

# Corporate Sustainability: CSDDD Implementation Challenges and Strategies in the Nordic Manufacturing Sector

Author: Miro Sarkkinen  
University of Twente  
P.O. Box 217, 7500AE Enschede  
The Netherlands

## **ABSTRACT,**

Globalisation has led to numerous environmental and ethical concerns, particularly within complex supply chains. Due to the gap in global governance, there has not been a single effective way to address these issues. The European Parliament adopted the Corporate Social Due Diligence Directive (CSDDD) as a structured solution to address this gap. However, several challenges and uncertainties surround its implementation. This thesis explores the challenges and strategies of implementing the CSDDD within the Nordic manufacturing sector. The focus on manufacturing companies in Finland, Sweden, and Denmark is motivated by their recognition as sustainability and corporate responsibility leaders in Europe. The directive mandates comprehensive due diligence regarding environmental and human rights impacts across companies' operations, with significant implications for corporate governance and supply chain management. Engaging in qualitative research involving semi-structured interviews with experts from 12 major manufacturing firms, a holistic view of implementation challenges and measures was developed. The findings identified several challenges, including a lack of internal preparedness, a narrow perception of sustainability as mainly environmental while neglecting social aspects, low rights-holder engagement, and difficulties in enforcing compliance among three types of suppliers: competitors, traders, and large suppliers. The measures proposed included integrating due diligence into procurement practices and high-leverage settings such as tendering, developing supplier sustainability, adopting solutions like workers' voice technology, and participating in collective measures facilitated by industry associations. Particular emphasis was placed on the need for open dialogue on social matters. The findings aim to contribute to laying the groundwork for understanding CSDDD implementation, offering insights that could facilitate the transition towards more sustainable and ethical business practices in the Nordic manufacturing sector.

## **Graduation Committee members:**

**Dr Klaas Stek, University of Twente**

**Dr Imad Antoine Ibrahim, University of Twente**

## **Keywords**

EU CSDDD, Due diligence, Nordic manufacturing sector, Sustainability, Corporate social responsibility, Corporate governance

## 1. INTRODUCTION

Globalisation is defined as increasing interconnectedness between cross-boundary actors, driven by people, ideas, goods, and capital flows (Cassimon et al., 2018, p. 1). It has altered the landscape in which companies operate by reducing the relevance of national boundaries and stimulating the emergence of complex and long supply chain networks (Cassimon et al., 2018, p. 1).

During World War II, international trade ceased, leading to isolated economies and disrupted trade flows. Many countries adopted tariffs and other trade barriers, such as import quotas, to protect domestic industries from external competition (Findlay & O'Rourke, 2009, p. 488; Frieden, 2006, p. 221). After the war, the foundations of modern globalisation began to take shape, driven by Western nations' common geopolitical and economic strategies aiming to liberalise international trade (Frieden, 2006, pp. 265-270). The devastation of the war necessitated economic stability and growth, leading to initiatives like the European Free Trade Area, which promoted greater economic integration and a more open global trading environment (Findlay & O'Rourke, 2009, p. 492). The concept of comparative cost, outlined in Ricardo's international trade economics theory (Maneschi, 1992, pp. 427-428), contributed to this integration. It laid the groundwork for expanding international trade networks by suggesting that countries can achieve enhanced efficiency and welfare by specialising in sectors with comparative advantages and engaging in global trade. By sourcing globally, companies can concentrate on their core competencies and strive for enhanced profitability and efficiency, aiming to achieve competitive advantage (Corinna Cagliano et al., 2012, p. 102; Kang et al., 2009, p. 241).

In addition to comparative cost, reducing expenses is another factor driving global sourcing. This imperative serves both as a rationale and a driver. Strategic sourcing decisions, such as the low-cost country sourcing (LCCS) strategy, address this need by considering the world as a source of materials, services, and final products (Monczka et al., 2021, p. 234). Research on German manufacturers supports this by identifying cost reductions as the dominant reason for global sourcing (Kinkel & Maloca, 2009, p. 159). Essentially, this reflects the make-or-buy decision process, where businesses must determine whether to manufacture goods and services internally or procure them from external suppliers, especially in countries with lower production costs. Such decision-making highlights the economic logic underpinning globalisation, as companies seek to optimise their operations and enhance competitiveness by leveraging global cost differentials.

Alongside global sourcing, the increased reliance on suppliers and the challenges of managing multi-tiered supply networks across various jurisdictions have sparked debates around corporate responsibility for labour abuses within these chains (Mares, 2010, p. 194; Outhwaite & Martin-Ortega, 2016, p. 43). The debates centre on the extent to which companies should be accountable for labour conditions in their supply chains and the effectiveness of current regulations and practices in preventing abuses. Companies cite challenges in undertaking enhanced governance practices due to complexity and opacity, while advocates argue for stricter public regulations to address persistent issues (Ringe & Gözlüglöl, 2022, pp. 127-134; Wormington, 2024).

One of the problems arising from the lack of transparency is increased information asymmetry. Research done on LCCS in Bangladesh's clothing apparel supplier describes how the factory owner deemed to hold information from the buyer, preventing the buyer from monitoring and enforcing fair wage practices. This lack of transparency has multiple implications from a

sustainability point of view and increased supply risk as the buyer is not up to date with the conditions. Whereas, from a corporate social responsibility standpoint, this enables unethical behaviour from the supplier side due to ineffective due diligence (Hasan et al., 2020, pp. 33-34; Holweg et al., 2011, p. 340).

Given the intricate and ethical issues associated with global supply chains, the research will focus on the European manufacturing sector. This sector is notably vulnerable to human rights and sustainability issues due to its complex supply chains and resource-intensive operations (Business for Social Responsibility BSR, 2022). This provides an ideal environment to identify the overarching challenges within the supply chain.

The evolution of economic globalisation has also influenced global governance dynamics, creating a lack of substantial oversight of multinational enterprises outside traditional national-based governance frameworks (Ruggie, 2007, p. 820). This oversight leaves private international law largely, if not entirely, absent from the global governance scene (Watt, 2011, p. 350), allowing multinational enterprises to take advantage of the resulting cross-country differences in regulations by moving production capacity to the country most willing to use lax standards (Christmann & Taylor, 2001, p. 5). Furthermore, recent studies, such as those by Nemoto (2022), highlight the diverse policies emerging in Western countries, particularly within the EU, by developing a framework that categorises policies into different approaches. The categorisation shows how varied the responses must be to address the issues effectively, contributing to the need for a systematic approach to address the gap in global governance.

Building on the momentum generated by the ongoing discussions around economic globalisation, corporate social responsibility, and the resultant shifts in global governance dynamics, the Council of the European Union took a significant step forward by approving the European Corporate Sustainability Due Diligence Directive (CSDDD) in May 2024. This directive mandates both EU and non-EU companies to undertake comprehensive due diligence regarding environmental and human rights impacts across their supply chains. The directive aims to mitigate potential and actual effects, addressing the visibility issues within supply chains to diminish information asymmetry. It establishes liability and possible financial penalties for non-compliance, and by fostering a harmonised legal framework, the CSDDD seeks to protect citizens, support developing countries, and encourage sustainable, transparent, and ethical business practices within the EU (*Corporate Sustainability Due Diligence*, 2022). Additionally, implementing the CSDDD demands significant adjustments in governance strategies for limited liability companies operating within the EU by 2029 (Flores, 2023).

In light of the EU's pivotal move with the CSDDD, a parallel development in the EU business community underscores the urgency and widespread support for this directive. Recent data reveals a consensus among companies on the need for a unified EU legal framework to address human rights and environmental impacts within business operations (*Questions and Answers: Just and sustainable economy [Press release]*, 2022; Torres-Cortés et al., 2020, pp. 531-539). This collective call for action is further backed by the recognition of the necessity for market efficiency to maintain an equitable competitive landscape, as 71.64% of companies taking part in the 2020 study on due diligence recognised the unfair competitive advantage gained from non-sustainable businesses (Torres-Cortés et al., 2020, p. 146). Such a drive towards regulatory uniformity is in step with the urgent need to promote sustainable and ethical business operations, as

further highlighted by the widespread labour rights infringements across various continents (see Appendix A).

In response to these developments, this research focuses on the manufacturing industry within the Nordic countries of Finland, Sweden, and Denmark, recognised as sustainability and corporate responsibility leaders in Europe (see Appendix B for overall sustainable ranking). Their exemplary status suggests that the Nordic countries are implementing more effective sustainability measures than other EU nations. This makes them an ideal environment for identifying current measures and developing new ones, providing a solid foundation for implementing the new Due Diligence Act and serving as a model for other European nations. The study will focus on Nordic companies employing over 1000+ employees and reporting a net worldwide turnover of EUR 450 million.

Implementing the CSDDD introduces multiple challenges, highlighting the complexities of transitioning towards sustainable practices. A primary issue lies in the nature of global supply chains, including the difficulty in obtaining reliable information from suppliers and ensuring adherence to sustainable standards throughout all supply levels. These monitoring and control challenges, especially with numerous tiers of suppliers, complicate efforts to trace material origins and verify compliance among all indirect suppliers due to low visibility, as the CSDDD demands. Additionally, the directive mandates that companies comply with sustainability standards, such as ISO14001 or the Paris Agreement, and ensure their suppliers and sub-suppliers do the same. This requirement poses a significant challenge, particularly for businesses with expansive small- to medium-sized supplier networks. Lastly, it is crucial to note that the application of the CSDDD is an active, ongoing process rather than a one-time effort, which may, through the introduction of new governance structures, increase the costs related to supply chain due diligence, potentially impacting companies' profitability (*Corporate Sustainability Due Diligence*, 2022; PricewaterhouseCoopers, 2023).

