditions between EU companies and third country competitors, it can create a competitive advantage in the long term if sustainable business practices become the new normal in the global market and investments pay off.

It has already been noted in previous Chapters, that while the costs of SSCM can be high, there are clear economic benefits to be gained from improved sustainability performance (Kogg & Mont 2012, 162). Improved corporate image, reduced waste and new innovations, to mention a few, can ultimately generate profits and create a competitive advantage. Furthermore, competitive advantage can also be created from differentiation through sustainability. (Zimon et al. 2020, 219, 232–233.) However, complying with legally binding minimum sustainability requirements for supply chains is unlikely to lead to any benefits of differentiation, especially in the internal market.

4.5 Theoretical framework

Based on the literature review, a research framework on the impacts of the CSDDD on supply chains was formed (Figure 2). The identified impacts are grouped into four themes: general impacts, challenges, supply chain structure and price levels, and competitiveness.

At a general level (General impacts), all companies in the scope of the directive have legally binding obligation to integrate the CSDDD in their supply chain. This is expected to have a substantial impact on supply chains and the impacts can affect each stage of the supply chain. The impacts are not unambiguous and will depend, inter alia, on the sector and the size of the company as well as the complexity of its supply chain. However, the integration of due diligence is expected to have several positive effects on companies and their supply chains.

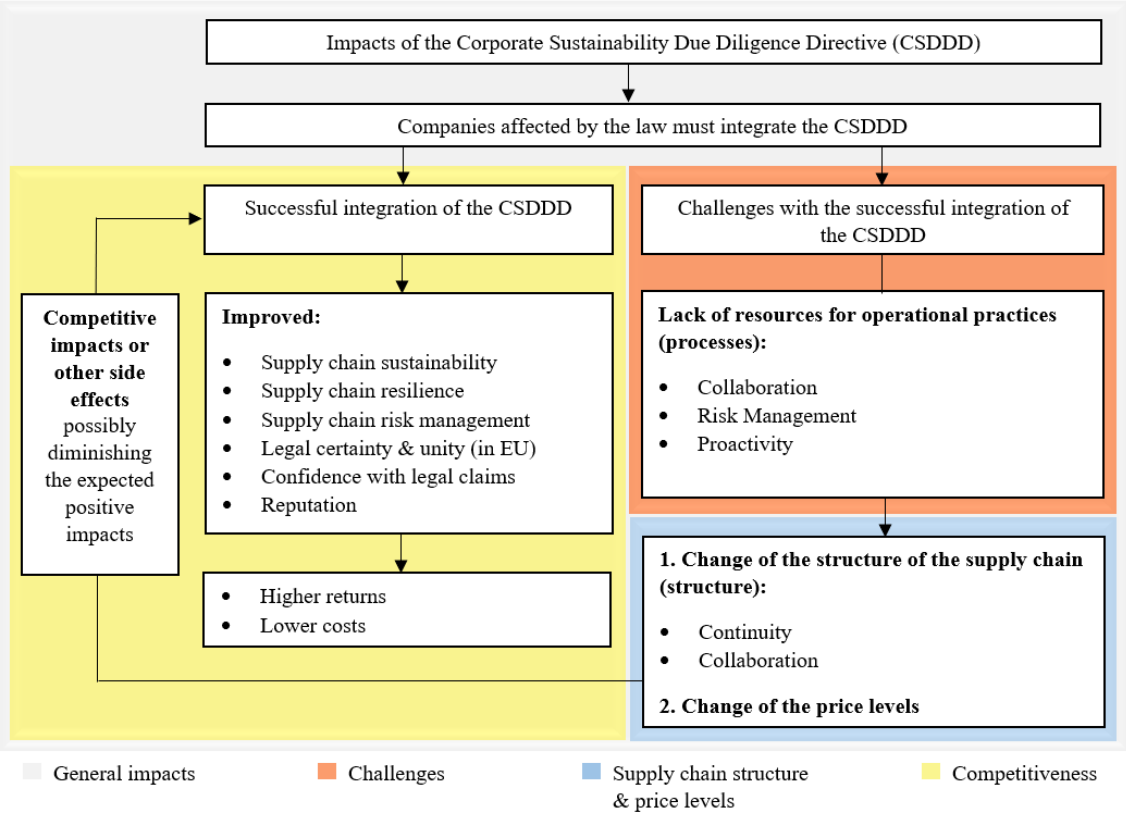


Figure 2 A literature review based framework on the impacts of the CSDDD on supply chains

On the other hand, it is also expected that many companies will face challenges in integrating the CSDDD. To overcome the challenges, companies are likely to change the structure of their supply chains and change price levels by raising product prices or lowering wages. These adaptation measures can in turn have competitive or other side effects that may diminish the expected positive effects, in particular in terms of expected higher returns and lower costs. The general impacts are therefore further classified into three themes – challenges, supply chain structure and price levels, and competitiveness – which are explored in more detail below.

Based on the literature review, successful integration of the CSDDD, i.e. more sustainable supply chain management, can lead to various desired outcomes: Improved sustainability, resilience and risk management in the supply chain, increased legal certainty and consistency in the Union, strengthened confidence with possible legal claims as well as improved business reputation. These positive impacts are eventually expected to reflect in improved financial performance and competitiveness. Higher returns can result from improved sales due to a better reputation and lower costs, for example through more efficient use of resources and reduced health and safety costs. For some companies, the CSDDD integration can be achieved without greater challenges, for example if there are sufficient resources for new investments. Moreover, some companies have already made progress with SSCM and the integration of the CSDDD requires little or no additional efforts. If no changes to the business are needed, it can be assumed that the expected positive impacts have already been at least partially achieved.

The challenges of the CSDDD integration are ultimately related to the lack of extra resources to carry out the necessary process-level SSCM practices. Following the framework by Beske and Seuring (2014) (Figure 1) and the supporting literature, the SSCM practices are divided into collaboration, risk management and proactivity. As outlined earlier, the main challenges often relate to the control and monitoring of long supply chains and the collection of reliable data from suppliers (*Risk Management*). One of the most crucial ways to address these challenges is to improve collaboration (*Collaboration*) throughout the supply chain. Improving collaboration and risk management, in turn, requires stakeholder management, learning and new innovations (*Proactivity*), among other things. And ultimately, to improve proactivity, collaboration and risk management processes to comply with the CSDDD, investments are needed in training, consultants or other external experts as well as new technology to facilitate SSCM processes. To make these investments, companies need funds and know-how. Therefore, the root cause of these challenges is simply considered to be a lack of resources to implement and develop process-level SSCM practices.

Further referring to Beske and Seuring's (2014) framework and supporting literature, SSCM practices can be conducted not only at the process level but also at the structural level (*Continuity* & *Collaboration*). If a company does not have sufficient resources to manage its current supplier portfolio under the new regulation, it may be worth reducing suppliers or switching to suppliers with whom SSCM is more successful. Moreover, relocation of production or other operations may be option for some companies to facilitate controlling and cooperation in supply chain. However, for key partners, it is important to invest in long-term partnerships, allowing skills, trust and common approaches to develop.

Both the development of operational processes and structural changes are expected to impose costs on companies, which may require them to raise product prices or reduce wages. Changes in product prices can put companies at a competitive disadvantage, because in a global market, and even in the EU, not all companies have to comply with the requirements of the directive. However, this will depend on the willingness of consumers to pay premium for more sustainably produced goods. Sustainable business practices can also improve a company's reputation in the eyes of consumers and increase sales despite price increases, which in turn would improve the company's competitive position.

Furthermore, changing the structure of the supply chain can facilitate the transition to SSCM and improve supply chain resilience, for example through closer collaboration and enhanced proactivity, but on the other hand, reducing suppliers can also increase bottlenecks and reduce resilience. Again, the outcome is not straightforward and depends, inter alia, on relationship between SC partners and the number of remaining suppliers. Moreover, while the successful integration of the CSDDD is expected increase the sustainability of the supply chains covered by the directive, it is possible that sustainability issues will simply be transferred from these EU supply chains to other supply chains, without actually improving the situation in developing countries. For example, if supplier countries cannot afford rising export costs, suppliers may withdraw from the market, causing workers to lose their jobs or move to the informal labour market, where wages are often lower and working conditions worse.

5 RESEARCH METHODS

This Chapter presents the methodological background to the empirical study and the decision-making behind it. First, the research approach is introduced in section 5.1, followed by a review of the research process in section 5.2. Finally, the quality of the research is assessed in section 5.3.

5.1 Research approach

Choosing and defining the research approach is essential when conducting research, as it affects the methods used to collect and analyse the data, and thus how the research questions are finally answered (Eskola & Suoranta 1998). This research will be conducted as a Delphi study, using a mixed-methods and action-oriented approach. In this section, the choices of research approach are further reviewed and justified.

5.1.1 Mixed-methods approach

The first methodological choice can be done between qualitative and quantitative research approach. Qualitative approaches are context-sensitive and seek interpretation and a holistic understanding of the subject under study, while quantitative approaches typically focus on hypothesis testing and statistical analysis (Eriksson & Kovalainen 2008). In this study, however, the research approach is a combination of both qualitative and quantitative methods. By using this so-called mixed-methods approach, it is possible to exploit the strengths of both approaches and compensate for their different weaknesses. It can also provide more comprehensive answers to research questions, overcoming the limitations of a single approach. (Spratt et al. 2004, 6.) Next, the reasons why a qualitative approach is appropriate for this study are explained, followed by an explanation of the importance of the quantitative part.

The aim of this research is to form a comprehensive understanding of the impacts of the CSDDD on businesses and their supply chains, which first justified the inclusion of a qualitative approach. Secondly, although the context of this study is quite broad, it focuses on a future phenomenon related to the business activities of companies operating in the EU and covered by the directive. Finally, qualitative research is considered particularly useful in situations where there is little or no prior knowledge on the subject (Eriksson & Kovalainen 2008). The CSDDD is a recent legislative initiative that will impose new requirements on many companies operating in Europe. Very little research has been done on its impact on supply chains, their management and the competitiveness of businesses. It has been recognised that the expected impacts of the proposed EU-wide due diligence regulation needs to be carefully assessed and complex interactions require further empirical and theoretical research (Schilling-Vacaflor & Lenschow 2021; Kolev & Neligan 2022).

On the other hand, the inclusion of a quantitative component in the approach is also justified. As Spratt et al. (2004, 7) point out, it is useful to use quantitative and qualitative research sequentially and in an integrated way if the aim is to use one method to inform the other. In this study, it makes sense to first statistically assess the likelihood of different scenarios based on a literature review, and only then to seek to understand and interpret the impacts qualitatively. A preliminary idea of which impacts are likely, and which are unlikely will help to understand the larger picture and facilitate further reflection. Both of the above-mentioned research methods seek to find new knowledge, but qualitative research aims to find new knowledge by preserving the complexities found in natural environments, while quantitative research aims to find new knowledge by simplifying complexities (O'Dwyer & Bernauer 2013, 3). In this research, the goal is to first create a simplified overall understanding of the likely impacts of CSDDD, and then to deepen this understanding by interpreting experts' views on the scenarios. Therefore, a mixed-methods approach is appropriate for this study.

5.1.2 Action-oriented approach

In this section, the choice of research approach is further demonstrated using business research categorization presented by Neilimo and Näsi (1980) and further refined by Kasanen et al. (1993). Shown in Figure 3, this framework introduces five different research approaches positioned on two axes according to their main focus: theoretical-empirical and descriptive-normative. The theoretical-empirical dimension describes the way in which knowledge is created. In theoretical research knowledge is obtained by reasoning and generating a priori knowledge without experimentation, whereas in empirical research knowledge is collected or generated through field or laboratory data collection. Descriptive-normative dimension, on the other hand, describes the nature of the knowledge. Descriptive research aims at describing, explaining and predicting the future, whereas normative research is more goal-oriented and seeks to explore practical ways to solve problems in specific situations. (Neilimo & Näsi 1980; Lukka 1991.)

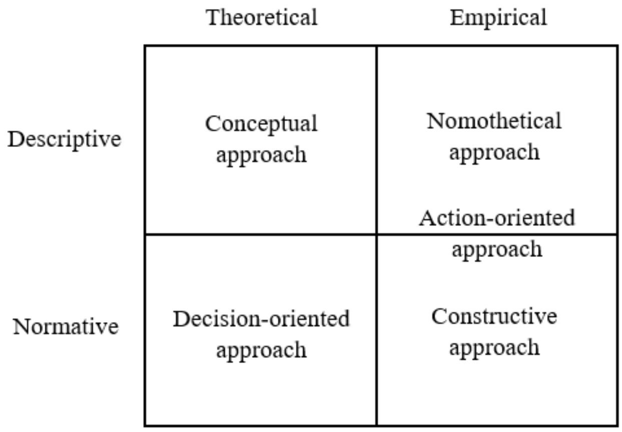


Figure 3 Business research approaches (Neilimo & Näsi 1980; Kasanen et al. 1993)

The five research approaches on this two-dimensional framework are: 1) nomothetical approach, 2) action-oriented approach, 3) constructive approach, 4) decision-oriented approach, and 5) conceptual approach. Based on the four-field division of the framework, the research approach of this study can be classified as action-oriented. Action-oriented approach is typically considered to be a descriptive approach, but it can also be normative (Lukka 1991). Of the many subgenres of action-oriented research, action research is the most normative option and thus closest to constructivist research (Lukka 2001).

The main difference between action-oriented and constructive research is that action-oriented research usually aims at a careful description and in-depth understanding of empirical phenomena without normative problem-solving objectives characterising constructivist studies. Only in the case of normative action research, research also involves active participation in the change process. (Lukka 2001.) In this research, the approach is mainly descriptive, as the primary aim is to understand and describe the impacts of the forthcoming CSDDD. However, the literature review also presents normative guidance for SSCM that can be reflected in the descriptive empirical findings, adding a normative feature to the research.

Furthermore, action-oriented research focuses primarily on research questions that, as the name suggests, have implications for action, whether it is solving a practical problem in a specific situation or changing the broader social structure. The focus of research is therefore on variables with a high potential for future action. (Patton 1986.) This further justifies the classification of this study as action-oriented since the impacts of the directive on businesses are studied in order to help them better understand the future requirements and business environment, and act accordingly.