Companies must take adequate measures to address these monitoring and control challenges hindering implementation efforts. CSDDD aims to introduce an enforceable legal standard of care based on due diligence, which could be expected of the company in the given circumstances. However, despite increased reporting requirements, information in corporate reports often differs significantly from the companies' actual practices. Consequently, evidence of companies' realistic due diligence measures remains extremely rare (Smit, Holly, et al., 2020, p. 946). This results in a lack of clarity on current and required actions for CSDDD compliance.

### 1.1. Research question

While a growing body of literature on corporate sustainability and supply chain management exists, research addressing adaptation to the CSDDD within the Nordic manufacturing sector is sparse. The existing studies predominantly focus on the directive's conceptual framework, leaving industry-specific insights gaps. The following research questions were formulated to address the gap:

1. *What global supply chain monitoring and control challenges impact the compliance of manufacturing companies with the CSDDD in Nordic countries, and how do these challenges impact compliance?*
2. *What targeted strategies or measures can manufacturing companies in Nordic countries implement to enhance compliance with the CSDDD, and how would these contribute?*

The answers are attained through interviews with manufacturing companies in Finland, Sweden, and Denmark.

## 1.2. Academic and practical relevance

Given the recent acceptance of the CSDD directive, this study seeks to contribute to laying the groundwork for understanding its implications rather than proposing detailed, practical solutions. It is hoped that this exploratory analysis will serve as a valuable resource for future research aimed at developing practical measures for more effective implementation of the directive tailored to the specific needs of each Nordic company within the manufacturing sector. Beyond the primary objectives, this research recognises the potential for indirect contributions to various stakeholders, including suppliers, communities, and the environment. By promoting a smoother transition to enhanced due diligence practices, the study aims to strengthen supply chain resilience and enhance stakeholder trust (*Questions and Answers: Just and sustainable economy [Press release]*, 2022).

## 2. THEORETICAL BACKGROUND

### 2.1. Concept of due diligence

The concept of "due diligence" has its historical roots in the legal domain, meaning a method aimed at diminishing commercial and financial risks. This method entails a comprehensive inquiry, typically undertaken by one company towards another, to identify potential misconduct or non-compliance with expected standards of conduct (Camoletto et al., 2022, p. 1124). The legal foundations of due diligence trace back to Roman law, which made individuals liable for not adhering to established behavioural standards (Bray, 1968, p. 157). The scope of due diligence literature has broadened extensively, encompassing environmental and social risks, including human rights and modern slavery issues. This is due to increasing global awareness, pressure and the need to address modern complex issues beyond traditional financial risks, reflecting evolving societal concerns (Camoletto et al., 2022, p. 1124).

Internationally, due diligence is recognised for its long-established importance in law, highlighting the expectation that States adhere to certain behavioural standards or achieve specific outcomes, albeit without specifying the exact results or the timelines for their achievement (Stephens & French, 2016, p. 46). A notable differentiation exists between due diligence as a legal standard or duty of care and due diligence as a procedural requirement. The former conveys the general obligation to "do no harm," while the latter introduces a procedural obligation for proactive and demonstrable steps. For instance, Germany's mandatory due diligence act interprets due diligence as a legal standard or duty of care, in contrast to the French Duty of Vigilance Law, which mandates the publication of a vigilance plan (Smit, Bright, et al., 2020, p. 262). However, it is unclear whether this distinction has implications for liability, as in both instances, a breach would occur if the due diligence requirement was not fulfilled and damage resulted (or could result) from such a breach (Smit, Bright, et al., 2020, p. 262).

This research interprets due diligence as combining these two facets: the actual or potential harm and the company's proactive measures concerning those harms (Smit, Bright, et al., 2020, p. 266). A key feature of due diligence in this study is the emphasis on risks extending beyond the company's internal concerns to external risks impacting individuals, the environment, and the planet (Smit, Bright, et al., 2020, p. 266). Companies must address relevant harms irrespective of the legality of their actions in the countries where they occur (Smit, Bright, et al., 2020, p. 267). Furthermore, this research adopts the concept of risk-based due diligence (RBDD), which aligns with the CSDDD (Council

of the European Union, 2024, pp. 68-69). This concept builds on the idea of human rights due diligence (HRDD) developed concerning the adverse impacts of business activity on human rights by extending to other areas, such as the environment and climate (Bright & Buhmann, 2021, pp. 4-5). The HRDD concept originated from the UN Guiding Principles on Business and Human Rights (UNGPs). It was further developed into risk-based in the Organisation for Economic Co-operation and Development (OECD)'s Guidelines for Multinational Enterprises (Bright & Buhmann, 2021, pp. 4-5).

## 2.2. Principal-agency theory

The study applies the principal-agent theory to comprehend why challenges arise in business relationships, providing context for specific CSDDD implementation challenges.

The principal-agent theory, also known as agency theory, originates from a risk-sharing problem, defined by Eisenhardt (1989, p. 58) as a situation where cooperating parties have different attitudes toward risk. Agency theory extends this concept to include issues that arise when involved parties have different goals and divisions of labour (Eisenhardt, 1989, p. 58; Jensen & Meckling, 1976, pp. 308-309; Ross, 1973, p. 134). According to Jensen and Meckling (1976, pp. 308-309), an agency relationship is a contract in which one or more entities (the principals) engage another entity (the agent) to perform a service on their behalf, involving some level of delegated decision-making authority to the agent. Agency problems arise from the assumption that both parties aim to maximise their utility, leading to the belief that the agent will not always act in the principal's best interests. Moreover, the core difficulty stems from the assumption that the agent has better information about relevant facts than the principal. Consequently, the principal cannot easily ensure that the agent's performance meets expectations, incentivising the agent to act opportunistically by exploiting information asymmetry. This results in compromised performance quality or diverted promises, known as moral hazard (Eisenhardt, 1989, p. 61; Kraakman et al., 2017, p. 29; Lassar & Kerr, 1996, p. 614). In the context of CSDDD implementation, potential scenarios include buyer-supplier relationships where the supplier (agent) withholds information from the buyer, preventing the enforcement of living wages (Hasan et al., 2020, pp. 33-34; Holweg et al., 2011, p. 340), thus failing to comply with CSDDD.

Another agency problem, described by Eisenhardt (1989, p. 61), is "adverse selection," where the agent misrepresents abilities. In the context of CSDDD and buyer-supplier relationships, this may involve suppliers presenting false information on their current sustainability due diligence measures. These agency problems are directly related to possible sustainability issues on the agent's side and contribute to the hindrance of due diligence. Information asymmetry is particularly problematic, as due diligence is an information-heavy process.

### 2.2.1. Agency costs

The aforementioned assumptions lead to agency costs resulting from the principal's efforts to limit divergences from their interests by establishing appropriate incentives for the agent and incurring monitoring costs to limit aberrant activities (Jensen & Meckling, 1976, p. 308). Naturally, agency costs associated with suppliers increase further down the supply chain as monitoring and control challenges intensify. Conversely, agents incur agency costs, known as bonding costs, to assure principals of their reliability (Jensen & Meckling, 1976, p. 308); these might include increased due diligence costs on the supplier's operations. More precisely, bonding costs encompass time and resources spent by the agent to convince principals of their integrity. Ultimately, residual loss occurs when, despite efforts

by the principal and agent, an agent deviates from the correct course of action, causing damage to the principal (Jensen & Meckling, 1976, p. 308). However, Kraakman et al. (2017, p. 30) highlight how constraints on agents' opportunistic behaviour before and after the relationship present a paradox, as these mechanisms tend to benefit agents as much or even more than principals. A principal will be willing to offer greater compensation to an agent when assured of honest and high-quality performance.

### 2.2.2. Limitations of the theory and agency relationships in CSDDD implementation

An over-emphasis on economic drivers is a significant weakness in agency theory (Heracleous & Lan, 2012), potentially overlooking social relationship factors, which are crucial when dealing with social sustainability matters. The theory's view of a flawless principal and imperfect agent relationship is also questionable. According to Perrow (1986, p. 14), agency problems (i.e., adverse selection, moral hazard) are not confined solely to the agent's side but also exist on the principal's side. This is vital in the context of supply chain-wide measures, as the interdependency of the supply chain means that principals and agents often swap roles (Fayezi et al., 2012, p. 565). Despite the criticism, the agency theory still provides valuable insights for understanding complex organisational dynamics, including those relating to CSDDD implementation.

Traditionally, agency theory focuses on contractual relationships, such as those between shareholders and managers, suppliers and buyers, as all contractual arrangements contain elements of agency (Ross, 1973, p. 134). However, this study also recognises agency relationships in specific non-contractual commitments with so-called "externalities" (Kraakman et al., 2017, p. 30). These include stewardship relationships between businesses and industry associations and rights holder relationships with rights holders and businesses. Additionally, the study acknowledges potential agency relationships between businesses implementing CSDDD and the government enforcing it.

## 2.3. Overview of the CSDDD

After two unsuccessful attempts to secure approval following the announcement of a "political agreement" on 14 December 2023, the Corporate Sustainability Due Diligence Directive (CSDDD) was officially approved by the Council of the European Union on 15 March 2024 (Council of the European Union, 2024; Jones Day, 2024). The CSDDD integrates principles from established due diligence guidelines, including the OECD Guidelines for Multinational Enterprises, the UN Guiding Principles on Business and Human Rights (UNGP), and the ILO Tripartite Declaration of Principles concerning Multinational Enterprises and Social Policy. It also considers national legislation, such as the German Supply Chain Due Diligence Act and the French Duty of Vigilance Law, aiming to mitigate fragmentation within the EU caused by varying levels of mandatory due diligence regulations (Parliament, 2021).

Upon its implementation, the CSDDD will be transposed into the national laws of EU member states, meaning these national laws will be adapted (Parliament, 2021). The directive's provisions will be implemented in phases based on criteria such as a company's size and turnover. After the directive comes into force, it will take five years for all companies within the scope to take effect (Council of the European Union, 2024, p. 114). Additionally, the Corporate Sustainability Reporting Directive (CSRD) framework is intended to be applied to the CSDDD. This means that companies are not required to produce separate reports for each directive, streamlining the reporting process and

ensuring coherence in the disclosure of due diligence efforts (Council of the European Union, 2024, p. 88; Smith-Roberts, 2022).

Entities falling under the directive's scope include limited liability companies (LLCs) based in the EU with more than 1000 employees on average and a net worldwide turnover exceeding EUR 450 million in the last financial year. Third-country companies generating at least EUR 450 million in net turnovers in the Union in the preceding financial year must also adhere to the due diligence requirements (Council of the European Union, 2024, pp. 55-56). A key distinction of the CSDDD from previous guidelines is its more focused scope of due diligence, which encompasses the company's chain of activities and selected aspects of the downstream value chain rather than the entire value chain as prescribed by the UNGPs and OECD Guidelines (Holly et al., 2023, p. 20). The "chain of activities" includes processes related to the production or provision of a company's goods and services, such as design, extraction, sourcing, manufacture, transport, storage, and supply of raw materials and products, and extends to activities of downstream business partners involved in the distribution, transport, and storage of the product on behalf of the company (Council of the European Union, 2024, p. 13).

The CSDDD establishes a framework for oversight and specifies consequences for non-compliance, aiming to ensure that companies adhere to the defined due diligence processes. In cases where a company causes direct damage, it may face sanctions under civil liability. The penalties for such infringements can be significant, with sanctions reaching up to at least 5% of the company's revenue (Council of the European Union, 2024, p. 103). Determining causality, which is essential for imposing these sanctions, is the responsibility of the member state in question (Council of the European Union, 2024, p. 106; Noerr, 2024). However, regarding environmental duties under the CSDDD, the directive adopts a more lenient approach. Companies are required to make their best efforts to achieve the objectives set out in their sustainable economy plan, as outlined in the CSRD. This means that while companies are encouraged to pursue environmental goals actively, there is no mechanism for enforcement against those who fail to meet their targets (Council of the European Union, 2024, p. 43; The Danish Institute for Human Rights, 2024).

#### **2.4. Due diligence process under CSDDD**

The CSDDD adopts a risk-based focus that evaluates various risk factors, including the company level (for instance, whether the business partner is not a company covered by this Directive), business operations, geographic and contextual factors (like the level of law enforcement in relation to the type of adverse impacts), as well as product, service, and sectoral risk factors (Council of the European Union, 2024, p. 23). Companies are required to utilise these risk factors to identify adverse impacts. This involves taking appropriate steps to map their operations, those of their subsidiaries, and those of their business partners in relation to their chain of activities (Council of the European Union, 2024, p. 23). The aim is to pinpoint general areas where adverse impacts are most likely and most severe. Following this mapping, an in-depth assessment should be conducted in areas with the highest likelihood and severity of adverse impacts (Council of the European Union, 2024, p. 23). In essence, this means companies must perform risk assessments and implement suitable measures for suppliers categorised as high-risk. Consequently, companies in high-risk sectors must encompass a broader range of companies within their due diligence processes (OECD, 2023, p. 18).

Under CSDDD, a "business partner" refers to entities with whom the company has a commercial agreement related to the company's operations, products, or services or to whom the company provides services ("direct business partner"), as well as those not directly connected but performing business operations related to the company's operations, products, or services ("indirect business partner") (Council of the European Union, 2024, pp. 63-64). The extent of action required from a company engaging in RBDD depends on the level of adverse impact involvement. The CSDDD recognises three levels of involvement: (1) the company directly causing the adverse impact, necessitating avoidance or mitigation actions; (2) joint causation with another business, requiring mitigation of the company's contribution; and (3) causation by another business relationship unrelated to the scoping company, thus not demanding direct actions (Council of the European Union, 2024, pp. 25-26).

The CSDDD's due diligence process is modelled after the OECD due diligence guidelines for responsible business conduct (OECD, 2018, p. 23). This model builds upon the four stages of HRDD outlined in the second Pillar of the UNGPs (Nations, 2011, p. 14), extending them to six stages: (1) integrating due diligence into policies and management systems, (2) identifying and assessing adverse human rights and environmental impacts, (3) preventing, ceasing, or minimising actual and potential adverse human rights and environmental impacts, (4) monitoring and assessing the effectiveness of measures, (5) communicating, and (6) providing remediation (Council of the European Union, 2024, p. 11). See Appendix C for a visualisation of the six stages.

#### **2.5. Potential challenges in implementing the CSDDD**

The successful implementation of the CSDDD presents a multifaceted challenge for companies, requiring a deep dive into the lower tiers of their supply chains. Companies must assess their adherence to environmental and human rights standards across all operational territories. This task is particularly challenging due to the low transparency and complexities of managing extensive supply networks that span diverse social, political, legal, cultural, and geographical contexts (Pedersen & Andersen, 2006, pp. 228, 229–230). Conversely, Ireland (2017, p. 128) notes that while states are territorially and jurisdictionally limited, multinational companies are well-placed to control and influence their supply chains. However, effective control is often undermined by informational deficits. Significant obstacles include the reliability of supplier data, the availability of third-party or country-specific human rights risk information, and the potential withholding of crucial data (McCorquodale et al., 2017, p. 222). These challenges are aggravated by the lack of robust IT systems, rendering the due diligence and reporting processes both labour-intensive and complex (Social and Economic Council of the Netherlands (SER) & Dutch Accounting Standards Board (DASB), 2023, p. 24).

Lower-tier suppliers' reluctance or inability to share information, fearing competitive disadvantages, further complicates due diligence efforts (Hofmann et al., 2018, p. 120). This issue is particularly critical when intermediaries or consolidators, such as co-operatives, act as the nexus between small-scale producers and large companies (Smit, Holly, et al., 2020, p. 950). Furthermore, risk analysis to address human rights issues under CSDDD is crucially reliant on information from relevant stakeholders (Lundan & Muchlinski, 2012, pp. 196-197), which underlines the importance of active stakeholder engagement. This may raise communication issues with rights holders in third-world countries with limited access to information channels (Smit, Holly, et al., 2020, pp. 956-957).

Transitioning to CSDDD compliance is expected to incur significant costs, including heightened monitoring expenses and increased operational costs for suppliers, which may lower the cost benefits of importing goods (Gabriel Felbermayr et al., 2021, p. 14; Gabriel Felbermayr et al., 2021, p. 40). Furthermore, the potential need to switch suppliers to ensure CSDDD compliance could impose additional financial, time, and effort-related burdens on companies. The impact of these changes will vary, heavily influenced by the existing sustainability measures within a company's supply chains and its exposure to human rights or environmental issues (Fasterling & Demuijnck, 2013, p. 807; Taherdoost & Brard, 2019, p. 8). Interestingly, a survey by Kolev and Neligan (2022, p. 14) involving 1000 German companies revealed that 16% of respondents felt no need for further adjustments to meet the law's demands, as they already complied with its requirements. Lastly, the nature of RBDD demands a substantive, contextual, and ongoing approach rather than a superficial tick-box methodology. This raises the issue of whether a CSR department is best placed to deal with RBDD, suggesting a multifunctional team approach involving compliance, operational, and legal departments, all of which should receive appropriate RBDD training (McCorquodale et al., 2017, p. 222).

## 2.6. Potential measures facilitating the successful implementation of the CSDDD

According to a study by Gabriel Felbermayr et al. (2021, p. 40), companies may choose to reduce their number of suppliers in response to increased governance costs associated with supplier management. This mainly arises when companies must identify and mitigate adverse human rights and environmental impacts within their supply chains for the same intermediate products. The rationale is that a more extensive supplier base increases the risk of non-compliance with regulatory and sustainability standards. This suggests a reduced supplier base could facilitate more seamless compliance with the CSDDD (Vachon & Klassen, 2006, p. 803). Nevertheless, a significant reduction in the number of suppliers might prompt a monopolisation effect, thereby enhancing the market power of remaining suppliers and consequently elevating the cost of intermediate products for European firms (Gabriel Felbermayr et al., 2021, p. 40). On the other hand, a small supplier base could speed up the risk management process, potentially decreasing the number of high-risk suppliers. This could allow reallocating resources towards initiatives like fostering long-term relationships and supplier development programmes, which might ease the adoption of shared goals and structures.

Companies might also consider relocating their supply chains to Europe or other regions with strict human rights and environmental regulations to avoid increased due diligence costs (Gabriel Felbermayr et al., 2021, p. 40). This strategic move aims at shortening supply chains and ensuring legal compliance, thereby addressing challenges such as unreliable data or the unwillingness to share information from tier-1 suppliers. As a result, this could lead to a transformation from labour-intensive to capital-intensive production (Gabriel Felbermayr et al., 2021, p. 40), which could lead to companies raising product prices (Gabriel Felbermayr et al., 2021, p. 43). Kolev and Neligan (2022, pp. 16,18) reveal that one in five companies plan to raise their product prices to finance the cost of complying with German due diligence law. On the contrary, only a minority of German businesses believe their customers are willing to pay for the higher compliance costs. Furthermore, European companies might opt for overseas investments to establish production sites that are easier to monitor (Gabriel Felbermayr et al., 2021, p. 41).