5.1.3 Delphi study

The Delphi method was selected to test theoretical assumptions and to generate new knowledge on the research topic. It is a research method that has been developed and widely applied particularly in the field of future studies (Tienari & Meriläinen 2012, 64-67). The method is suitable for predicting the future prospects and changes or for gaining understanding of issues that are unclear and unpredictable (Koppa 2015). Linstone and Turoff (1975, 3) have characterised the Delphi method as a structured group communication process in which the group of individuals deals effectively with complex problems. Later Anttila (2005, 398–400) defines it as a step-by-step semi-structured or structured survey method for eliciting and refining the opinions, experiences and future visions of the group under study. These considerations make the use of the Delphi method ideally suited to this research and its objectives. The objective of this study is to assess what will happen in the future when, for the first time ever, the EU-wide due diligence directive on supply chain enters into force. The impacts involve complex interactions and are therefore difficult to predict. However, the expert group involved in this study seeks to assess possible and likely scenarios. The method also helps to identify new values, visions and ideas that can be used later in the decision-making process (Kuusi 1999).

Linstone and Turoff (1975, 4) note, however, that although widely used as a forecasting method, Delphi can also be used for other purposes, such as examining the importance of historical events, estimating potential budget allocations, exploring urban planning possibilities, defining the pros and cons of potential policy options, and generating causal relationships in complex economic or social phenomena. In any case, the method is characterised by panel of experts, several rounds of questionnaires, feedback and assessment of individual and group views, opportunity for individuals to revise views as well as anonymity of respondents (Linstone & Turoff 1975, 3; Linturi 2020). These features support the idea that the research process is not only about collecting existing knowledge, but also about generating new knowledge.

Delphi method usually consists of two or three questionnaire rounds, during which participants are asked to give their opinions on the subject (Kuusi 1999). According to Kuusi (1999), a typical Delphi process consists of nine successive steps as follows:

1. Narrowing down the research problem and defining research objective
2. Gathering a team of researched to conduct the research
3. Selecting and gathering the expert panel
4. Creating, testing and adjusting the questionnaire for the first round
5. Conducting the first questionnaire round (either written, computer-assisted or oral interviews)
6. Analysing the responses from the first round
7. Creating and testing the questionnaire for the second round
8. Conducting the second questionnaire round and evaluating of the responses
9. Reporting the results of the survey

Researcher plays a key role in creating a guided and interactive process where experts responding to the questions take positions on the arguments and learn about each other's opinions during the rounds. Between each round, researcher analyses the information and sends opinions, especially those that deviate from the general line, back to the experts for further consideration. This allows the experts to compare their own views with those of others and possibly change them. (Anttila 2005, 398–403.) This research consists of two rounds of Delphi questionnaires.

However, the above-mentioned characteristics of Delphi method are not absolute, and it is possible to deviate from them depending on the situation. In recent years, for example, the number of one-round Delphi studies has also increased. The conditionality on the basic characteristics makes Delphi an eclectic and flexible method. This is further emphasised by the fact that it is used both qualitatively and quantitatively, and in some cases both. (Linturi 2020.) However, the method is particularly useful in situations, where the research problem is somewhat vague and therefore cannot be studied efficiently with a single analytical tool (Kuusi 1999). The use of the method in this study can therefore be justified not only by the exploratory nature of this study, but also by the flexibility of the Delphi method. Research is exploratory in nature when it seeks to bring out new perspectives and approach lesser-known phenomena (Ghauri & Grønhaug 2002).

Consequently, this is a mixed-methods and action-oriented research, and will be carried out using the Delphi method. This approach was considered appropriate in order to find answers to the research questions and to obtain the desired result, i.e. an understanding of a future phenomenon that has not been extensively studied from a supply chain or competition perspective in the academic literature. Moreover, the literature review and the empirical study were considered compatible in terms of their sequential application, which led to a better outcome for the research purpose. In the following subsection, the research process will be examined step by step.

5.2 Research process

This section presents the 10-step research process used in this study, shown in Figure 4. It follows the 9-step Delphi process presented by Kuusi (1999) but has been adapted to suit this study.

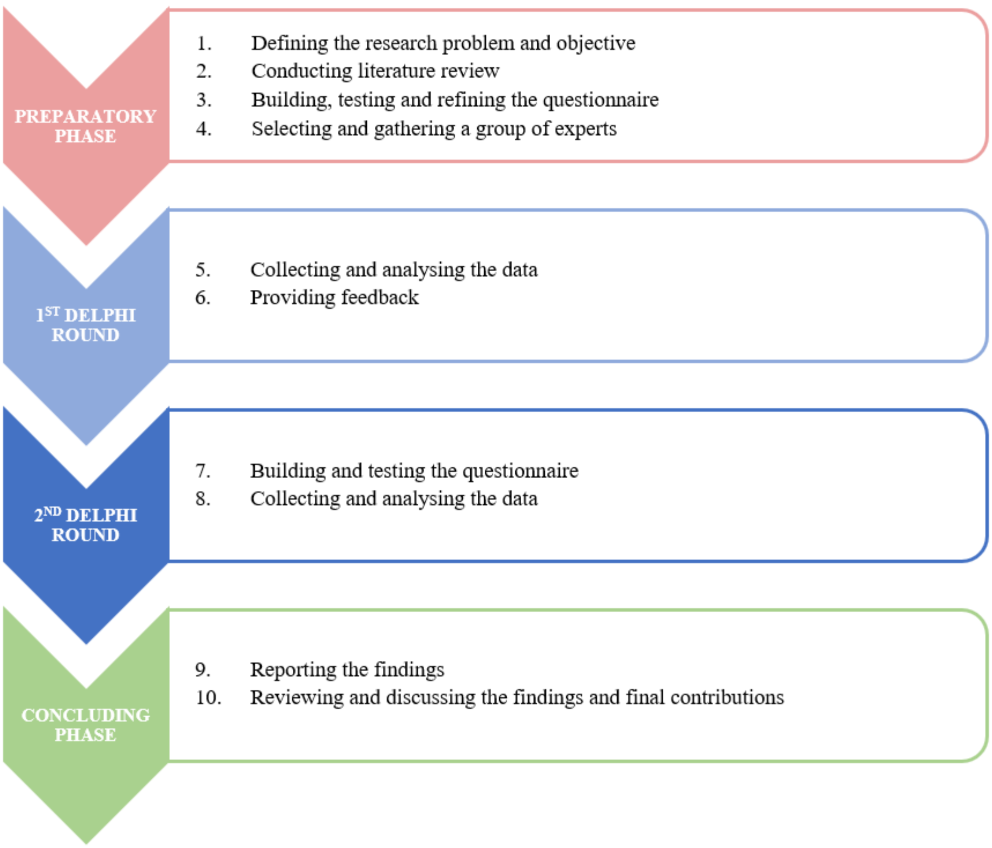


Figure 4 The research process of Delphi study

As this research consists of both a literature review and an empirical study, *'Conducting literature review'* was added as second step of the process. The original step 2, *'Gathering a team of researchers to conduct the research'*, was in turn omitted as the research is mainly conducted by a single researcher. Finally, due to the nature of this research, master's thesis with certain structure, step 10 '*Reviewing and discussing the final contributions*' was added.

5.2.1 Preparatory phase

Step 1: Defining the research problem and objective

As with any research, the success of Delphi depends to a large extent on the definition of the research problem and objective. As discussed, Delphi research is well suited to "hot" topics that are still unclear and controversial, and the development potential of the research topic is still vague or undirected. (Kuusi 1999.)

The research problem for this study was first identified and selected in December 2021. In that year, the European Union's new trade policy strategy was published, committing to a green transition. One of the policy initiatives of the strategy to promote greener trade policy is the supply chain due diligence to ensure responsible business conduct. Since then, and even before, the EU-wide supply chain due diligence regulation has been a hot topic among NGOs, trade unions and multinational companies (Smit et al. 2020, 169). However, the implications of such a broad directive from a supply chain or competition perspective have not been widely addressed in the academic literature, revealing a research gap. When it comes into force, mandatory regulation will impose new requirements on many companies operating in EU and their supply chains. Thus, a research problem was identified, from which the research objective was further derived. Both the research problem and objective were further developed and refined in January 2022, when a research plan was drawn up for the university and presented in early February 2022 as part of the master's thesis process. In addition, it was not until February 2022 that the European Commission published its official proposal of Corporate Sustainability Due Diligence Directive, which is discussed in this research.

Step 2: Conducting literature review

Based on the identified research problem and objective, a literature review was conducted between January and April 2022. The research problem and objective evolved even further by reviewing the academic literature, confirming research gaps and the potential contribution of the research. Moreover, understanding of the subject increased significantly, which later enabled the design of a survey relevant to the research objective. The questions and response scales typical of Delphi research are easier or possible to develop only after the research objective has been clearly defined and a critical literature review and other preliminary research activities have been carried out (Loo 2002, 765). In April, an interim report including the literature review was also presented to the university as part of the master's degree process, and feedback was received to refine it. The literature review was then further completed and refined.

Step 3: Creating, testing and adjusting the questionnaire

A key part of the Delphi process is careful design and formulation of survey questions. Usually, Delphi questionnaire includes a variety of scale responses and open-ended comment questions. Open-ended questions are used to provide justification for issues that would not be addressed by scale questions. (Loo 2002.) In this research, the first questionnaire round consisted of multiple-choice statements. See the extract from the questionnaire form round 1 in Figure 5.

TURUN YLIOPISTO

English

Impacts of the Directive on supply chains in general

Evaluate the following statements related to the general expected impacts of the Directive on supply chains.

The Directive will...

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree	No response
1) have a large impact on supply chains.	○	○	○	○	○	○
2) radically change the way companies do business at different stages of their supply chain.	○	○	○	○	○	○
3) have small impact on most companies as they already meet the due diligence requirements.	○	○	○	○	○	○

Figure 5 Extract from the questionnaire form round 1 (3 out of 46 statements)

The questionnaire was created, tested and adjusted in April 2022. The questionnaire was built on Qualtrics platform and contained a total of 46 multiple-choice statements, divided into 8 different themes: 1) impacts of the directive on supply chains in general, 2) competitiveness, 3) suppliers, 4) production, 5) customers and employees, 6) supply chain profitability and efficiency, 7) resources and collaboration, and 8) controlling and monitoring. Each statement had six response options according to the following scale: 1 = strongly disagree, 2 = somewhat disagree, 3 = neither agree nor disagree, 4 = somewhat agree, 5 = strongly agree, 6 = no response. The questionnaire was tested several times by the researcher and the supervisors and refined until it was finally ready for publication at the end of April.

In Delphi study, questions must be carefully worded so that the way the questions are phrased does not lead the respondent to a particular conclusion and misrepresent the respondent's opinion (Linstone & Turoff 1975, 6). However, in this questionnaire multiple-choice statements were used instead of completely neutral questions in order to assess the likelihood of different scenarios. In any case, the statements were formulated in such a way that the respondents would not be unnecessarily misled.

Step 4: Selecting and gathering a group of experts

Delphi method is characterised by a panel of experts in the fields surrounding the research topic (Linstone & Turoff 1975, 5). According to Kuusi (1999), one of the critical steps in the process is usually gathering the team of experts. The experts who make up the panel should be selected from different backgrounds, so that the understanding of the phenomenon is diverse. The diversity of perspectives is enhanced by the fact that different panellists have different interests in the phenomenon. Stakeholders form interest groups, many of whom have significant influence on societal decision-making. Business and labour organisations as well as NGOs are at the forefront in this respect. (Linturi 2020.)

Furthermore, what matters in the Delphi method is the quality of the experts, not the quantity. The sufficient number of experts and responses also vary depending on the nature of the phenomenon being studied and the Delphi application being used. (Kuusi 1999; Loo 2002.) Considering the research problem and objective, the expert panel for this research consisted of representatives of Finnish companies, representatives of advocacy organisations as well as other sustainability experts. To ensure that participants had the best possible expertise on the research topic, only supply chain or sustainability experts were selected for the panel. All participants had at least two years' experience in the fields, but most had more than 10 years' experience and were in influential positions.

The panel of experts consists of people from different sectors, companies and advocacy organisations with diverse backgrounds in terms of education, work and interests, which in turn supports the diversity of the respondents. Several industries are represented, such as energy, automotive, food, forest, metal, engineering as well as clothing and textile. The expert matrix (Table 3) below further illustrates the panellists' areas of expertise.

Table 3 Expert matrix

SECTORS (X) / FIELD OF WORK (Y)	Accounting	Auto	Consumer goods	Clothing / Textile	Energy	Engineering	Food	Forest	Metal	Multiple sectros
Advocacy			Expert N							Expert L
Commerce										Expert J
Consultancy	Expert G									Expert A
Industry		Expert C	Expert F	Expert K	Expert B	Expert M		Expert I	Expert H	
Industry Association								Expert E		
NGO							Expert D			

Experts who completed the 1^{st} and 2^{nd} rounds of the survey   Experts who completed the 1^{st} round of the survey

The selection and contacting of experts started in April 2022 and continued until early June 2022. A total of 36 experts were selected to be contacted. They were contacted by e-mail, phone or LinkedIn. Out of the contacted experts, 15 agreed to participate in the survey, 14 of them completed the 1^{st} round of the survey (marked in green and red on the Expert Matrix and 10 of them eventually finished 2^{nd} round of the survey (marked in green on the Expert Matrix). As is typical for Delphi, the anonymity of participants was guaranteed, and the responses are strictly confidential and will only be used for research purposes.

5.2.2 1st Delphi round

Step 5: Collecting and analysing the data

The flexibility of the Delphi method provides researcher a wide range of options for the data collection, and there is no single right technique for it. Traditionally, the 'data collection' rounds have been conducted in the form of interviews, but electronic surveys have increased. (Ojasalo et al. 2009.) In this research, data was collected in both rounds of the survey using electronic questionnaires. Personalised links to the first-round questionnaire were sent by email to the participants, also known as Delphi panellists. The advantages of the technique are flexibility of response in terms of time, speed of data collection and the direct availability of the data in electronic format for analysis.