Social accounting (SA) can play a pivotal role in operationalising the due diligence requirements of companies to avert human rights violations, offering a robust framework for accountability measurement and reporting. SA means identifying and recording an entity's activities in terms of its social responsibility by seeking to place a value (positive or negative) on its impact on people, the environment, and society (Torrecchia, 2013, p. 2168). It furthers the role of businesses as responsible social entities dedicated to advancing human rights (Chetty, 2011, p. 759). SA aligns with the stakeholder-oriented elements of the CSDDD, endorsing engagement with relevant rights holders throughout the due diligence process (Council of the European Union, 2024, pp. 22, 30). Additionally, it may provide a structured approach to facilitate companies' transition towards CSRD compliance, the reporting segment of the CSDDD. In conclusion, SA can serve as a Corporate Social Responsibility (CSR) tool, constituting a reporting system that compiles insights from various stakeholders regarding the entity's success in achieving its due diligence goals and objectives (Torrecchia, 2013, p. 2168). See Appendix D for an example of a SA framework.

At the procurement level, companies can initiate measures by drafting new contractual clauses to be included in contracts with suppliers, such as the right to request information to satisfy CSDDD disclosures, remedies when such information is not disclosed and contractual guarantees to comply with a specific code of conduct (Walter & Burg, 2023). Furthermore, companies might collaborate with competing buyers who share a similar level of responsibility consciousness (Cao et al., 2023, p. 13). Such collaboration might benefit from a streamlined due diligence process and share the costs associated with compliance. However, companies must remain aware of competition laws, especially when collaborating with competitors, even within the procurement sphere. The EU's horizontal guidelines could potentially prohibit such collaborations if they involve the exchange of sensitive information that could influence the market behaviour of the involved parties (Commission, 2023, pp. 11-12, 99).

Lastly, as part of Industry 4.0, a significant opportunity involves the adoption of a distributed permissioned ledger (DPL), leveraging blockchain (BC) technology. The essence of DLP lies in its structure as a decentralised database that spans multiple locations or users. This system operates based on consensus algorithms and restricts access to authorised individuals (Asante et al., 2023, p. 713; Chowdhury et al., 2019, pp. 167931-167932). BC is a cryptographically secure decentralised database that generates a digital log of trusted and immutable transactions, which are encapsulated into blocks, a process known as mining (Asante et al., 2023, p. 713).

DPL is characterised by several key features, including immutability, traceability, trust, transparency, and a distributed network framework (Chowdhury et al., 2019, p. 167932; Wagner et al., 2022, p. 4). These attributes make DPL suitable for addressing various supply chain due diligence challenges, such as trust deficits, inadequate information sharing, and transparency. Notably, DPL enhances transparency and accountability within supply chains since the state of the ledger, alongside every interaction between participating entities, can be verified by any authorised user, thereby significantly benefiting the communication aspects of the due diligence process (Chowdhury et al., 2019, p. 167932). Moreover, the ability to track products in real-time from their origin through production to consumption can be a pivotal tool for supply chain mapping, an initial phase of the RBDD process (Kshetri & Loukoianova, 2019, pp. 13-14). However, to fully harness these benefits within the supply chain, the entire supply chain must adopt blockchain

technology. This necessitates certain digital literacy and technical capabilities (Asante et al., 2023, p. 726). Such requirements might pose a substantial barrier in the form of high adoption costs. On the contrary, solutions like Provenance and IBM Blockchain make BC technology more accessible and cost-effective by leveraging pre-built frameworks and improving scalability through existing cloud infrastructure.

### 3. RESEARCH DESIGN

#### 3.1. Research method

The research method employed in this study is qualitative research, primarily associated with data collection techniques like interviews and data analysis procedures such as categorising data. This method is characterised by generating or utilising non-numerical data (Saunders et al., 2007, p. 145). It is preferred for its effectiveness in studying phenomena in real-world settings (Yin, 2015, p. 9). Central to the qualitative research approach in this study is conducting interviews with experts in the field, thereby collecting primary data specifically tailored to the research project (Saunders et al., 2007, p. 607). The study adopted a hybrid approach, considering both deductive and inductive approaches. It is deductive in that the study names and organises themes based on the concepts under the Theoretical Background part, yet inductive, as it allows the collected data to reveal emerging concepts (Yin, 2015, p. 100). This began with collecting raw data, followed by identifying frequent, dominant, or significant themes, ultimately leading to a framework. This methodology was selected as it aligns closely with the research objective: to examine the challenges and measures of individual companies to conclude a broader set of challenges and measures applicable across Nordic manufacturing firms.

The study utilised semi-structured interviews, a method in which the interviewer starts with a series of interview themes but is prepared to vary the order in which questions are asked and to ask new questions in the context of the research situation (Saunders et al., 2007, p. 611). This approach ensured a depth of understanding while allowing for adaptability in the conversation.

#### 3.2. Sampling

In conducting the interviews for this study, a sample comprising 12 companies was selected from the population of Nordic companies within the manufacturing industry, employing over 1000+ employees and reporting a net worldwide turnover of EUR 450 million or more. One professional was chosen to be interviewed from all of these companies. The sampling strategy employed was purposive sampling, a method based on the premise that the companies themselves are most relevant in understanding the challenges and potential measures related to implementing the CSDDD. As Etikan et al. (2016, p. 2) define, purposive sampling involves intentionally selecting participants with specific qualities deemed valuable for the research. However, it is essential to note that purposive sampling has drawbacks, particularly concerning the generalisability of the research findings. The selective nature of this sampling method can restrict the study's outcomes' applicability to broader populations, thus undermining the external validity (Saunders et al., 2007, p. 151).

To further enhance the sampling strategy, the study utilised a combination of two purposive sampling techniques: homogeneous and expert sampling. The homogenous meaning focuses on candidates who share similar traits or specific characteristics. Whereas expert sampling targets individuals with specialised knowledge in a given field, which is particularly useful when empirical observation is sparse (Etikan et al., 2016,

p. 3). Furthermore, to ensure the participants' expertise, the following criteria were used:

**Table 1. Criteria for selecting interview participants**

Criteria
1. Have to be employed by a manufacturing company in Finland, Sweden, or Denmark.
2. Participants should include those involved in various aspects of sustainability initiatives, such as environmental management, CSR, strategic planning, procurement, and CSDDD compliance and due diligence.

#### 3.3. Data collection

An interview guide was designed to help guide the interviews and ensure that a broad range of relevant information was collected within the topic's boundaries. Appendix E1 shows the complete interview guide. It consisted of guiding themes containing several specific questions (Rubin & Rubin, 2012, p. 125; Yin, 2015, p. 147). These guiding themes were: (1) understanding and preparation for CSDDD, (2) challenges in supply chain transparency and information management, (3) supplier engagement and compliance strategies, (4) resource allocation and impact of costs, (5) innovative measures and technological adoption, and (6) collective measures and rights holder engagement. The questions within these themes were constructed to maintain validity by aligning them with the challenges, measures, and the six-stage CSDDD process detailed in the Theoretical Background. Furthermore, by anchoring the questions in the study's findings, content validity was strengthened, ensuring the questions were relevant to the topic and addressed all topical aspects (Babbie, 2016, p. 150). For participant profiles, see Appendix E2.

The data-gathering process involved direct interactions with relevant entities within the Nordic manufacturing sector. This direct approach is deemed reliable as the respondents possessed firsthand knowledge and experience pertinent to the study. However, the reliability of this firsthand information can also be questioned. There is a risk that participants may withhold certain information to avoid probing into sensitive areas they prefer not to disclose or are not authorised to discuss. Such omissions could result in a skewed 'picture,' portraying either a socially desirable image of themselves or their organisation (Saunders et al., 2007, p. 318). To counteract potential biases such as social desirability, Bergen and Labonté (2020, p. 787) suggested various methods, from which indirect questioning, posing indirect questions about the past, and asking follow-up questions to gain more authentic and specific information were employed during the interviews. Additionally, respondents were encouraged to describe specific critical incidents applicable to the research question, grounding the study in tangible experiences rather than abstract theories (Saunders et al., 2007, pp. 324-325). Lastly, interviews were conducted online and were recorded with permission from the respondents to allow transcribing the data.

#### 3.4. Data reduction and data analysis

The data gathered from the transcribed interviews were analysed through reflexive thematic analysis (TA), which is defined by Braun and Clarke (2021, pp. 5, 283-298) as the active role of the researcher in coding and theme development, the inevitable subjectivity of these processes, and the importance of the researcher reflecting on their assumptions and practices and how these might shape and delimit their data analysis. Crucially, this approach does not view the researcher's subjectivity as a bias to be controlled but rather as a resource to be harnessed, focusing on the researcher's reflective engagement with the data and the analytical process (Braun & Clarke, 2021, pp. 5-8)



Reflexive TA proved ideal for the analysis due to its flexibility, which supports both inductive and deductive generation of themes, aligning with the chosen hybrid approach. The analysis was structured around the six distinct yet recursive phases as outlined by Braun and Clarke (2021, pp. 42-153): (1) Familiarisation, (2) coding, (3) generating initial themes, (4) reviewing themes, (5) defining and naming themes, (6) displaying the results. The first stage involved familiarisation with the data to identify potential coding labels. This was followed by systematic efforts to identify coded excerpts, facilitating an interplay between the analytical objectives and the data. Subsequently, the coded data were analysed to discern overarching themes, forming clusters. The final steps involved the review and refinement of these themes. This phase was critical to determine whether to discard, combine, or split themes, resulting in each theme's clear definition and naming.

## 4. RESULTS

For an overview of the challenges and measures identified in the results, refer to Appendices F1 and F2.

The following section discusses the results obtained through the interviews with Nordic manufacturing firms aimed to identify challenges and measures for effective CSDDD implementation. When referring to statements made by particular interview participants, the abbreviation IP, with the number of interview participants, is used.

### 4.1. Potential implementation challenges

#### 4.1.1. Organisation internal preparedness

Companies often focus on visible sustainability efforts for external reporting, overlooking internal processes and responsible personnel (IP12). Half the participants believed their organisations lacked internal preparedness for CSDDD implementation (IP1, IP4, IP6, IP8, IP10, IP11). Therefore, the lack of internal integration of sustainability presents a significant challenge. IP1 underlined the difficulty of instilling a sustainability mindset across a globally dispersed workforce. IP4 noted that while some companies are mature in this, sustainability is often not a driver in decision-making processes. Moreover, departments such as sourcing and sales frequently lack awareness and struggle with regulatory compliance (IP4), creating barriers between sustainability and other functions. This misalignment is further complicated by the varying maturity levels of organisations and the challenge of embedding sustainability into business models, particularly in companies built through acquisitions (IP5). IP7, IP6, and IP10 emphasised the challenge of making those outside of sustainability roles aware of and committed to sustainability policies, which are often easier to establish than to implement.

Furthermore, many perceive sustainability as an environmental issue, neglecting the social aspects (IP10). This gap in understanding complicates the implementation of comprehensive RBDD measures. IP1 mentioned that the CSDDD introduces new considerations about the impact on people and the environment, which are unfamiliar to many business professionals. Moreover, IP3 and IP10 discussed the lack of maturity in understanding sustainability within purchasing functions, highlighting the need for better education and support from sustainability specialists. This integration is further complicated by the siloed nature of large organisations, hindering effective CSDDD implementation (IP5, IP6, IP8).

#### 4.1.2. Risk mapping and data management

Mapping risks across extensive and fragmented supply chains is a critical challenge. The further away from the final product, the more complex the supply chain becomes, with multiple tiers and diverse geographic, legislative and cultural contexts (IP1, IP3,

IP9). The conservative nature of industries and the lack of transparency in supply chains exacerbate these difficulties (IP4). Supply chains can be lengthy and constantly changing, making it challenging to maintain accurate and up-to-date information (IP6), which is further complicated by the unwillingness of suppliers to share information (IP2, IP10). Furthermore, companies struggle with defining and measuring social risks, especially when dealing with numerous suppliers across different regions (IP6, IP8). Effective monitoring requires a comprehensive understanding and mapping of the chain of actions to assess performance and implement changes (IP3).

Managing and integrating vast amounts of new data from diverse sources within an organisation is another significant challenge. Companies require robust data management tools to maintain transparency and ensure all relevant information is accessible in one place (IP5). The constantly changing nature of supply chains makes data management even more complicated (IP6). Many companies still rely on outdated methods like Excel, which are insufficient for the complex demands of modern sustainability requirements (IP7). Businesses need integrated systems to consolidate data and make it easily accessible for all departments, especially procurement, to overcome this (IP11, IP12).

#### 4.1.3. Supplier management and information deficits

A notable challenge in implementing CSDDD is the information deficit. Suppliers often lack the necessary information or are unwilling to share it (IP1, IP2, IP3, IP4, IP5, IP6, IP10, IP11). IP1 noted that suppliers sometimes claim trade secrets as a reason for withholding information, while others may simply be unaware of the required details. This issue is aggravated when dealing with suppliers in regions with less developed technical capabilities and regulatory frameworks (IP1). IP3 emphasised that suppliers often only provide the minimum information necessary, and the accuracy of this information can be questionable. IP6 pointed out that trust plays a significant role, as there is no foolproof way to verify if suppliers are sincere.

Managing relationships with suppliers who may be unwilling or unable to comply with due diligence requirements is challenging. IP7 discussed the difficulty of terminating contracts with non-compliant suppliers without disrupting the supply chain. IP2 noted that communication and training are often met with a lack of interest, especially from beyond tier-one suppliers. This disinterest increases the closer the suppliers are to the raw materials, making cooperation and compliance harder to achieve. Smaller suppliers often lack the resources and information to comply with due diligence requirements, creating barriers to comprehensive risk management (IP5). This is why IP6 suggests more collaborative approaches to streamline data collection. Moreover, suppliers, especially those in regions with less regulatory pressure and green incentives, often lack the motivation to adhere to due diligence requirements (IP1), focusing more on cost-saving polluting processes (IP3). Lastly, establishing consistent and reliable monitoring systems for supplier compliance remains a significant challenge, especially regarding social aspects (IP10).

#### 4.1.4. Collaboration and low leverage

A key collaboration challenge lies in collecting information from certain suppliers rather than the type of information itself (IP9). Firstly, traders often resist providing detailed information on supply chains due to competitive concerns and business secrets. IP3 mentioned the necessity of traders in specific supply chains, while IP9 and IP10 discussed traders' reluctance to share supply chain details to prevent losing business advantages. Secondly, competitors within the supply chain are often unwilling to



collaborate due to market rivalry and competitive pressures. IP9 explained that traders who are also competitors fear disclosing their supply chain to avoid losing suppliers, while IP10 highlighted the competition over securing suppliers hampering transparency efforts. Thirdly, large suppliers, especially those significantly larger than the purchasing company, often resist compliance due to their dominant market position. IP4 and IP5 emphasised that large suppliers feel no obligation to comply with requests from smaller companies, as they do not rely significantly on their business. This lack of leverage complicates efforts to enforce CSDDD compliance, particularly in industries where the purchasing company is a minor player (IP6, IP9).

Lastly, companies have significantly less leverage over indirect suppliers, making enforcing due diligence requirements (IP2) harder. Additionally, a shift to circular business models, where companies purchase waste or low-value goods, increasingly reduces leverage over suppliers. In connection to this, IP9 highlighted that in circular economies, the purchasing company often deals with large suppliers for whom the purchased waste is of minor significance.

#### 4.1.5. *Lack of rights holder engagement*

Engaging with rights holders is mandated by the CSDDD and is essential for managing a company's impact on its surroundings (Council of the European Union, 2024, p. 22). Half of the companies interviewed did not actively engage with rights holders, and existing efforts are often minimal (IP4, IP5, IP6, IP10, IP11, IP12). IP5 admitted to limited engagement efforts, while IP10 mentioned that current initiatives, such as whistleblowing tools, are basic, but more substantial efforts are lacking. Establishing effective rights-holder dialogue under CSDDD faces several challenges, including power imbalances, language barriers, and logistical issues. IP2 pointed out that power dynamics, especially in areas with limited internet access, may create significant barriers to engagement. Furthermore, companies struggle and have yet to identify their rights holders, a prerequisite for effective engagement (IP9, IP11). IP1 noted the difficulty in identifying legitimate and politically neutral stakeholders, especially in foreign contexts.

Effective communication channels must be established to reach the right holders without overwhelming them. IP5 highlighted the challenge of finding appropriate ways to communicate with workers without drowning them with information. This is crucial to ensure they understand their rights and can engage effectively. Rights holders and internal stakeholders are also often unaware of the channels available for reporting issues and engaging with companies (IP11). Moreover, IP9 noted the difficulty in considering the vast number of people involved in the chain of actions and scaling engagement efforts accordingly. Lastly, companies are often reluctant to communicate openly about complex issues, fearing reputational risks and increased scrutiny. IP5 mentioned that increased transparency could lead to greater scrutiny from NGOs and the media, which companies may prefer to avoid. On the contrary, IP1 argued that proactive engagement and transparency can prevent more significant reputational damage in the long run and are crucial for maintaining brand integrity.

#### 4.1.6. *Costs of enhanced due diligence*

Businesses face the challenge of integrating an increased chain of actions wide RBDD, which may see significantly increased costs before routine builds up. IP7 explained that sustainability functions do not directly generate profit but are essential for maintaining good business practices. Furthermore, companies are often caught in a difficult position where they need to enhance their sustainability efforts while also being pressured to

reduce costs. IP10 described this as a significant dilemma, as meeting these expectations simultaneously is challenging.

## 4.2. **Potential implementation measures**

### 4.2.1. *Sustainability internal integration*

Gap assessment ensures the effective embedding of RBDD across organisations. IP9 emphasised the need for a comprehensive corporate-wide gap assessment, possibly with third-party involvement, to identify and address deficiencies. Regular validation is crucial to walking the talk in sustainability efforts (IP9). Furthermore, integrating due diligence into the tendering and contracting phases increases leverage over suppliers. This involves requiring evidence of commitment to sustainability from suppliers before contract signing, incorporating sustainability surveys, and evaluating supplier performance based on their sustainability practices (IP3, IP9). Establishing transparent, sustainable procurement practices and supplier selection criteria is vital. IP6 and IP10 pointed out that aggressive purchasing practices often contradict sustainability goals and may contribute to unethical labour practices on the supplier side. Therefore, aligning procurement goals with sustainability is essential (IP3, IP4, IP5, IP6, IP9, IP10, IP11).