The first-round questionnaire was open from late April to early June, after which it was closed, and the results analysed. The results were analysed in Excel based on the numerical distributions of the responses. Diagrams were generated from the distribution of responses, including the key ratios. In addition, responses to the free comment box at the end of the questionnaire were interpreted and taken into account in the analysis.

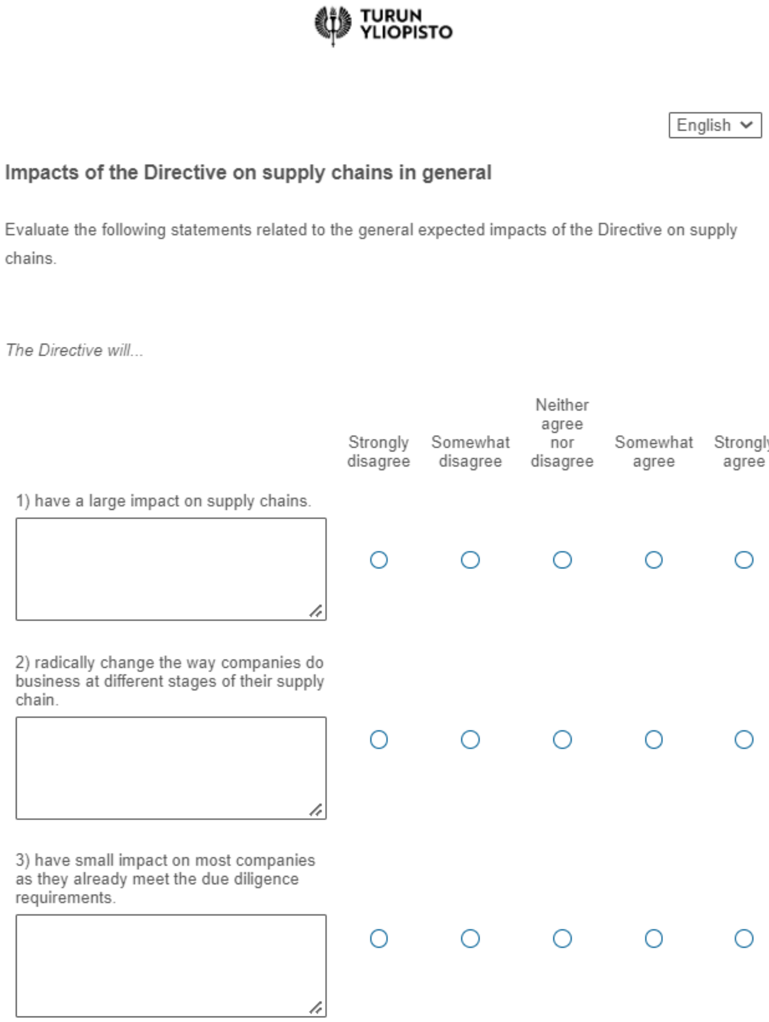
Step 6: Providing feedback

Once the results had been collected and analysed according to the Delphi process, a compact 'feedback' report was compiled for the participants for the next round. Based on the feedback typical of the Delphi method, the panellists can correct or complete their answers in the next round. Feedback is usually provided in the form of panel-wide measures such as median or dispersion data. (Kuusi 1999.) In this research, the feedback report showed the relative distribution of responses in the form of 100% stacked bars, as well as the average value for each statement.

5.2.3 2nd Delphi round

Step 7: Building and testing the questionnaire

Once the feedback report had been submitted to the panellists, a second-round questionnaire was developed and tested. The questionnaire consisted of exactly the same 46 statements as in the first round, but each statement was now accompanied by an open response box. An extract from the second-round questionnaire is shown in Figure 6.


TURUN YLIOPISTO

English

Impacts of the Directive on supply chains in general

Evaluate the following statements related to the general expected impacts of the Directive on supply chains.

The Directive will...

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
1) have a large impact on supply chains.	○	○	○	○	○
2) radically change the way companies do business at different stages of their supply chain.	○	○	○	○	○
3) have small impact on most companies as they already meet the due diligence requirements.	○	○	○	○	○

Figure 6 Extract from the questionnaire form round 2 (3 out of 46 statements)

In line with the traditional Delphi method, the idea of the second round was that for each statement, the expert would compare her or his own first-round response with the panel's distribution of responses, and if the response differed from the majority opinion on the statement, she or he was asked to justify her or his answer choice in the open-ended response box. In addition to justifying on the answers, experts were given the option to change their first-round responses in the second round.

Step 8: Collecting and analysing the data

After the second-round questionnaire was built and tested, it was published in mid-July and personalised links to the questionnaire were sent to the 14 participants of the first round. The second round of the questionnaire was open until mid-July, and 10/14 of the participants eventually responded to the second and final survey. The results were analysed in Excel based on the numerical distributions of the responses. Again, diagrams were created from the distribution of responses, including the key ratios. In addition to the numerical distributions, the responses were now deepened with comments on each statement, which were classified in Excel and their content analysed.

5.2.4 Concluding phase

Step 9: Reporting the findings

Once both rounds of the survey had been completed and the results analysed, the findings were reported in Chapter 6 of this research. The response distributions for both rounds are presented with the results to show the changes in the experts' responses between the first and second round. However, the evaluation and interpretation of the results is mainly based on the results of the second and final round. The comments from the second round are also an important part of the findings, and direct and indirect quotes from participants are presented to support the quantitative results. Some of the comments have been translated into English, as participants had the option of responding in either Finnish or English. Moreover, for each statement, the average value of the responses of the panel is presented.

The information processed in the Delphi study must also be shared with the panel (Linturi 2020). A summary report of the results will be sent to all panellists, and they will also have an opportunity to discuss the results in a webinar this autumn.

Step 10: Reviewing and discussing the final contributions

In the end, the main findings, final contributions and conclusions are discussed in Chapter 7. The empirical results are compared with previous literature on the subject and the research questions are answered. Furthermore, research limitations and suggestions for further research are presented.

5.3 Research quality

According to Eriksson and Kovalainen (2008), the classic criteria for assessing the quality of research can be divided into reliability and validity. Reliability relates to the degree of consistency of the study: it is high if another researcher obtains similar results when replicating the first researcher's study. Validity, on the other hand, refers to the extent to which the conclusions drawn from the research provide an accurate description or explanation to the research questions. Creswell (1998) further stresses that in order to increase the validity of a research, it is essential to define and illustrate the research approach.

This research was carried out as a mixed-methods Delphi study, ultimately involving ten sustainability or supply chain experts from different sectors. The experts were selected from both the private and third sectors with different interests and work backgrounds. The respondents' experience among sustainability and supply chains ranged from 2 to 25 years. The panel was therefore composed of experts with knowledge of the research subject but covering a wide range of interests and perspectives. This would suggest that if the survey were to be repeated, the results would be similar. The Delphi questionnaire also had two rounds, and in the second-round experts were able to correct their own answers. The iteration further increases the reliability of the research. In addition, the research process is described in great clarity and detail in Chapter 5, which means that another researcher can easily carry out a similar study again.

On the other hand, it should be noted that a qualitative study, or partly qualitative study as in this case, always reflects the subjective opinions of the individuals involved and the sample included only 10 Finnish experts. To achieve even better reliability, the survey could be conducted in a broader and more international way, involving experts from different EU and non-EU countries. However, due to the nature of this research and the time pressure, such an extensive study would not have been possible. Overall, the reliability of the survey is estimated to be quite good.

The Delphi method was well suited to the topic under study, which concerned a complex and unclear future phenomenon. For some statements in the questionnaire, the experts reached a clear consensus, while for others, opinions were widely divided, both for and against. These results enabled the researcher to draw comprehensive conclusions on the topic under study and successfully answer the research questions. The research approach is also defined, justified and illustrated in Chapter 5. Consequently, the validity of the study is considered to be high.

6 RESULTS

In this Chapter, the results of the Delphi study are reviewed. In line with the theoretical framework, the results are grouped under four themes: 1) general impacts, 2) challenges, 3) supply chain structure and price levels, and 4) competitiveness. In the questionnaire, the statements were further subdivided into eight themes, and the caption of each results diagram refers to this sub-theme. The statements are therefore not presented in the exact numerical order of the questionnaire, but according to the broader four-theme breakdown. For the sake of comparison, the results of both the first and second rounds have been included for each statement. The focus is, however, on the final, second-round results. Further conclusions and discussion as well as the theoretical contributions are presented in Chapter 7.

6.1 General impacts

Most participants (n = 8) somewhat or strongly agree that (1) the Directive will have a large impact on supply chains. Comments suggest that the extent of the impact will depend on the company, the final requirements of the Directive and their implementation. Only one participant somewhat disagrees on the statement without providing further explanation, and one respondent neither agrees nor disagrees stating that '*In general, current geopolitics and pandemics, for example, have a greater impact than a single directive.'*

The panellists were divided on whether (2) the Directive will radically change the way companies do business at different stages of their supply chain. While 50% of respondents somewhat disagreed, 40% somewhat agreed, resulting in a final mean of 2.9. One respondent changed her answer from 'somewhat agree' to 'somewhat disagree' stating: *'I changed my answer. The Directive will affect supply chain management and data, but may not change the business as such.'* Other respondents who disagreed or neither agreed nor disagreed argued the following:

> *'Practices will not change overnight.'*
>
> *'Global markets are huge and complex; EU has influence but is not the only player.'*

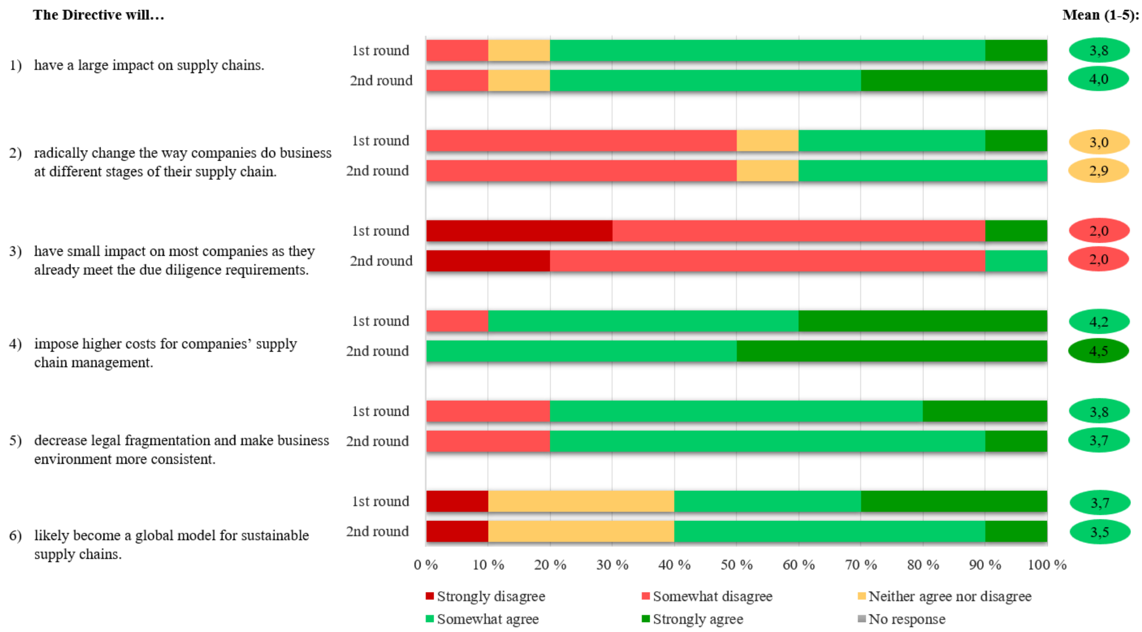


Figure 7 Impacts of the Directive on supply chains in general

However, all but one of the respondents disagreed with the statement that (3) the Directive will have little impact on most companies because they already meet due diligence requirements. The panellist who strongly agreed in the first round changed his answer to somewhat agree in the second round, but still did not justify his differing view. Another panellist noted that it *'Depends on the contents of the requirements. On a general level there's most likely room for improvement.'*

Moreover, with a mean score of 4.5, all participants believe that (4) the Directive will impose higher costs for companies' supply chain management: *'Data systems, gathering and interpreting information does not come for free. Additional resources are needed for these tasks but most likely this is not a grounds for including the additional costs into prices in a global market.'*

Almost all participants also think that (5) the Directive will decrease legal fragmentation and make business environment more consistent. This is expected to happen at least at EU level. Those who disagree argue that the directive actually gives Member States a lot of power to implement it, which is why it does not guarantee a fully harmonised business environment. Moreover, one respondent noted that there are only 27 member states in EU, and the rest have their own rules in global supply chains. Based on this, the respondent in question also strongly disagreed that (6) the Directive will likely become a global model for sustainable supply chains. However, the majority of respondents (n = 6) agreed with the statement. Though, this was again found to depend on final requirements of the CSDDD and their implementation, as well as on how well the other global giants adopt EU requirements.

It is further stated in the free comment section that the change will be easier for large companies but would be devastating for SMEs. SMEs are currently excluded from the scope of the directive, but the final application will determine the consequences. On the other hand, one expert explains that the new due diligence requirements are quite comparable to quality control in the 1990s. For the time being, they are seen as an additional costly activity in traditional procurement. Although building processes and changing old practices and operations always costs money and requires a lot of resources, it should be seen as an investment. See the further justification below:

> *'In today's 'buy anything, buy anywhere' world, supply chains can stretch across the globe. This is costly and makes supply chain management risky and expensive. The Supplier DD regulation will do companies a favour, as they will have to look at the map they have been drawing for 20 years and narrow it down. This will eliminate unnecessary players and make supply chains more reliable, cleaner and sustainable. Resilience is a theme that should be embedded in every company's strategy for the 2020s. Resilience will not be achieved if there are unknown weaknesses in operations. '*

6.2 Challenges

Most panellists (n = 6) expect that (36) for many companies it will be challenging to bear the additional implementation and compliance costs of due diligence. One of these panellists justifies her answer (strongly agree) to this statement as well as to statements 37) and 38) saying: *'This might become a true risk as CSDDD is definitely not the only new regulatory or other requirement that companies are facing, be it CSR or any other area of corporate operations.'* However, there is a fairly wide variation in the responses with the average score of 3.4 and not all respondents see this as a challenge. It is mentioned in the comments that the same additional cost of the Directive will affect operators in the same category in the same market area, so that competition between them will not be affected.