Embedding due diligence in everyday business decisions requires thoroughly integrating sustainability policies across the supply chain (IP2, IP7, IP8). IP8 mentioned the establishment of a sustainability supplier management department, while IP7 recommended integrating sustainability into employee performance metrics to ensure that employees are motivated and accountable for sustainability goals. Furthermore, internal training and awareness programs, including e-learning, face-to-face workshops, and annual company sustainability policy training, are critical (IP1, IP2, IP9, IP10, IP11). This involves identifying critical internal stakeholders to ensure commitment from all relevant departments (IP11). Additionally, appointing sustainability champions within each department can facilitate better implementation. These individuals work closely with central sustainability teams and ensure sustainability practices are embedded in their respective departments (IP6, IP9, IP12). Lastly, translating sustainability language into department-specific terms, as noted by IP8 and IP12, is essential for aligning sustainability goals with overall business objectives.

### 4.2.2. *Risk mapping and monitoring*

Effective risk mapping involves asking suppliers about their code of conduct and sustainability practices, assessing the maturity of their due diligence processes, and categorising suppliers based on risk levels (IP1, IP2, IP3, IP5, IP6, IP7, IP9, IP11). IP5 stressed the necessity of prioritising areas of high impact and dependency while ensuring data validity through cross-referencing with public indexes and third parties. Verified management tools and third-party audits, such as those conducted by SCS Global or Fair Labor Association, help maintain compliance and accuracy in risk assessments (IP2, IP6, IP9). A practical initial assessment could involve determining the percentage of spend covered by suppliers who have signed the company's code of conduct. This may help identify the extent of compliance within the supply chain and highlight areas needing improvement. However, due to numerous small suppliers, achieving complete coverage can be challenging (IP6). Specific sustainability requirements, such as certifications or sustainability programs, should be in place for higher-risk raw materials. This ensures that higher-risk areas receive the necessary attention and resources (IP6).

Sustainability surveys serve as multipurpose tools to identify current compliance levels and areas needing improvement (IP2, IP9, IP10). They are particularly effective during high-leverage phases like tendering, onboarding, or contract negotiations. They

provide transparency and traceability of supply chains, integrating country- and sector-specific risks (IP9). Social auditing programs are essential for verifying compliance and addressing potential risks. IP6 and IP9 discussed the limitations of announced audits and the importance of broader supply chain audits rather than site-specific checks. IP5 also pointed out the challenge of audit fatigue and the need for industry alignment to reduce the burden on suppliers.

#### 4.2.3. *Supply chain restructuring*

Backshoring, or the localisation of suppliers, is increasingly seen as a strategy to simplify supply chains and improve sustainability outcomes. IP7 highlighted the benefits of shorter supply chains, emphasising that reduced complexity aids effective monitoring, thus allowing a more straightforward adaptation of RBDD. Yet, localisation must benefit both parties involved. IP3 discussed cases where suppliers were awarded the business after showing a willingness to establish operations closer to the company's plants. However, localisation was only suggested when the company saw an opportunity for the suppliers to tap into new markets to embrace a mutual win-win.

The challenges of backshoring cannot be overlooked. IP5 mentioned the difficulty in shifting dependency from Asia to Europe due to logistical, cost, and sourcing constraints. It often makes more sense for global companies to manage existing risks rather than restructure the entire supply chain. IP6 supported this view by suggesting that many first-tier suppliers are already within the EU, and the risks primarily arise from lower-tier suppliers in higher-risk countries. Additionally, IP9 argued that globalisation forces are stronger than the indirect impact of CSDDD. However, engaging with sustainably mature first-tier suppliers can reduce the need for involvement with lower-tier suppliers, bringing the total cost of CSDDD compliance down.

#### 4.2.4. *Supplier relationship management*

RBDD is essential during onboarding (IP5, IP6, IP9, IP11). A robust supplier onboarding system collects all necessary information before establishing a partnership (IP5). This preemptive approach prevents potential issues by categorising suppliers based on their maturity of sustainability and associated risks. IP6 mentioned that supplier interviews at the start of onboarding utilise heightened leverage to help gather essential information about suppliers' sourcing practices and map their suppliers. Furthermore, effective supplier relationship management involves collaborative, consistent communication and fostering long-term relationships to build trust and cooperation (IP1, IP2, IP3, IP5, IP6, IP7, IP11, IP12). It is crucial to approach suppliers with cultural sensitivity; IP2 and IP5 stressed understanding regional norms and root causes of issues, suggesting that culturally aware approaches can facilitate more effective problem-solving.

Sustainable supplier development is necessary to build suppliers' capacity and sustainability knowledge (IP3, IP5, IP6, IP11). IP3 suggested that working with suppliers to improve sustainability practices can encourage transparency and meet regulatory requirements. IP5 preferred building supplier capacity rather than heavy involvement in operations, promoting self-sufficiency, and lowering long-term costs associated with RBDD implementation. However, this can be resource-intensive, making prioritising key suppliers necessary. Lastly, demanding corrective action plans based on the severity of violations is critical for maintaining compliance. IP5 discussed having tailored remediation plans for different issues, from minor violations to serious ones like forced child labour, and working closely with procurement teams to determine the appropriate pressure level to apply. IP6, IP7, and IP9 mentioned issuing time-bound corrective actions and conducting follow-up audits to

ensure compliance. Exiting relationships should be a last resort, as maintaining leverage is crucial for driving improvements (IP5, IP9, IP10, IP11).

#### 4.2.5. *Rights holder engagement*

Effective engagement with rights holders is crucial for successfully implementing RBDD. Therefore, it is essential to ensure that contact points and grievance mechanisms are well-known, understandable, and operational. This includes covering what they are, how they should be used, and how they function (IP1). Moreover, involving the communication department can enhance the clarity and effectiveness of stakeholder engagement by tailoring communication channels to identified rights holders and preventing greenwashing (IP12).

Early rights holder engagement as part of due diligence at the onset of projects can preemptively address power dynamics and communication barriers (IP9). This includes assessing country and site risks, engaging with local communities, and establishing communication channels before operationalising any facility (IP9). Furthermore, establishing clear guidelines for stakeholder involvement is another critical measure. IP12 pointed out that accessibility and clear communication are vital, as stakeholders may provide excessive or insufficient input. By defining the scope and expectations of stakeholder contributions, companies can streamline the engagement process and obtain meaningful insights without overwhelming the stakeholders or the project team. Leveraging local expertise with relevant cultural and geographical knowledge through proxies or country-specific teams can significantly enhance rightsholder engagement, especially in high-risk regions or commercially crucial areas (IP5, IP11). IP5 and IP11 discussed the benefits of using initiatives like the Responsible Business Alliance (RBA), which facilitates dialogue with local workers.

#### 4.2.6. *Collective measures*

Addressing structural problems in sustainability requires collective action (IP1, IP6). IP1 noted that many human rights issues are structural and cannot be resolved quickly in isolation. Similarly, IP6 mentioned that complex, industry-wide problems need collective action to determine appropriate solutions and address the root causes of the harm. Collaborating across the industry is essential to increase leverage and share best practices (IP1, IP4, IP5, IP7, IP11). IP5 emphasised the benefits of associations like the Pharmaceutical Supply Chain Initiative, which allows for anonymised result sharing and avoids antitrust issues. IP7 discussed the success of initiatives like Drive Sustainability, where companies like BMW and Volkswagen collaborate to push sustainable supply chain changes collectively. Furthermore, IP8, IP10, and IP12 highlighted the importance of forums and networks, such as the Nordic Business Network on Human Rights, which facilitate confidential discussions and trust-building among companies facing similar challenges. IP9 underscored the role of organisations like the Consumer Goods Forum, which collectively brings together diverse stakeholders to tackle issues.

Collaborating with companies sharing the same supply chains can amplify efforts and create significant leverage. Institutions could facilitate these collective measures to overcome the challenges of low-leverage buyer-supplier settings. IP9 and IP11 stressed how joint audits and shared requirements among competitors can streamline supplier engagement and drive changes more effectively. This collective approach helps avoid overwhelming suppliers with multiple, disparate requests and ensures consistent standards across the industry. While collaboration is essential, it must navigate legal constraints, such as antitrust laws (IP2, IP7, IP9). IP7 and IP9 noted the importance of following competitive laws while collaborating meaningfully.

#### 4.2.7. Technological solutions

Blockchain (BC) technology can be valuable for tracing materials from high-risk areas and streamlining data management. IP7 noted that their company uses BC for materials sourced from high-risk regions to mitigate human rights risks. However, the technology is expensive and not feasible for widespread use across all products and supply chains. IP2 and IP6 concurred, acknowledging BC's potential for improving traceability and monitoring, though its current cost and the need for reliable data verification limit its application.

Worker voice technology is increasingly used to gain direct insights from workers, especially in high-risk supply chains. IP9 described their company's use of this technology within sustainability auditing programs to gather real-time feedback from workers, helping to identify problem areas and inform supplier capacity building. This approach ensures that workers' perspectives are included in the due diligence process. However, IP2 and IP5 cautioned that while valuable, worker voice technology must be carefully implemented to ensure accurate data collection and meaningful engagement. IP5 highlighted the importance of thoughtful engagement strategies to use the gathered data best. Another hurdle could be trust-building among workers to ensure they feel comfortable using the technology.

#### 4.2.8. Pricing and contractual clauses

Two out of twelve participants planned to increase prices (IP1, IP4). IP1 explained that while industry norms dictate price increases with rising input costs, it remains uncertain if consumers will accept higher prices. IP10 noted that pricing often overlooks social sustainability aspects, making it difficult to pass these costs on to customers. However, higher prices could incentivise suppliers to adopt more sustainable practices if they know there is a financial benefit.

Lastly, Integrating human rights into the supplier code of conduct and contractual clauses is essential for effective monitoring and enforcement (IP5, IP6, IP7, IP9, IP10). IP5 mentioned their company's reliance on the RBA's code of conduct to ensure realistic and industry-relevant expectations. However, IP5 also cautioned that contractual clauses might be ineffective without the means to check compliance. IP6 and IP7 emphasised the importance of regularly updating these codes to align with new legislation and specific high-risk raw materials.

## 5. DISCUSSION AND CONCLUSION

This paper aimed to contribute to laying the groundwork for understanding the implications of CSDDD on Nordic manufacturing companies by addressing the following research questions:

*“What global supply chain monitoring and control challenges impact the compliance of manufacturing companies with the CSDDD in Nordic countries, and how do these challenges impact compliance?”*

*“What targeted strategies or measures can manufacturing companies in Nordic countries implement to enhance compliance with the CSDDD, and how would these contribute?”*

Through expert interviews with 12 companies, a comprehensive view was established to outline potential challenges and measures of CSDDD implementation. The following overarching findings were made:

Internally, a significant challenge is the lack of integration of sustainability due diligence, particularly regarding social aspects. This deficiency hampers the effective application of measures and monitoring, potentially causing harm, such as through aggressive procurement practices. This undermines compliance

with the CSDDD due to the absence of a unified approach. It leads to inconsistent application of adequate measures, heightened risk of internal non-compliance, and an inability to monitor effectively. It is impossible to track and evaluate what is not fully understood. Building internal capacity is crucial, including redefining sustainability to consider social aspects and establishing transparent social sustainability procurement practices. Proper alignment at management layers ensures effective use of RBDD data and value-based decision-making by integrating social sustainability into core strategies.

Risk mapping presents another challenge due to the complexity of actions spanning multiple countries and legislations, resulting in low visibility. This complexity makes controlling and monitoring risks difficult, directly impacting compliance as companies may overlook or inadequately address critical risks. Managing the extensive data generated by risk mapping is also significant. Companies must understand the risks and potential harms they are mapping. Identifying and prioritising high-risk supply chain segments and suppliers with high dependency and impact is crucial. Implementing blockchain technology in high-risk product categories can streamline data management, providing transparency and reliability.

Supplier management faces difficulties due to insufficient motivation and low leverage to ensure compliance. Factors such as low trust and insufficient incentives hinder the RBDD process, raising concerns about data reliability. This impacts compliance as companies cannot enforce sustainable practices effectively. The leverage varies based on supplier type and the company's adoption of a circular economy model. Trust can be fostered through a collaborative approach to supplier management. Building supplier capacity in sustainability to lower the company's involvement and encouraging collective measures facilitated by industry associations can help address low leverage and reduce compliance costs. However, successful collective measures require open dialogue on social matters, often impeded by a conservative approach equating transparency with vulnerability.

Engagement with rights holders presents a challenge due to a lack of awareness of its significance. Identifying and addressing adverse impacts or monitoring measures becomes challenging without dialogue with rights holders, directly impacting compliance as key rights holders' concerns and inputs are missed. Companies must become more open and vulnerable regarding sustainability issues to build trust and facilitate measures such as worker voice technology. Identifying rights holders, choosing appropriate communication channels, raising awareness, and leveraging country-specific teams for culturally sensitive communication are essential steps.

Ultimately, while Nordic manufacturing companies recognise the importance of the CSDDD, it is crucial to note that their concerns should not be limited to risk mapping alone. Instead, a holistic approach to compliance is necessary.

### 5.1. Theoretical implications

The study aimed to build on the CSDDD implementation challenges and measures identified in the Theoretical Background by conducting interviews centred around the concept of RBDD defined by the OECD (2018) while also considering the requirements of the CSDD directive (Council of the European Union, 2024). The Results contributed to the existing literature by addressing the broadened due diligence concept and discussing how companies perceive and implement due diligence. Specifically, how companies interpret due diligence beyond legal compliance to include proactive measures for sustainability and the RBDD framework in real-world

settings, such as through social auditing programs. Furthermore, the Results expanded on the challenges and measures outlined in the Theoretical Background. The findings provided a more holistic perspective on various aspects, such as social sustainability procurement practices under internal sustainability integration, worker voice technology as a technological measure, and discussed collective approaches. Notably, collective measures were extended beyond purchasing collaboration to industry-wide collaboration supported by the CSDDD (Council of the European Union, 2024, p. 30).

A critical examination of associations facilitating collective RBDD, highlighted by Sarfaty and Deberdt (2024, p. 1056) study on the Responsible Minerals Initiative's (RMI) risk assessment tools, reveals a box-ticking approach to HRDD based on imprecise indicators and unreliable information. This approach lacks regulatory oversight and independent verification, necessitating precise indicators and mandatory third-party verification for transparency and reliability. Moreover, Marques (2017, p. 25) argues that the literature suggests industry associations can either hinder or help facilitate risk-based due diligence. On the one hand, they might act as self-serving entities that exacerbate risks ("peril") or, under the right conditions, promote effective self-regulation and collective measures that mitigate risks and ensure compliance ("promise"). This dual nature emphasises the importance of critically assessing and structuring these associations to ensure they contribute positively to collective RBDD efforts.

The Results fail to discuss social accounting (SA), a concept identified in the Theoretical Background. SA may be used to operationalise due diligence requirements to prevent human rights violations, offering a robust framework for accountability measurement and reporting (Torrecchia, 2013). Findings on SA by Pianezzi and Cinquini (2016) demonstrate that it promotes equality, transparency, and fairness and emphasises genuine stakeholder engagement, polyvocal dialogue, and corporate disclosure. This structured approach integrates facts, communication, possibilities, and values, thereby addressing the limitations of conventional accounting focused solely on economic values, ultimately facilitating the better implementation of the CSDDD.

Another connection can be made between the Theoretical Background and sourcing decisions under the Results. As Gabriel Felbermayr et al. (2021, p. 40) and Vachon and Klassen (2006, p. 803) suggested, the indirect impact of CSDDD may lead to shorter supply chains to reduce the complexity of due diligence measures. This might also be perceived as companies becoming more hesitant to engage with suppliers with low sustainability maturity to avoid further adding to the complexity. Specifically, as identified in the Results, this could result from sustainability sourcing practices, particularly sustainable supplier selection. A study by Lightle et al. (2024) indicates that trends in mergers and acquisitions show a preference for avoiding companies with low ESG maturity. This supports the notion that future decisions may increasingly exclude companies with inadequate sustainability due diligence, particularly in higher-risk regions. On the contrary, if the cost of compliance is too high, larger suppliers may choose not to do business with buyers from the EU, which must be considered, especially in low-leverage situations.

### *5.1.1. Buyer-supplier relationship*

The study acknowledges the various agency relationships involved in implementing the CSDDD. It focuses specifically on the relationships between buying organisations (principals) and suppliers (agents), as well as between organisations (principals) and industry associations (agents). This focus aligns with the

study's company perspective, highlighting relationships where the company serves as the principal rather than an agent.

The findings revealed several challenges in buyer-supplier relationships, such as suppliers' lack of motivation and reliability concerning current sustainability levels, mainly due to a lack of information about suppliers' sustainability measures. These challenges can be partly explained through the principle-agency theory. Specifically, goal and interest misalignment account for the suppliers' low motivation, while information asymmetry stems from the assumption that suppliers possess better information about their actual sustainability measures (Eisenhardt, 1989, p. 61; Kraakman et al., 2017, p. 29; Lassar & Kerr, 1996, p. 614). Furthermore, as highlighted in the Results, suppliers are unable to incorporate more extensive due diligence measures due to limited capacity, necessitating capacity-building practices. However, suppliers may fail to recognise the benefits of these costly sustainability development practices, for example, when there are minimal governmental incentives or a possible weakening of competitive position due to rising business costs. These challenges are exacerbated in low-leverage settings, where buyers' attempts to mitigate information asymmetry or implement measures, in general, become increasingly complex.

Another agency problem contributing to the implementation challenges is the potential for adverse selection, where the agent misrepresents its actual level of sustainability (Eisenhardt, 1989, p. 61). The significance of this challenge may increase when companies, as mentioned earlier, start applying stricter supplier selection criteria. This may prompt suppliers to behave more opportunistically to maintain business, which is described by the agency theory as the underlying agent's tendency to act opportunistically when the principal lacks the means to verify the relevant facts (Eisenhardt, 1989, p. 61; Kraakman et al., 2017, p. 29; Lassar & Kerr, 1996, p. 614). Moreover, a study analysing 87 different buyer-supplier relationships in Europe highlights how ex-ante and ex-post information imbalances correlate with opportunistic behaviour, underscoring the importance of effective information collection measures to address the imbalance (Steinle et al., 2014, p. 135). Additionally, the same study found a significant correlation between a supplier's poor reputation and an increased risk of ex-post opportunism (Steinle et al., 2014, p. 134). To mitigate these challenges, agency theory suggests companies take various control measures and engage in monitoring to reduce moral hazard (Maestrini et al., 2018, p. 329; Steinle et al., 2014, p. 134). The results provided several measures to address these issues, such as sustainability auditing, implementing sustainability surveys during high-leverage phases like tendering or onboarding, and the importance of a collaborative approach in supplier relationship management.