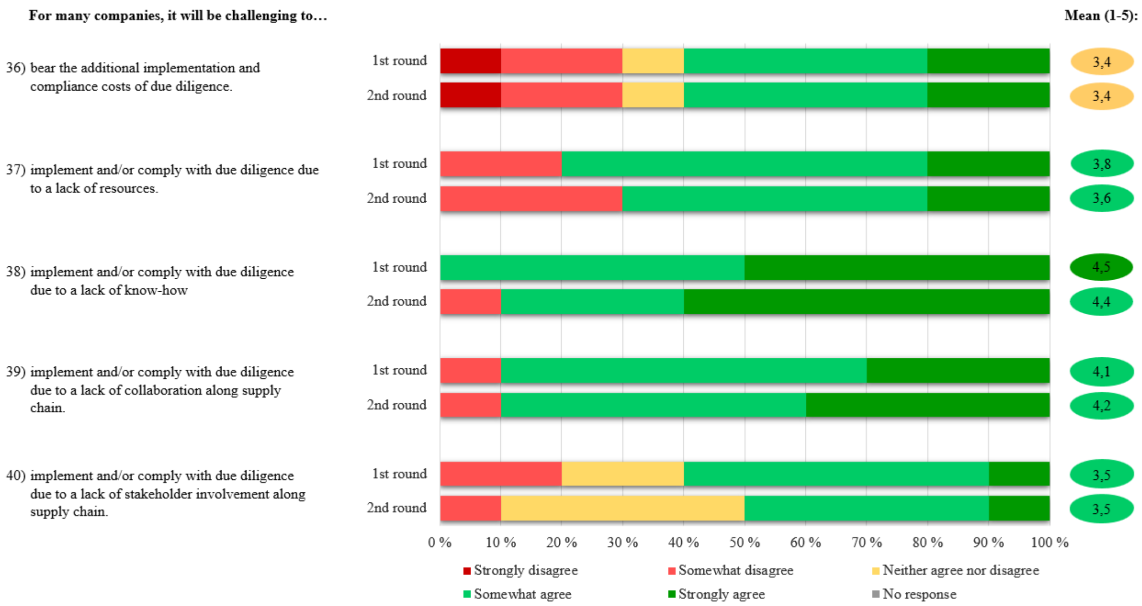


Figure 8 Resources and collaboration

According to the results, implementation and/or compliance with the Directive is challenging, in particular due to lack of (38) know-how (mean = 4.4) and (39) collaboration (mean = 4.2). One respondent noted, however, that the challenges posed by lack of know-how depend on how requirements are interpreted in different companies and how sustainability practices vary as a result. The challenges posed by lack of collaboration, in turn, are considered to depend on distance and differences with suppliers, as well as on the maturity level of suppliers to deal with the requirements:

> *'Level of maturity to handle these topics at the supplier with possible needs for training etc.; cultural differences, geographical distance and so on.'*

> *'Especially if you go beyond Tier 1, the lack of collaboration is a big problem.'*

However, one panelist did not see the lack of collaboration as a challenge for the implementation of the CSDDD, as it is by no means structurally difficult to develop collaboration to the new required level.

The majority (n = 7) also believe that (37) for many companies, implementing and/or complying with the CSDDD is challenging due to a lack of resources. This is expected to be the case especially if sustainability work has not yet started. Half of the participants also feel that the lack of stakeholder engagement makes implementation and/or compliance with the Directive challenging. However, there is some variation in responses, with panellists who neither agree nor disagree commenting:

'Something that may be difficult to influence through a directive.'

'They [stakeholders] commit when they have to'

'Not sure what the role of external stakeholders would be here so that the focus is still on the supply process.'

Moreover, without further comments, all participants agree that it will be challenging for many companies to (42) control and/or monitor that sub-suppliers will comply with due diligence requirements (mean = 4.9) and to (44) obtain reliable information on the activities of their suppliers or third parties (mean = 4.4). Furthermore, nine out of ten participants agree that it will also be challenging for many companies to (43) control and/or monitor that secondary members (e.g. logistics service providers, finance) will comply with due diligence requirements (mean = 4.6). It is found that the further you go beyond the company's own activities, the more challenging it becomes to monitor.

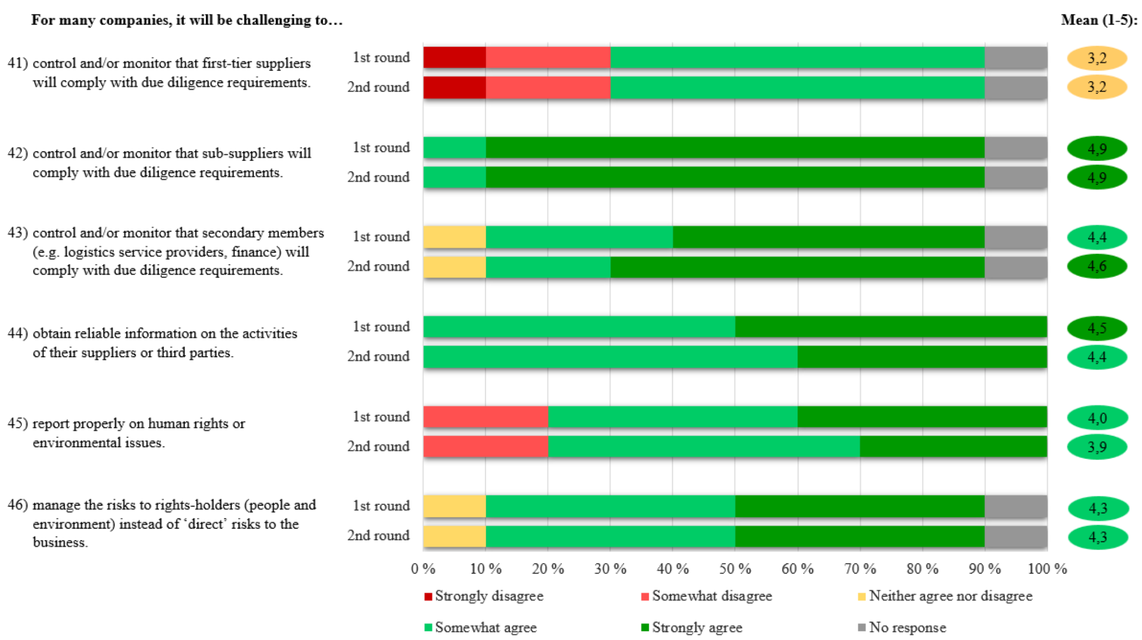


Figure 9 Controlling and monitoring

However, it was also noted that monitoring secondary members is likely to be easier than monitoring second-tier suppliers. One panellist neither agree nor disagree with the 43rd statement saying: *'Obtaining information from indirect actors may be more difficult, for* *example because the individual company is not a significant customer in the indirect actor's supply chain, although in general the sectors mentioned as examples [logistics service providers, financial sector] are no more problematic to collect the required information than other sectors.'*

Slightly more variation is found in the statement (41) concerning the controlling and monitoring of first-tier suppliers. Nevertheless, most participants also find the monitoring of first-tier suppliers somewhat challenging. Large companies are perceived to have the resources and expertise to do this, while small companies do not One respondent who disagree comments that good tools and models already exist for this. However, one respondent points out the following:

> *'The relationships are established but the number of 1st tier suppliers might make this difficult in practice (time, resources, knowledge etc.). How will this be streamlined so that a company that is a supplier to many customers wouldn't need to go through several similar DDs based on CSDDD?'*

Moreover, eight out of ten respondents somewhat or strongly agree that it will be challenging for many companies to (45) report on human rights and environmental issues. Comments highlight that while companies are making increasing efforts to improve their reporting on these issues, challenges do remain. Reporting is hampered by the difficulty of obtaining information, particularly from the upstream in the supply chain. On the other hand, it is mentioned that good reporting practices do exist, especially for first tier companies. Finally, with the average score of 4.3, it is considered to be challenging for many companies to (46) manage the risks to rights-holders (people and environment) instead of 'direct' risks to the business. It is noted that this may require a change of mindset in the management of the company.

It is further mentioned in the free comment section that while the CSDDD directive poses practical challenges for companies, its main weaknesses lie in its legal vagueness. And, as discussed earlier, there are also concerns about how suppliers will meet due diligence requirements for multiple customers in a way that they do not have to repeat the same process multiple times, as well as how external compliance monitoring is carried out.

6.3 Structure of supply chain & price levels

Most participants believe that as a result of the directive (15) the supplier governance costs and (16) the complexity of supplier governance will increase as every supplier has to be regularly audited regarding human rights and environmental risks. In the comments section, it is clarified that if such auditing has not yet been carried out or has been done to a limited extent, the new audit requirements may lead to additional costs or resource allocation needs in the short term and increase the amount of governance work. The respondent who somewhat disagrees with both statements declares that they have already been auditing their first-tier suppliers for several years and do not see that this would increase governance costs. However, she adds that additional costs will certainly arise when going beyond the first tier. One panellist strongly agreeing with statement 15 and somewhat agreeing with statement 16 again expressed concern about cross auditing (see also comment on statement 41):

> *(15) 'This a true risk - how will this DD procedure be implemented in practice so that companies and their customers don't end up cross-auditing each other in the global value networks with various business relationships? Will this replace customers' own questionnaires and the ones from NGOs, investors and authorities etc.? If for example an industry-level ambitious scheme / standard exists including an external audit, could this be used to prove that (at least certain) DD requirements are already met?'*
>
> *(16) 'See my reply above - how to avoid the accumulative auditing effect? How to prove the reliability of the suppliers' replies? Will this effort create value added or just add bureaucracy?'*

There is a little more variation in statement 17 (mean = 3.4). Six out of ten agree at least somewhat that as a result of the Directive (17) many suppliers are no longer able to supply companies affected by the law. Somewhat agreeing panellists comment the following:

> *'If the directive aims for changes, it is likely that all the same suppliers will not be able to deliver in the future.'*
>
> *'There are certainly players in some industries that are being cut out of supply chains. This can lead to concentration, i.e. the preference for larger suppliers over smaller ones.'*

'Or don't want to, which is already evident'

On the other hand, disagreeing respondent justifies her answer based on her own experience: *'we already have all our risk country suppliers audited'*. However, she adds that some suppliers may be cut out from companies that have not previously paid attention to such issues in their supply chain. It is further mentioned that this can happen, but that there is usually a way around almost everything, which can in turn affect the reliability of the information provided by suppliers.

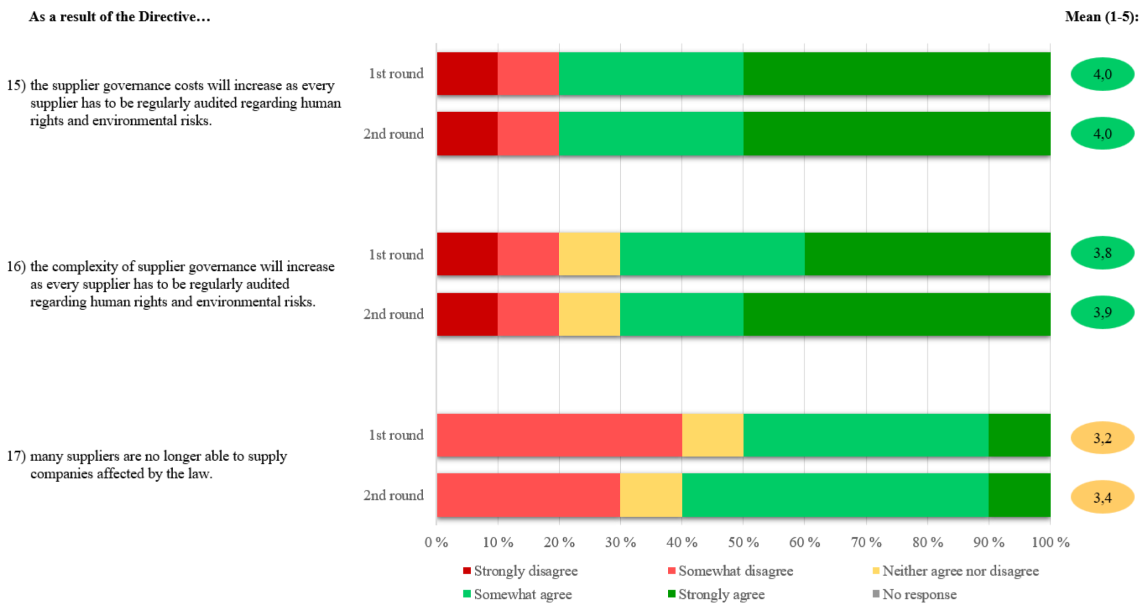


Figure 10 Suppliers (part 1)

All respondents somewhat or strongly agree that many companies will (18) change their procurement strategy as a result of the Directive. It is believed for example, that supply chains are likely to become more centralized as reporting obligations increase. However, one respondent clarifies that while there will probably be some changes in procurement strategy, major sudden changes are unlikely if it means a large increase in costs and raw materials supplied.

Furthermore, six out of ten panellists believe that as a result of the law, many companies may (19) decrease the number of their suppliers. However, one panellist disagrees and three neither agree nor disagree with the statement, with one of them stating:

'Difficult to estimate - maybe the most obvious risk cases would be left out but there's also the opportunity to develop suppliers' operations together instead of

ruling them out. ... if ruling out would mean no raw material, that's less business also for the company.'