A commonly recommended action under agency theory is utilising incentives to ensure agreement adherence and align goals between principals and agents. This may work as a counterweight for the lack of governmental incentives. However, a study by Maestrini et al. (2018, p. 329) found that incentives increase the likelihood of supplier opportunism, reasoning that specific targets associated with incentive schemes motivate suppliers to circumvent the performance measures for their benefit. Lastly, supply chain mapping under RBDD may naturally reduce information asymmetry and, therefore, the likelihood of moral hazard. This can result from the buyer building a link with the supplier's supplier, increasing the buyer's coercive powers, or decreasing the supplier's information power (Yang et al., 2022, p. 8).

### *5.1.2. Business-industry association relationship*

As highlighted previously, industry associations (agents) may fail to adequately facilitate collective measures (Marques, 2017,

p. 25; Sarfaty & Deberdt, 2024, p. 1056). Some challenges related to industry initiatives can be attributed to agency theory. According to this theory, where multiple principals are present, the challenge of ensuring the agent's responsiveness is greater, particularly when the principals have diverging interests. Multiple principals will face information and coordination costs, inhibiting their ability to engage in collective action (Kraakman et al., 2017, p. 30). This has two possible consequences: Firstly, difficulties in coordinating between principals will lead them to delegate more of their decision-making to agents, increasing the potential of the companies not actively engaging within and with the association (Easterbrook & Fischel, 1996, pp. 66-67; Kraakman et al., 2017, p. 30). Secondly, the harder it is for principals to coordinate a single set of goals for the agent, the more difficult it becomes to ensure that the agent does the "right" thing (Hansmann, 1996, pp. 39-44; Kanda, 1992, pp. 440-441, 444-445; Kraakman et al., 2017, p. 30). Ultimately, these coordination costs between principals exacerbate agency problems (Kraakman et al., 2017, p. 30).

Lastly, joining associations could be attributed to self-interest decisions and means to maximise profits rather than the association's collective goals (Schnurbein, 2009, p. 101; Watson, 1988; Young, 1985). This aligns with the principal acting as a utility maximiser under agency theory (Jensen & Meckling, 1976, pp. 308-309), which forms a challenge that becomes particularly pronounced when multiple principals engage with the same agent. Under Results, several participants expressed scepticism over the benefit of the associations and attributes of competitiveness, hindering the effectiveness of collectiveness. These remarks can possibly be linked to companies' self-interest.

In summary, the current effectiveness of specific industry associations might be significantly hampered by agency problems, coordination costs, and principals' self-interest, all of which challenge the realisation of collective goals.

### 5.1.3. Concluding theoretical implications

Successfully overcoming implementation challenges and taking adequate measures, companies face an inevitable increase in transparency in their actions. The cost of this is the risk of immediate identification of any misstep (Chaudhry & Wald, 2022, p. 3). However, transparency can be a valuable marketing tool for manufacturers (Rapezzi et al., 2024, p. 12); for example, once several retailers become mandated to include the European Digital Product Passport, requiring traceability of the products through the value chain (CIRPASS, 2023).

In conclusion, from a theoretical perspective, this paper has broadened the understanding of the potential challenges and measures associated with implementing RBDD under the CSDDD, leaving room for future focus on practical measures. The findings offer a holistic view of what companies may need to consider to facilitate the proper implementation of the directive to make a real difference in addressing societal issues.

## 5.2. Limitations and future research recommendations

This research does not come without its limitations. Firstly, the sample size of 12 experts may not represent the whole population, as possible variability may not be entirely captured, especially when the scope included three Nordic countries. Additionally, more than one person should have been interviewed per company to get a more complete picture of the participant organisation's state of due diligence. Another limitation may be including all the manufacturing companies, whereas there are several differences in supply chains depending on the sub-sector within the manufacturing industry. Therefore, this may limit the generalizability of the findings. In future, this

could be improved by focusing on certain parts of the manufacturing industry, such as the automotive sector.

An early stage of CSDDD implementation may have limited the ability to collect accurate information on the actual challenges and measures. Lastly, due to time constraints, other critical external stakeholders, such as industry associations, regulatory authorities, and NGOs, were left out, and they could have given important insight, especially concerning the rights holder engagement and collective measures.

Future research recommendations focus on developing practical measures for more effective implementation of the directive tailored to the specific needs of each Nordic company within a specific part of the manufacturing sector, such as clothing. This can build on the findings made in this study and give actionable recommendations to managers. Another recommendation for future research is the role of industry associations in facilitating collective RBDD measures. Industry associations can be pivotal in fostering collaboration among companies to address common challenges. Researching this area could uncover how associations can effectively coordinate collective efforts to improve RBDD, potentially leading to less resource-intensive adaptation of RBDD, increased leverage and ways to address structural sustainability issues.

Lastly, as discussed in the study, there are vast technological solutions. Therefore, the study could concentrate on Industry 4.0 (I4.0) solutions in RBDD. I4.0 technologies like AI can revolutionise supply chain transparency and data management. Research in this area can explore how these technologies can be leveraged to enhance the efficiency, accuracy, and effectiveness of RBDD processes. This gap is acknowledged by Sarfaty and Deberdt (2024, pp. 1056-1057), who underline the need for research on how governance technologies can facilitate the implementation of new supply chain regulations.

## 6. ACKNOWLEDGEMENTS

I express my deepest gratitude to my supervisor, Dr Klaas Stek, for allowing me to research such a crucial sustainable topic and guiding me through the bachelor's thesis process. I would also like to thank the interview participants for their valuable contributions and insights, which were critical to the success of this research.

## 7. REFERENCES

- Asante, M., Epiphaniou, G., Maple, C., Al-Khateeb, H., Bottarelli, M., & Ghafoor, K. Z. (2023). Distributed Ledger Technologies in Supply Chain Security Management: A Comprehensive Survey. *IEEE Transactions on Engineering Management*, 70(2), 713-739. <https://doi.org/10.1109/TEM.2021.3053655>
- Babbie, R. (2016). *The Practice of Social Research* (14 ed.). Cengage Learning.
- Bergen, N., & Labonté, R. (2020). "Everything Is Perfect, and We Have No Problems": Detecting and Limiting Social Desirability Bias in Qualitative Research. *Qualitative Health Research*, 30(5), 783-792. <https://doi.org/10.1177/1049732319889354>
- Braun, V., & Clarke, V. (2021). *Thematic Analysis: A Practical Guide*. SAGE Publications. <https://us.sagepub.com/en-us/nam/thematic-analysis/book248481>
- Bray, J. (1968). Possible guidance from Roman law. *Adel. L. Rev.*, 3(2), 145-158. <http://www.austlii.edu.au/au/journals/AdelLawRw/1968/1.html>
- Bright, C., & Buhmann, K. (2021). Risk-based due diligence, climate change, human rights and the just transition [Article]. *Sustainability (Switzerland)*, 13(18), Article 10454. <https://doi.org/10.3390/su131810454>
- Business for Social Responsibility BSR. (2022). *10 Human Rights Priorities for the Industrial Manufacturing*. BSR: Sustainable Business Network and Consultancy. Retrieved March 24 from <https://www.bsr.org/en/primers/10-human-rights-priorities-for-the-industrial-manufacturing-sector>
- Camoletto, S., Corazza, L., Pizzi, S., & Santini, E. (2022). Corporate Social Responsibility due diligence among European companies: The results of an interventionist research project with accountability and political implications. *Corporate Social Responsibility and Environmental Management*, 29(5), 1122-1133. <https://doi.org/https://doi.org/10.1002/csr.2258>
- Cao, Y., Li, Q., Shen, B., & Wang, Y. (2023). Buyer collaboration in managing supplier responsibility with ESG due diligence effort spillover and fairness concerns. *Transportation Research Part E: Logistics and Transportation Review*, 180, 1-18. <https://doi.org/https://doi.org/10.1016/j.tre.2023.103333>
- Cassimon, D., Engelen, P.-J., & Van Cappellen, H. (2018). Globalization. In A. Marciano & G. B. Ramello (Eds.), *Encyclopedia of Law and Economics* (pp. 1-9). Springer New York. [https://doi.org/10.1007/978-1-4614-7883-6\\_194-1](https://doi.org/10.1007/978-1-4614-7883-6_194-1)
- Chaudhry, S. J., & Wald, K. A. (2022). Overcoming listener skepticism: Costly signaling in communication increases perceived honesty. *Current Opinion in Psychology*, 48, 1-8. <https://doi.org/https://doi.org/10.1016/j.copsyc.2022.101442>
- Chetty, K. R. (2011). From responsibility to accountability—Social accounting, human rights and Scotland. *Critical Perspectives on Accounting*, 22(8), 759-761. <https://doi.org/https://doi.org/10.1016/j.cpa.2011.07.006>
- Chowdhury, M. J. M., Ferdous, M. S., Biswas, K., Chowdhury, N., Kayes, A. S. M., Alazab, M., & Watters, P. (2019). A Comparative Analysis of Distributed Ledger Technology Platforms. *IEEE Access*, 7, 167930-167943. <https://doi.org/10.1109/ACCESS.2019.2953729>
- Christmann, P., & Taylor, G. (2001). Globalization and the environment: Determinants of firm self-regulation in China. *Journal of international business studies*, 32(3), 439-458. <https://doi.org/https://doi.org/10.1057/palgrave.jibs.8490976>
- CIRPASS. (2023). *The Digital Product Passport as defined in the Proposal for Eco-design for Sustainable Product Regulation (ESPR)*. <https://cirpassproject.eu/download/2042/?tmstv=1711562138>
- Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal co-operation agreements, 1-167 (2023). [https://competition-policy.ec.europa.eu/system/files/2023