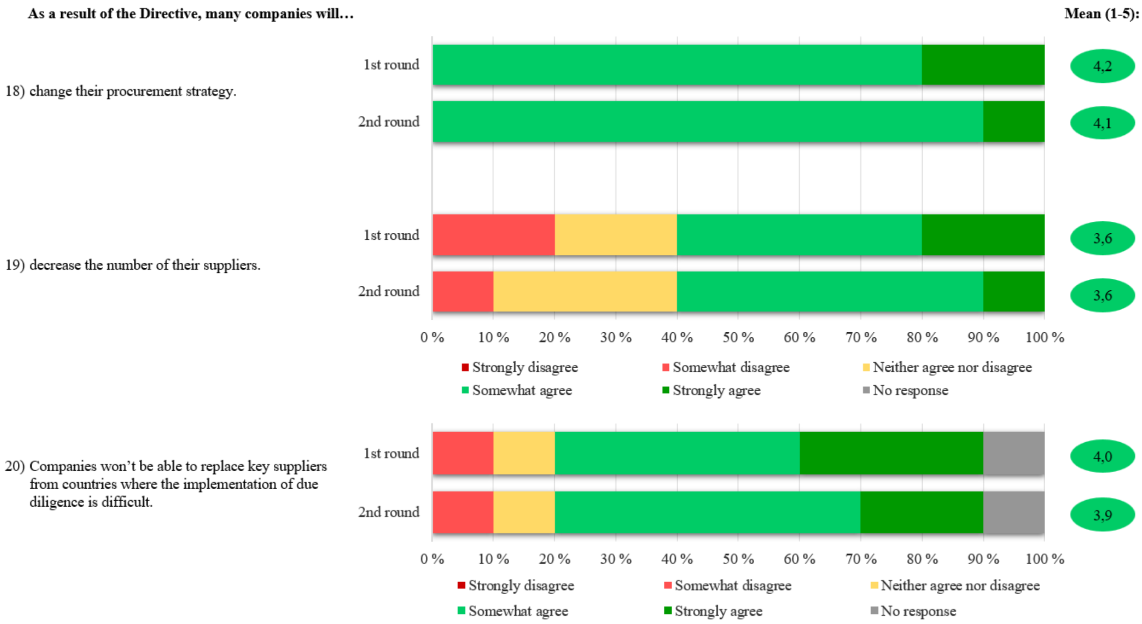


Figure 11 Suppliers (part 2)

Finally, majority of the participants think that (20) companies won't be able to replace key suppliers from countries where the implementation of due diligence is difficult. The disagreeing participant argues that there are alternative sources available or being developed. One somewhat agreeing respondent points out, however, that the risk exists for raw materials that are geographically linked to a particular risk country, and the supplier is likely to have limited ability to influence the local environment.

In the following statements related to production (21–26), the answers of the panelists are very divided. Only on the 21st statement there is a fairly unanimous view. Majority (n = 8) does not believe that many companies would (21) relocate their production to Europe. Such a change is seen as a major and time-consuming project, which is unlikely to be undertaken simply because of the forthcoming directive. On the other hand, one neither agreeing nor disagreeing respondent believes that companies will at least explore the possibility to relocate production to Europe. See direct references below:

'This may happen, but not because of this directive, but for trade policy reasons.'

'Relocation decisions and implementation are big projects that depend on various aspects. Not knowing the exact contents of the final CSDDD but still it would be difficult to imagine it alone had such a huge collective impact on corporate decisions.'

'Many companies will certainly explore the possibility of moving production to Europe, but a rapid shift will not happen and it will certainly not be possible to move all supply chains.'

One respondent changed her answer from 'somewhat disagree' in the first round to 'somewhat agree' in the second round without giving further explanation. Moreover, a narrow majority (n = 6) somewhat agrees that many companies will (22) withdraw their operations from countries with weak governance. It is argued that if the country's governing organization cannot be trusted, it can be difficult to implement the CSDDD directive throughout the supply chain or guarantee a good outcome. On the other hand, three respondent disagrees and one neither agrees nor disagrees stating that while there may be pressure to do so, it can be difficult in practice, for example in terms of sourcing alternative raw materials.

Four out of ten panellists somewhat disagree that, as result of the Directive, many companies will (23) insource their previously outsourced activities. Four other panellists neither agreed nor disagreed with the statement, and some of them point out in the comment section that companies are likely to explore this option, and this may happen, but can be a long process and companies are more likely to change suppliers. Yet, two panellists somewhat or strongly agree on the statement, with one arguing that it could work for the most strategic raw materials related to CSDDD.

With the average score of 2.9, the responses are split 50/50 between agree and disagree on statement 24, stating that as a result of the Directive many companies will (24) only use foreign production and/or suppliers from countries or regions with safe and good working conditions, i.e. high human rights standards. The distribution of responses is similar for statement 25 on environmental standards, with a mean of 2.9, the only difference being that two respondents answered neither agree nor disagree. Respondents disagreeing with both statements explain that this would take a long time or even be practically impossible.

Furthermore, 60% of respondents either strongly disagree or somewhat disagree that many companies will (26) invest abroad in order to establish their own production sites there which would then be easier to monitor and control. One of them argues that *'Investment decisions and implementation are big projects that depend on various aspects out of which CSDDD is only one.'* Nevertheless, three participants believe that this can be possible outcome.

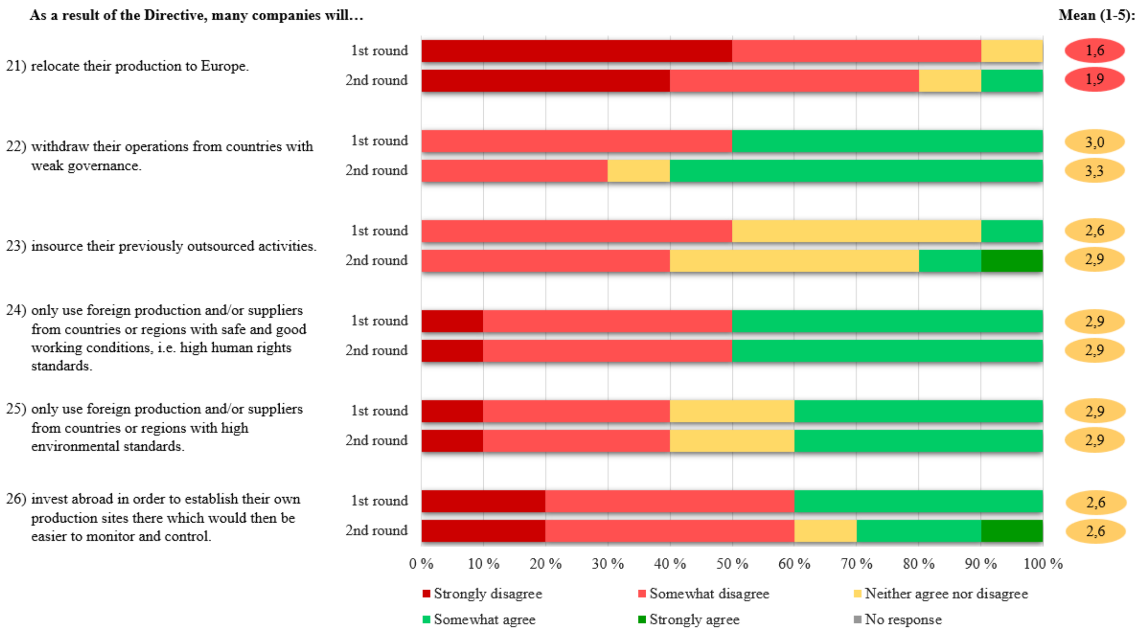


Figure 12 Production

The following statements address the potential impacts on product prices and wages in the supply chain. Majority believes that to finance the additional costs resulting from the implementation of due diligence, many companies will (27) raise product prices for customers (mean = 3.8). One of the somewhat agreeing respondent states:

> *'This might be inevitable - on the other hand in a global market also difficult or impossible to do. (Price negotiations with customers that still have other alternatives without this pricing factor.)'*

However, the respondent who neither agrees nor disagrees states:

> *'This is hardly the only reason for global price rises. In most industries, price is determined by competition and not just by supply chain costs'*

Majority, in turn, does not believe that to finance the additional costs resulting from the implementation of due diligence, many companies will (28) lower the wages along their supply chain (mean = 2.0). It is pointed out that operators often do not own their own factories and cannot directly influence wages. But it is also noted that price pressures can indirectly influence the wages paid by the supplier. Neither agreeing nor disagreeing participant comments, however, that *'if prices do not go up in the market, the costs will be collected from somewhere.'*

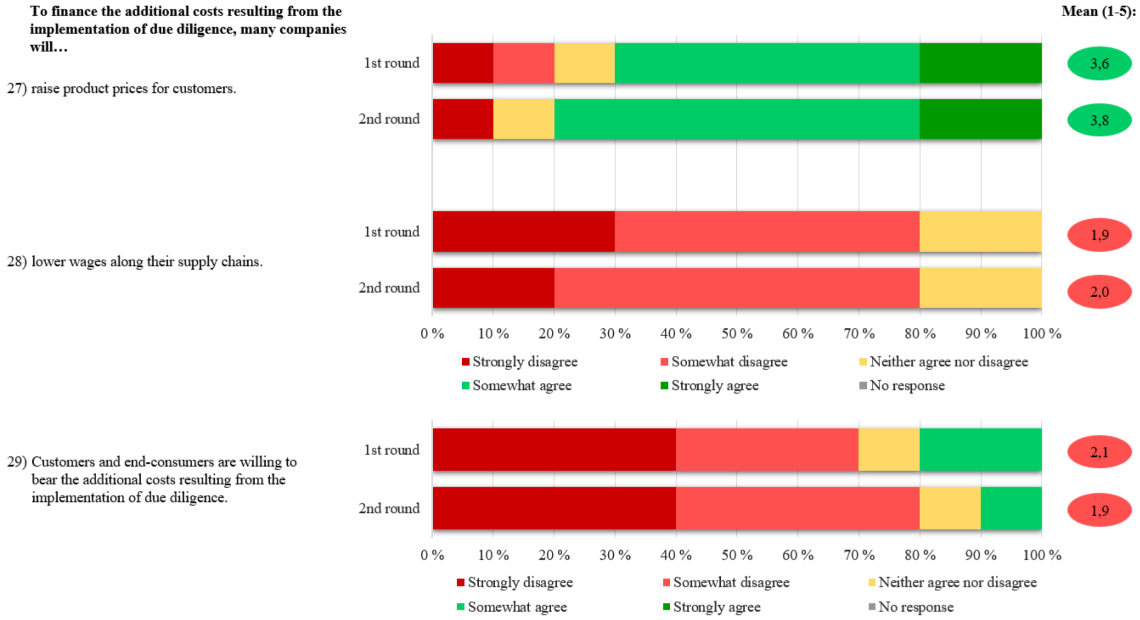


Figure 13 Customers and employees

Lastly, eight out of ten panellists somewhat or strongly disagree that (29) customers and end-consumers are willing to bear the additional costs resulting from the implementation of due diligence. It is perceived that they are still largely unwilling to pay a premium for such sustainable production that meets the CSDDD standards. Respondents who strongly disagree emphasise these issues in their comments:

> *'At the moment, consumers are not paying a premium, but for the same price, a more responsible alternative will be chosen.'*

> *'So far my experience is the opposite if we look at customers and end-consumers at large (mass impact) instead of certain niche customers and consumer types in the more developed markets which have willingness to pay a premium for these aspects.'*

> *'In a way, this is a distant issue for consumers, even if the issues are important.'*

Furthermore, a panellist who neither agrees nor disagrees states:

> *'Depends on the sector. It may well be that consumers in wealthy countries are able to make that choice in risky industries, but I think in other industries it is not a strong driver of decisions.'*

6.4 Competitiveness

The following statements deal with the impacts on the competitiveness of the company. First, the potential positive effects of the Directive on supply chain profitability and efficiency (statements 30–35), which also affect the competitiveness of businesses, are examined. This is followed by a more direct review of the impact of the Directive specifically on the competitiveness of companies in the short term (statements 7–10) and in the long term (statements 11–14).

With the mean score of 2.4, 70% of the respondents somewhat disagree that successful integration of the Directive will (30) generate economic benefits for companies through higher profits. Only one respondent somewhat agrees with the statement without further justification. A panellist who neither agrees nor disagrees questions:

> *'What would be the grounds for these profits? It would mean that the additional costs due to CSDDD need to be included in the prices or some other mechanism exists to cover them. If this should be a mainstream compliance practice in EU, who would pay extra for it?'*

With the mean score of 2.7, most of the participants (n=6) also disagree that successful integration of the Directive will (31) generate economic benefits for companies through reduced health and safety costs. It is argued in the comments that this is unlikely to happen unless a company owns the factories in its supply chain. Nevertheless, 80% of the panellists believe that successful integration of the Directive can (32) generate economic benefits for companies through higher efficiency along the supply chain. As stated by one respondent, this can happen through improved collaboration and understanding between suppliers, if the principles are implemented in practice. On the other hand, it is argued that this may not necessarily happen, and the question is asked: '*…if a company has, say 8 000 suppliers, how to allocate resources to focus on the suppliers with most impact?'*

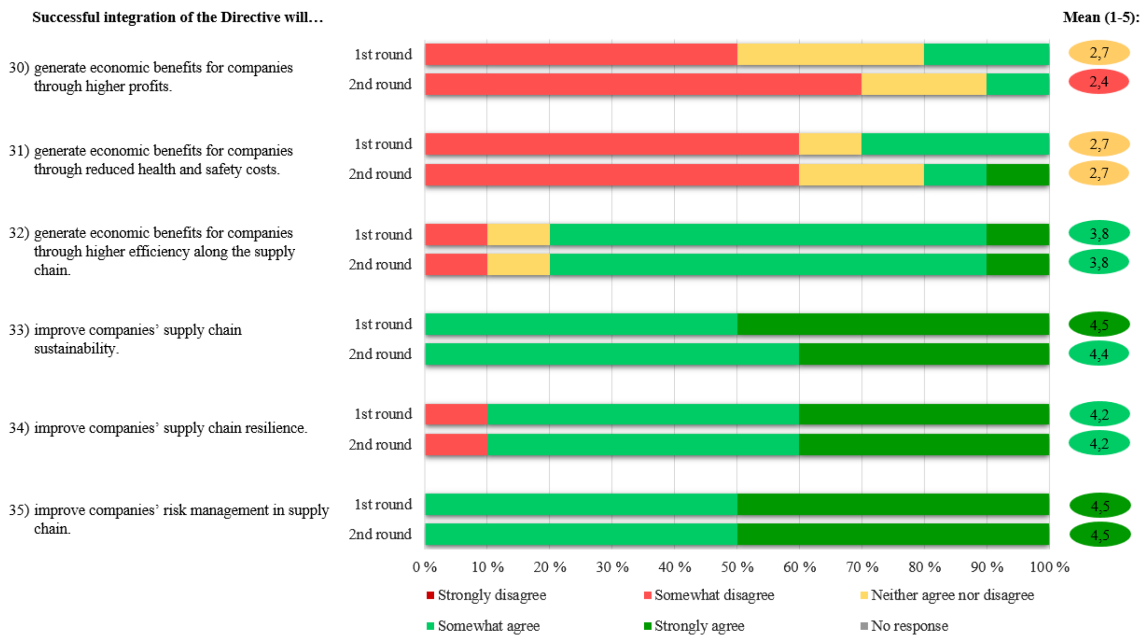


Figure 14 Supply chain profitability and efficiency

Moreover, all the panellists either strongly or somewhat agrees that that successful integration of the Directive will (33) improve companies' supply chain sustainability and (35) risk management in supply chain. One respondent, who somewhat agrees, states again that these objectives can only be achieved if the principles are implemented in practice, thus improving cooperation and understanding between suppliers. Practical implementation can be challenging if there are several thousand suppliers. Other panellists further note the following:

> *(33) 'If the Commission's draft directive followed the risk-based approach of the UNGPs (e.g. without limiting due diligence to established business relationships), the law would better promote sustainable business.'*

> *(34) 'Why I only somewhat agree and not strongly: risk management has probably identified the highest risk activities by now. The Directive will extend coverage to lower risk countries or activities.'*

Furthermore, all but one participant either strongly or somewhat agrees that that successful integration of the Directive will (34) improve companies' supply chain resilience. Those who agree do not provide further explanation, but one respondent who disagrees justifies his opinion by saying that *'reducing the number of alternatives rarely improves resilience'*.

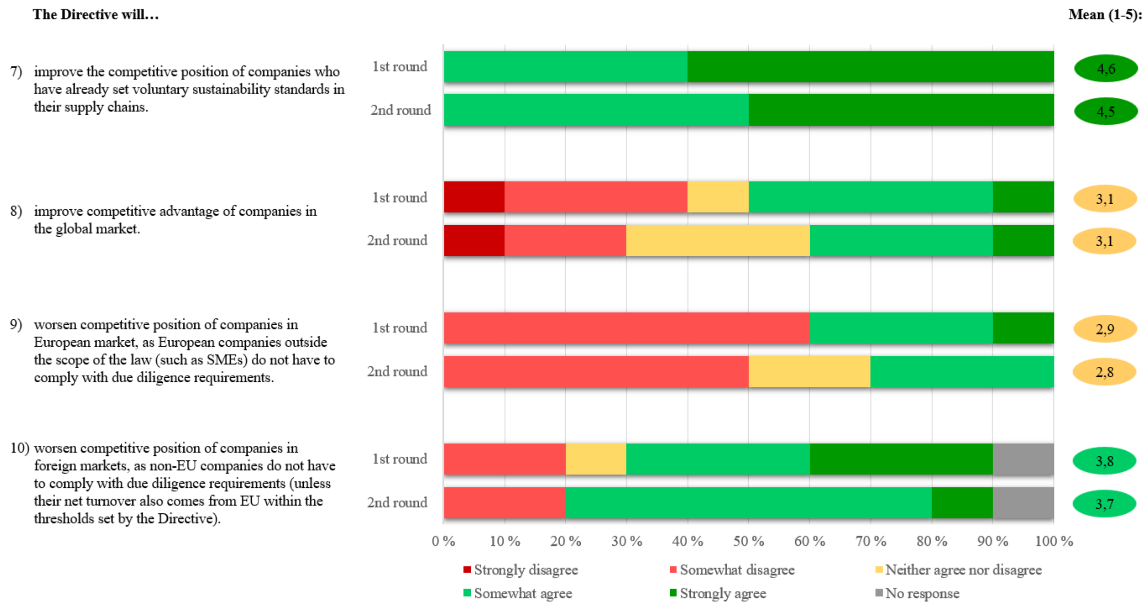


Figure 15 Competitive Impacts in the short to medium term (1–5 years)

The following statements deal with competitive impacts in the short to medium term. With the average score of 4.5, all respondents at least somewhat believe that the Directive will (7) improve the competitive position of companies who have already set voluntary sustainability standards in their supply chains. It is found that in the short term 'a front runner benefit' is most likely to occur. Furthermore, with the mean score of 3.1, opinions differ on whether the Directive will (8) improve the competitive advantage of companies in global market (in the short to medium term). The effects depend on many factors and are therefore difficult to assess, as the comments reveal:

> *'Varies between companies and sectors.'*

> *'It is currently difficult to assess the impact at global level.'*

> *'Depends a lot on the global market situation and willingness to pay (extra) for the efforts required by CSDDD.'*

One respondent, who somewhat agrees with this statement, has a clearer scenario to give:

> *'I would see that as the level of requirements within the EU becomes more uniform, it will have a global market impact and improve the competitive position of companies that have been working on these issues for a long time, as more companies are on the same starting line.'*

Moreover, six out of ten respondents somewhat disagrees that the Directive will (9) worsen competitive position of companies in European market, as European companies outside the scope of the law (such as SMEs) do not have to comply with due diligence requirements. However, three respondents somewhat agree with the statement, with one of them arguing that costs cannot necessarily be included in prices, even within the EU. The rest two respondents neither agree nor disagree saying:

> *'However, the themes and spirit of the due diligence should also be respected by smaller businesses to the extent that they are provided for in other laws or required by public opinion.'*

> *'Difficult question that depends on who is a competitor to whom. Would the ones falling outside be able to fill the demand gap compared to the volumes of bigger players?'*

70% of the panellists believe, on the other hand, that in the short to medium term, the Directive can (10) worsen competitive position of companies in foreign markets, as non-EU companies do not have to comply with due diligence requirements (unless their net turnover also comes from EU within the thresholds set by the Directive). The answers given by some panellists are actually contradictory with the statement 8, as competitiveness is expected to both improve (agreeing with statement 8) and then deteriorate (agreeing with statement 10) in the global market. Furthermore, only two panellists somewhat disagree with the statement 10, and one referred to the long-term outcome in his argument, stating that in the short term the directive may actually have a negative impact on competitiveness, as shown below:

> *'As I believe that the EU's CSDD directive will be a global model for sustainable supply chains, I do not believe that in the long term it will weaken companies' competitive position in foreign markets. Of course, in the short term there may be an impact, for example through additional costs.'*

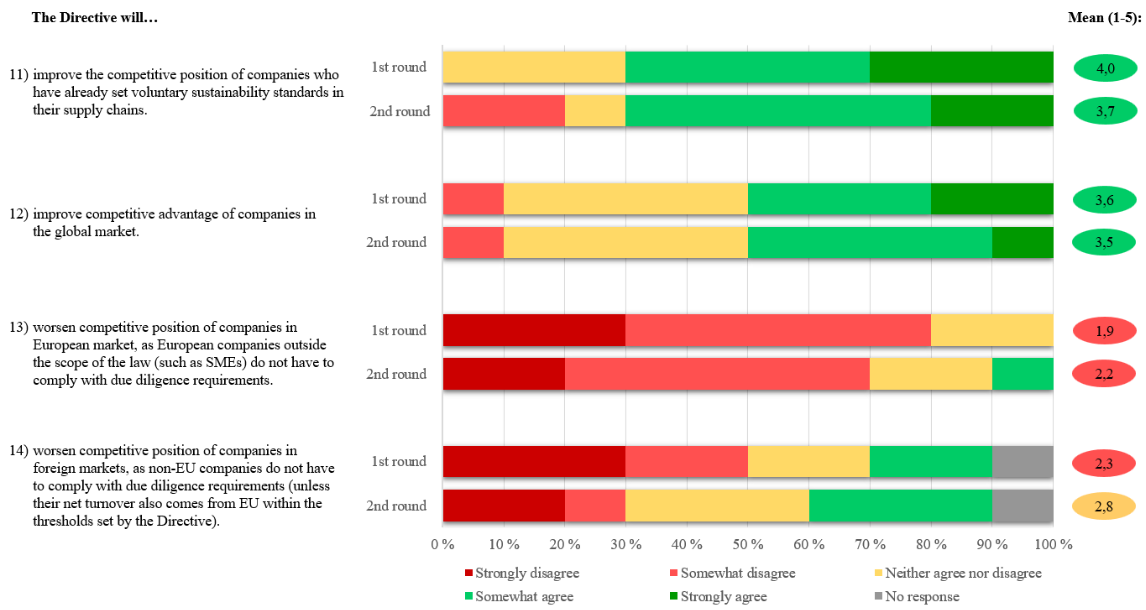


Figure 16 Competitive Impacts in the long term (6–10 years)

The following statements deal with competitive impacts in the long term. With the average score of 3.7, the majority (n = 7) still somewhat or strongly believe that, also in the long term, the Directive will (11) improve the competitive position of companies who have already set voluntary sustainability standards in their supply chains. This is justified by the fact that such companies have a longer tradition of sustainable business practices and their integration into both the company's strategy and operations. However, their competitive position is likely to be weakened if these practices become mainstream. On the other hand, two experts somewhat disagree, one of them arguing that in the long run, companies that start sustainability measures later will actually benefit from companies that have established good practices earlier. In other words, later entrants can create a competitive advantage by not having to create good practices from scratch but can learn from those who have already invested resources in developing SSCM practices.

There is quite a lot of variation in responses for statement 12, as there was for statement 8 (short term). However, only one respondent somewhat disagrees that in the long term the Directive will (12) improve competitive advantage of companies in the global market. According to the respondent: *'The Directive is not expected to significantly improve the position of companies on the global market beyond the current standards.'* Half of the respondents (n = 5) at least somewhat agree with the statement, and four of them neither agree nor disagree. According to the latter, the final result depends on many factors, as the comments reveal:

'Depends on so many (other) things and developments on a global level; emerging markets, protectionism and other trade policy developments, how CSR is weighed and valued etc.'

'There are both benefits and drawbacks. Measures require resources, but prevent problems and risks and streamline operations'

Furthermore, most respondents do not think that in the long run the directive will (13) worsen competitive position of companies in European market, as European companies outside the scope of the law (such as SMEs) do not have to comply with due diligence requirements. The average score is 2.2, with only one expert somewhat agreeing with this statement, explaining that costs cannot necessarily be included in prices.

Finally, responses to the statement 14 vary a lot: 30% agree, 30% disagree and 30% neither agree nor disagree that the directive will in the long term (14) worsen competitive position of companies in foreign markets, as non-EU companies do not have to comply with due diligence requirements (unless their net turnover also comes from EU within the thresholds set by the Directive). One strongly disagreeing respondent continues to argue that she believes the Directive will be a global model for responsible supply chains and therefore does not believe that in the long term the Directive will weaken the competitive position of companies in the foreign market. Neither agreeing nor disagreeing respondents again explain that this will depend on many factors such as the business sector, global developments in terms of sustainability, protectionism and trade policy developments. See one comment below:

'In some sectors, customers and owners will in any case require measures covered by the Directive in the future. On the other hand, there may also be sectors where someone outside the EU may benefit from a lower level of due diligence.'

7 DISCUSSION AND CONCLUSIONS

In this Chapter, the key findings of the research are discussed and concluded by comparing the empirical results with previous theoretical literature on the subject. First, the research questions are answered, followed by a presentation of the theoretical and practical contributions. Finally, the limitations of the study are reviewed and suggestions for further research are made.

7.1 Answering the research questions

Based on the empirical Delphi study, the research framework based on the literature review on the impacts of the CSDDD on supply chains has been enriched (Figure 17). Empirically confirmed findings are marked in red in the figure. The key findings are also presented in written form for the different impacts, further specifying the expected impacts based on experts' assessments.

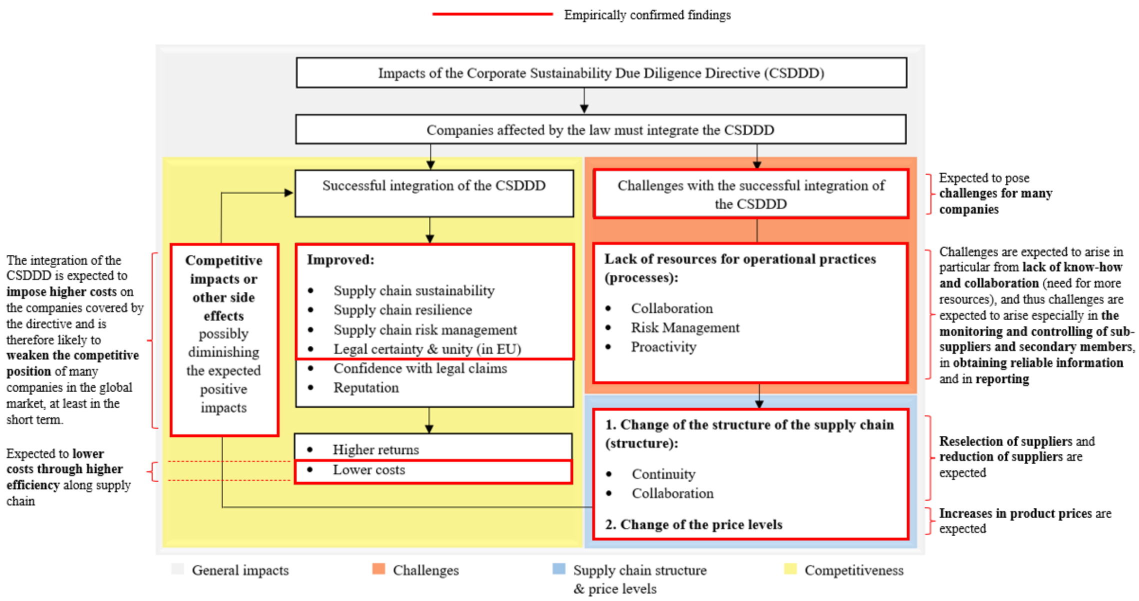


Figure 17 A literature review based framework on the impacts of the CSDDD on supply chains enriched with empirical findings

The above framework provides an overview of the key findings of this research. However, in the following sections, the impacts of the directive on supply chains and their management, the challenges it poses to supply chain management, as well as its competitive impacts on businesses, are discussed more broadly and in more detail.

7.1.1 Impacts and challenges of the CSDDD

In this section, the first research question (RQ1) of this study and its sub-research question (RQ1.1) will be answered:

RQ1: *How will the EU-wide Corporate Sustainability Due Diligence Directive (CSDDD) impact on supply chains and supply chain management?*

RQ1.1: *What challenges will the CSDDD impose on supply chain management?*

The CSDDD places obligations for companies to undertake due diligence for actual or potential adverse human rights and environmental impacts in their own operations, those of their subsidiaries, as well as of their established business relationships throughout their supply chains. The obligations are legally binding, as voluntary recommendations to conduct due diligence have not led to large-scale improvements in the sustainability of companies' supply chains. Consequently, once the directive enters into force, all companies covered by it will have to comply with the same due diligence requirements and improve risk management for rights holders, people and the environment.

While several experts of the Delphi panel argued that the impacts of the CSDDD are still somewhat difficult to estimate, especially on a global scale, the results provide a fairly broad idea of what to expect and what challenges companies should be prepared for. Firstly, supporting the theory, the directive is expected to have a large impact on supply chains. According to the literature review based framework, the directive can have positive and negative impacts on supply chains, impacts on supply chain structure and price levels, as well as impacts on the company's competitiveness. All these impacts were also identified by the experts and will be discussed in more detail below. However, most of the panellists did not think that the CSDDD would radically change the way companies do business at different stages of their supply chains, as Reynders (European Commission 2022a) suggested. They estimated that the EU's influence may not be enough to radically change the way global players do business and that old practices will not change quickly. On the other hand, 40% of the panellists somewhat agreed with Reynders.

Nevertheless, the experts anticipate that the complexity of supplier governance is likely to increase and pose challenges for many companies. As Pedersen and Andersen (2006, 229–230) pointed out, managing suppliers in large supply chains consisting of parties operating in different social, political, legal, cultural and geographical contexts can be very demanding. Furthermore, Hofmann et al. (2018, 130) concluded that while companies may be able to control first-tier suppliers, it is more challenging or even impossible to control the distant upstream actors. In line with his findings, all the panellists see that it will be particularly difficult to control and monitor that sub-suppliers comply with the due diligence requirements. The further a company must go in its own operations, the more challenging it becomes to monitor.

The control and monitoring of other members in the supply chain, such as secondary members, is also seen as a challenge. Secondary members include, inter alia, providers of logistics and financial services. McCorquodale et al. (2017) also identified specifically the governance of such third parties as a key challenge in exercising due diligence. Although Hofmann et al. (2018, 130) suggested that first-tier suppliers may be easier to control, most experts still find this somewhat difficult. However, panellists do admit that it depends on the resources of the company and the number of its first-tier suppliers whether or not they can be controlled without greater problems. It should also be mentioned that 30% of the experts do not really see the control of first-tier suppliers as a challenge.

Moreover, the results confirm that these challenges are seen to be at least partly due to the difficulty in obtaining reliable information from suppliers or third parties. In this context, the concern was also raised about how suppliers would even be able to provide reliable information and meet the due diligence requirements of multiple customers without having to repeat the same process too many times. This concern was supported by Hofmann et al. (2018, 130), who noted that the upstream actors, even companies that are at arms-length to raw material stages, can be overburdened by having to perform analytical practices for numerous customers and other parties. Most experts also estimated that it will be difficult for many companies to properly report on human rights or environmental issues, as found in the study by Tran-Nguyen et al. (2021). One panellist noted, however, that good reporting practices already exist for first-tier suppliers.

The Delphi study thus indicates, in accordance with several previous researches, that for many companies, managing risks to rightholders will be complicated by the difficulty of controlling and monitoring long supply chains, obtaining reliable information from SC partners and reporting properly on sustainability issues. However, it would be crucial to improve the transparency of the supply chain in order to achieve a more sustainable approach. Supply chain transparency is hampered by a lack of know-how and collaboration, which the panellists further identified as key challenges in implementing and complying with the CSDDD. They noted that lack of collaboration is likely to pose difficulties especially for companies whose suppliers are geographically distant and whose suppliers' maturity to deal with these issues is weak. It was also mentioned that the lack of know-how will probably become a particular problem because, in addition to the CSDDD, companies now have to adapt to an increasing number of rules on CSR and other aspects of business, which increases the need for know-how within companies. All the more reason why, as Fasterling and Demuijnck (2013, 807) pointed out, companies can face a considerable information management burden and external expertise is needed if they do not have the necessary skills or resources themselves. The majority of the panellists did confirm that it is likely be challenging for many companies to implement and comply with due diligence due to a lack of resources.

Furthermore, Kolev and Neligan (2022, 19) suggested that it may be necessary or beneficial for companies to change the structure of their supply chain in order to comply with new sustainability requirements. Similarly, IFLR (2022) noted that companies may need to make changes to their sourcing strategies, supply chain management and investment prioritisation, among other things. The results of the empirical data confirmed these assumptions. All panellists agreed that many companies would need to change their procurement strategies. Apart from the fact that buying companies themselves would decide to change the structure of their supply chain, 60% of the expert panel members estimated that many suppliers will no longer be able to supply companies affected by the law. As Felbermayr et al. (2021, 46.) noted, the directive is also likely to increase suppliers' export costs, and smaller firms may not be able to afford this, forcing them to reduce their exports or withdraw from the market altogether. Consequently, companies need to reselect or reduce their supplier portfolio.

Most of the panellists believed that many companies would change their procurement strategy by reducing the number of their suppliers, which was also considered likely in the study by Felbermayr et al. (2021). One expert predicted that this may lead to centralisation, favouring large suppliers over smaller ones. However, 10% disagreed and 30% neither agreed nor disagreed with the scenario of supplier reduction, pointing out that while the riskiest suppliers might be cut out, it would generally be a better option to develop suppliers' operations together rather than simply excluding them from the chain.

Beske and Seuring (2014) also emphasised the importance of long-term partnerships and joint development for SSCM. They also stressed, however, that it is essential for SSCM to be able to choose which partnerships are worth continuing and developing. As one panellist pointed out, eliminating unnecessary SC partners makes supply chains more reliable, cleaner, sustainable and resilient since there are no longer unknown weaknesses in the operations.

Furthermore, 60% of the panellists somewhat agreed that many companies would withdraw their operations from countries with weak governance. This scenario was also considered likely in the study by Kolev and Neligan (2022, 19). However, reselecting or reducing supplier portfolio can also be challenging. Almost all experts themselves predict that companies will not be able to replace key suppliers from countries where the implementation of due diligence is difficult. While one panellist disagrees, arguing that alternative sources exist or will be developed, it was declared by other panellists that there are country-specific raw materials located in risk countries. In the case of the latter, the supplier may only have a limited ability to influence the local environment, which poses challenges for SSCM. It can therefore be concluded that companies with critical country-specific raw materials or commodities in high-risk countries, where governance is weak or where exercising due diligence is otherwise difficult, will face the greatest challenges under the CSDDD. Removing supplier of such raw materials or commodities could lead to a situation where the company can no longer manufacture its final product and thus the business would suffer unless a substitute is available.

Felbermayr et al. (2021, 40) suggested as an alternative that companies could invest abroad and establish their own production sites there which would then be easier to monitor and control. However, while 30% of the panellists agreed that this could happen in many companies, 60% disagreed. Companies could also relocate their supply chains to Europe, where compliance with the law is easier and less expensive to monitor (Felbermayr et al. 2021, 40). However, almost none of the panellists believed that this scenario would happen either. Moreover, only 20% of the panellists estimated that many companies would insource their previously outsourced activities. Investment and relocation decisions and their implementation were seen as major projects that will not be undertaken solely as a result of the new law. While many companies are likely to explore the possibility of moving production to Europe, this is not feasible for all supply chains, and even if it were, it would take a long time. In the end, the expert panel was divided on whether many companies will only use foreign production or suppliers from regions with high human rights and environmental standards. While half of the panellists agreed, half of them disagreed arguing that this may be impossible in practice, as noted earlier.

Overall, it can be concluded that reselecting suppliers and reducing the number of suppliers are likely to be ways to change the procurement strategy and supply chain structure, rather than making larger investments and more time-consuming decisions to move production to Europe or set up own production facilities abroad. Furthermore, even if the aim is to make only moderate changes and thus minimise costs, the Delphi expert panel were unanimous that compliance with the directive will, at least to some extent, impose higher costs on companies' supply chain management. Reflecting on the literature, the increase in costs was also predicted by Felbermayr et al. (2021), Kolev and Neligan (2022) as well as the European Commission (2022a), among others. In general, SSCM has been found to result in higher costs for companies, which has also been one of the main barriers to its adoption (Seuring & Muller 2008; BHRRC 2020).

Furthermore, while 60% majority agreed that many companies will find it challenging to cope with these additional costs, 30% disagreed and 10% neither agreed nor disagreed. Either way, almost all experts estimated that to finance the additional costs resulting from the implementation of due diligence, many companies will raise the product prices for customers. To compare, one in five of the companies surveyed by Kolev and Neligan (2022) also responded that they would increase the price of their products as a result of due diligence. Moreover, the experts believed that customers and end-consumers will not be willing to bear the additional costs resulting from the implementation of CSDDD. This was again supported by Kolev and Neligan’s (2022) study, although the European Commission (2022b) argued that today’s customers do prefer sustainable products, and compliance with due diligence brings higher returns to the company. However, if the panellists' assessment is accurate and customers are not willing to pay premium, this could pose challenges to the competitiveness of companies covered by the directive. Competitive impacts of the directive are further addressed in the next sub-section. In the end, it was pointed out that while the CSDDD is expected to pose practical challenges for companies, its main weaknesses lie in its legal vagueness.

7.1.2 Competitive impacts of the CSDDD

In this section, the second research question (RQ2) of this study will be answered:

RQ2: *What will be the competitive impacts of the CSDDD on companies?*

First, the factors affecting the profitability and efficiency of companies, which are reflected in their competitiveness, are examined, followed by a further analysis of the competitive impacts in the short to medium (1–5 years) and long term (6–10 years).

In line with studies by Villiers (2019) and Schilling-Vacaflor and Lenschow (2021) as well as the European Commission's (2022c) objective, the Delphi expert panel believed that successful integration of the directive would improve companies' risk management in supply chains as well as supply chain sustainability. 90% of the panellists also estimated that supply chain resilience would improve, although many of them expect companies to reduce their supplier base. This finding is supported by scholars (Ergun et al. 2010) who argue that supply chain resilience can also be enhanced with a smaller supplier base through increased collaboration and information sharing. There was only one disagreeing panellist stating that reducing the number of alternatives rarely improves resilience, supported by the opposing group of researchers (Christopher & Peck 2004; Jüttner 2005; Pettit et al. 2010).

Furthermore, the results showed that since supply chain risk management, sustainability and resilience are expected to improve if CSDDD is successfully integrated, it can also bring economic benefits for companies through higher efficiency along the supply chain. Only one panellist argued that such economic benefits are likely to accrue only if a company owns the factories in its supply chain. Contrary to what the European Commission (2022b) as well as Carter and Rogers (2008, 370–371) argued, the majority of panellists did not believe, however, that successful integration of the directive would generate economic benefits through higher profits or reduced health and safety costs. Although European Commission (2022b) reasoned that economic benefits can be achieved through higher returns, as consumers increasingly prefer products that are produced in an ethical and environmentally sustainable way, 80% of the panellists estimated that customers are not willing to bear the additional costs resulting from the CSDDD. As one panellist questions, 'who would pay extra for mainstream compliance practice?'

In summary, the results show that the majority of Delphi panellists believe that the CSDDD directive will (1) increase supply chain management costs, causing (2) companies to raise the prices of their products, but (3) customers will not be willing to pay a higher price for the products. This sequence can be expected to weaken companies' competitiveness, as argued by Felbermayr et al. (2021, 44). On the other hand, if companies' supply chain risk management, sustainability, resilience and efficiency improve in line with the panellists' expectations and deliver economic benefits, their competitiveness could improve accordingly, at least in the long run. Also, prices do not necessarily need to be kept higher if cost savings can be found elsewhere. In the study by Business Finland (2022), it was considered more likely that sustainable business practices would improve competitiveness and secure business for the future.

Furthermore, it was stated by Felbermayr et al. (2021, 43) that companies forced to improve safety standards may not have other choice than to lower the wages they pay to remain competitive. However, almost all experts disagreed that many companies would lower wages along their supply chains to finance the additional costs resulting from the implementation of due diligence. Still, it was pointed out that although EU operators often do not own their factories and cannot directly influence wages, price pressures can indirectly affect the wages paid by the supplier.

In the end, most Delphi panel members were of the opinion that in the short to medium term the directive will weaken competitive position of companies in foreign markets, as non-EU companies do not have to comply with due diligence requirements (unless their net turnover also comes from EU within the thresholds set by the Directive). When looking at the long term, the panel was very divided on whether or not competitiveness in foreign markets will deteriorate. This was considered to depend on a number of factors, making it challenging to predict. In some sectors, customers and owners are in any case expected to require measures covered by the directive in the future, while in others non-EU companies may benefit from a lower level of due diligence. However, half of the panellists at least somewhat agreed that in the long term the directive will improve competitive advantage of companies in the global market. In line with the European Commission's (2022b) idea, 60% of the panellists also expect that the directive is likely to become a global model for sustainable supply chains. In this context, one panellist further explains that while CSDDD may weaken the global competitiveness of companies in the short term, she believes the directive will become a worldwide model on sustainable supply chains and will therefore not diminish such competitiveness in the long run.

Furthermore, it was not considered that SMEs or other European companies excluded from the scope of the directive would cause a competitive disadvantage to the companies covered by it, at least not in the long term. In the short to medium term, 30 percent minority believed that the directive could worsen competitive position of companies in European market, as European companies outside the scope of the law, such as SMEs, do not have to comply with due diligence requirements. However, one panellist argued that smaller companies must also comply with the themes and spirit of the due diligence to the extent that they are provided for in other laws and as required by public opinion. In any case, most experts further estimated that, at least at EU level, the CSDDD will reduce legal fragmentation and make the business environment more consistent. This is also expected by the European Commission (2022c), and it is actually the second main objective of the directive.

Ultimately, one thing was clear for the Delphi panel: in the short to medium term the directive will improve the competitive position of companies who have already set voluntary sustainability standards in their supply chains. Most believed that this will also to be the case in the long term, although it was mentioned that the competitive advantage may be weakened as due diligence practices become mainstream. Two panellists disagreed however, estimating that in the long run, later entrants will benefit even more from the SCM improvements made by front runners.

Overall, it can be concluded that in the short to medium term, the global competitiveness of the companies affected by the CSDDD is expected to weaken. In the long term, however, competitiveness on the global market may improve. In the European market, the business environment is expected to become more uniform, and European companies not covered by the directive, such as SMEs, are not considered to weaken the competitive position of the companies affected by the law, especially in the long term. Eventually, however, the companies that are expected to benefit most from the new directive are those that have already started sustainability efforts and voluntarily set sustainability requirements for their supply chains. In the short term in particular, these companies are estimated to become more competitive. In the long run, the lead of the frontrunners is likely to remain, but it is expected to level off. Ultimately, these competitive effects are always seen to depend on a number of factors, such as the business, the industry, trade policy developments and global trends.

7.2 Theoretical and practical contribution

The European Commission's proposal for a Corporate Sustainability Due Diligence Directive, published earlier this year, will set new requirements for many companies operating in the EU. There is a fair amount of research on the sustainability impacts of due diligence, and many scholars have concluded that a mandatory due diligence legislation, if successfully enforced, is an effective way to improve the sustainability of supply chains (COWI, Ecofys, Milieu 2018; Smit et al. 2020). However, very little research has been done on the impacts of the CSDDD on supply chains and their management, and on the competitiveness of the businesses affected by the directive.

It has been recognised that the expected implications of the proposed due diligence regulation need to be carefully assessed and that the complex interactions require further empirical and theoretical research (Schilling-Vacaflor & Lenschow 2021; Kolev & Neligan 2022). This research has contributed to filling this theoretical research gap and provides insight into the impacts of the CSDDD from a supply chain and competition perspective. Moreover, multidimensional practices are still the least studied in the literature on SSCM (Seuring & Müller 2008; Pagell & Wu 2009; Yawar & Seuring 2017). This gap is also filled in this study by focusing on SSCM where all dimensions of TBL are taken into account.

This research also links previous literature on sustainable supply chain management to the implications and challenges of the forthcoming directive. Thus, the results confirm certain problematic issues related to SSCM particularly in the context of the CSDDD. The theoretical framework was established on the basis of previous SSCM and due diligence literature, and empirical results confirmed some of the effects included in the framework as expected and others as less expected. Finally, this rather extensive study also facilitates further research on the subject and future research suggestions are presented in the next section.

Furthermore, as pointed out in sub-section 5.1.2, this action-oriented research focuses on research questions that have implications for action. On a practical level, this research will help companies to understand the challenges and opportunities that the future directive is likely to bring and how the business environment may change. With a better understanding, it will also be easier for companies to prepare for future changes.

7.3 Limitations and future research suggestions

This research is a mixed-methods Delphi research and the limitations associated with it must be taken into account. Kuusi (1999) states that a valid assessment in a Delphi study requires a broad view of the whole environmental development of the subject under study. A limited expert view of the subject is not sufficient, but the problem can be reduced, for example, by the right selection of an expert panel (Kuusi 1999). In this research, the panel was selected from experts who were expected to have a comprehensive understanding of the subject. Furthermore, the panellists were selected from different companies and organisations to ensure that a wide range of perspectives are represented in the study. However, the study is limited to Finnish experts and of the experts selected, 10 participated in both rounds of the Delphi questionnaire. The study therefore did not include perspectives from representatives of different EU countries, nor, from representatives of developing countries. The limited sample size of the research is also a factor to bear in mind when examining the results.

This study examines the impacts of CSDDD in general, without focusing in detail on individual sectors or companies and their differences in terms of the future impacts. Therefore, further research should be carried out with a more specific scope, for example focusing on a particular sector or company size. This would provide companies with even more reliable estimates of how their particular business will be affected by the directive. Furthermore, this research is descriptive and action-oriented in nature, seeking to describe and interpret the impacts and challenges rather than directly instruct companies to take specific action. Thus, further research derived from this study could also focus on the normative side and provide real guidance to companies on how to adapt their business when the CSDDD enters into force. Finally, based on the empirical observations presented in this study, future studies are needed to clarify how external monitoring of CSDDD compliance should be implemented in practice and how suppliers affected by the directive can meet the due diligence requirements of multiple customers without the excessive burden of having to repeat the same process multiple times.

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APPENDICES

Appendix 1: First and second rounds of the Delphi questionnaire

Both Delphi rounds had the same statements. In the first round, only multiple-choice answers were allowed. In the second round, in addition to the multiple-choice answers, there was an open text box for each statement where the respondent could add a justification for her/his answer. The annexes shown below are from the first round of the survey:

TURUN YLIOPISTO

English

Survey on the impacts of mandatory corporate sustainability due diligence on supply chains

On February 2022, the European Commission gave a legislative proposal for EU-wide regulation on supply chain due diligence: **the Corporate Sustainability Due Diligence Directive (hereinafter referred to as "the Directive")**. The Directive aims to promote sustainable business activities in global supply chains and unify business environment and requirements for companies operating in the Union. Due diligence in the Directive is defined as:

*Process put in place by an undertaking in order to identify, cease, prevent, mitigate, monitor, disclose, account for, address and remedy the risks posed to **human rights**, including social and labor rights, to **the environment**, including climate change, and to **governance**, both by its own operations and its business relationships.*

The scope of the Directive covers the following companies and sectors:

- **EU companies:**
    - **Group 1** – all EU limited liability companies with significant size and economic power meaning more than 500 employees and a net worldwide turnover of more than EUR 150 million.
    - **Group 2** – other limited liability companies operating in pre-defined sectors with a significant environmental impact, and which do not meet the thresholds of Group 1, but which have more than 250 employees and a net worldwide turnover of at least EUR 40 million.
- **Non-EU companies operating in EU with a turnover in the EU that meets the thresholds of groups 1 and 2.**

After the adoption of the Directive, a two-year transition period will start for group 1 companies and a four-year transition period for group 2 companies. During these periods, Member States will have to adopt their own company laws.

The aim of this study is to investigate how the coming EU-wide mandatory due diligence is going to impact on supply chains when entering into force and what kind of challenges it poses on supply chain management.

The questionnaire contains a total of 46 statements, divided into 8 different themes. The statements presented consider impacts in the short to medium term (1–5 years) from the date the Directive enters into force unless otherwise stated. Each statement has six response options according to the following scale:

1 = Strongly disagree
2 = Somewhat disagree
3 = Neither agree nor disagree
4 = Somewhat agree
5 = Strongly agree
6 = No response

Please answer all the statements to the best of your knowledge.

TURUN YLIOPISTO

English

State your title here please:

State your field of work here please:

Academy

Advocacy

Authorities

Commerce

Consultancy

Industry

Other, what:

State your work experience among supply chains and/or sustainability **in years** here please:

TURUN YLIOPISTO

English

Impacts of the Directive on supply chains in general

Evaluate the following statements related to the general expected impacts of the Directive on supply chains.

The Directive will...

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree	No response
1) have a large impact on supply chains.	○	○	○	○	○	○
2) radically change the way companies do business at different stages of their supply chain.	○	○	○	○	○	○
3) have small impact on most companies as they already meet the due diligence requirements.	○	○	○	○	○	○
4) impose higher costs for companies' supply chain management.	○	○	○	○	○	○
5) decrease legal fragmentation and make business environment more consistent.	○	○	○	○	○	○
6) likely become a global model for sustainable supply chains.	○	○	○	○	○	○

English

Competitiveness

Evaluate the following statements related to competitiveness in **the short to medium term (1–5 years)** from the date the Directive enters into force and from the perspective of **companies within the scope of the Directive.**

The Directive will…

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree	No response
7) improve the competitive position of companies who have already set voluntary sustainability standards in their supply chains.						
8) improve competitive advantage of companies in the global market.						
9) worsen competitive position of companies in **European market**, as **European** companies outside the scope of the law (such as SMEs) do not have to comply with due diligence requirements.						
10) worsen competitive position of companies in **foreign markets**, as **non-EU** companies do not have to comply with due diligence requirements *(unless their net turnover also comes from EU within the thresholds set by the Directive).*						

The Directive will…

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree	No response
11) improve the competitive position of companies who have already set voluntary sustainability standards in their supply chains.						
12) improve competitive advantage of companies in the global market.						
13) worsen competitive position of companies in **European market**, as **European** companies outside the scope of the law (such as SMEs) do not have to comply with due diligence requirements.						
14) worsen competitive position of companies in **foreign markets**, as **non-EU** companies do not have to comply with due diligence requirements *(unless their net turnover also comes from EU within the thresholds set by the Directive).*						

TURUN YLIOPISTO

English

Suppliers

Evaluate the following statements related to suppliers in the supply chain.

As a result of the Directive…

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree	No response
15) the supplier governance costs will increase as every supplier has to be regularly audited regarding human rights and environmental risks.	○	○	○	○	○	○
16) the complexity of supplier governance will increase as every supplier has to be regularly audited regarding human rights and environmental risks.	○	○	○	○	○	○
17) many suppliers are no longer able to supply companies affected by the law.	○	○	○	○	○	○

As a result of the Directive, many companies will…

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree	No response
18) change their procurement strategy.	○	○	○	○	○	○
19) decrease the number of their suppliers.	○	○	○	○	○	○

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree	No response
20) Companies won't be able to replace key suppliers from countries where the implementation of due diligence is difficult.	○	○	○	○	○	○

TURUN YLIOPISTO

English

Production

Evaluate the following statements related to production from the perspective of European companies within the scope of the Directive.

As a result of the Directive, many companies will…

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree	No response
21) relocate their production to Europe.	○	○	○	○	○	○
22) withdraw their operations from countries with weak governance.	○	○	○	○	○	○
23) insource their previously outsourced activities.	○	○	○	○	○	○
24) only use foreign production and/or suppliers from countries or regions with safe and good working conditions, i.e. high human rights standards.	○	○	○	○	○	○
25) only use foreign production and/or suppliers from countries or regions with high environmental standards.	○	○	○	○	○	○
26) invest abroad in order to establish their own production sites there which would then be easier to monitor and control.	○	○	○	○	○	○

TURUN YLIOPISTO

English

Customers and employees

Evaluate the following statements related to customers or employees in the supply chain.

To finance the additional costs resulting from the implementation of due diligence, many companies will…

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree	No response
27) raise product prices for customers.	○	○	○	○	○	○
28) lower wages along their supply chains.	○	○	○	○	○	○

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree	No response
29) Customers and end-consumers are willing to bear the additional costs resulting from the implementation of due diligence.	○	○	○	○	○	○

TURUN YLIOPISTO

English

Supply chain profitability and efficiency

Evaluate the following statements related to supply chain profitability and efficiency.

Successful integration of the Directive will…

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree	No response
30) generate economic benefits for companies through higher profits.	○	○	○	○	○	○
31) generate economic benefits for companies through reduced health and safety costs.	○	○	○	○	○	○
32) generate economic benefits for companies through higher efficiency along the supply chain.	○	○	○	○	○	○
33) improve companies' supply chain sustainability.	○	○	○	○	○	○
34) improve companies' supply chain resilience.	○	○	○	○	○	○
35) improve companies' risk management in supply chain.	○	○	○	○	○	○

TURUN YLIOPISTO

English

Resources and collaboration

Evaluate the following statements related to resources and collaboration in the supply chain.

For many companies, ***it will be challenging to****…*

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree	No response
36) bear the additional implementation and compliance costs of due diligence.	○	○	○	○	○	○
37) implement and/or comply with due diligence due to a lack of **resources**.	○	○	○	○	○	○
38) implement and/or comply with due diligence due to a lack of **know-how**.	○	○	○	○	○	○
39) implement and/or comply with due diligence due to a lack of **collaboration** along supply chain.	○	○	○	○	○	○
40) implement and/or comply with due diligence due to a lack of **stakeholder involvement** along supply chain.	○	○	○	○	○	○

TURUN YLIOPISTO

English

Controlling and monitoring

Evaluate the following statements related to controlling and monitoring of the supply chain.

For many companies, ***it will be challenging to****…*

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree	No response
41) control and/or monitor that **first-tier suppliers** will comply with due diligence requirements.	○	○	○	○	○	○
42) control and/or monitor that **sub-suppliers** will comply with due diligence requirements.	○	○	○	○	○	○
43) control and/or monitor that **secondary members** (e.g. logistics service providers, finance) will comply with due diligence requirements.	○	○	○	○	○	○
44) obtain reliable information on the activities of their suppliers or third parties.	○	○	○	○	○	○
45) report properly on human rights or environmental issues.	○	○	○	○	○	○
46) manage the risks to rights-holders (people and environment) instead of 'direct' risks to the business.	○	○	○	○	○	○

TURUN YLIOPISTO

English

If there is anything else you wish to say regarding this topic, please do so: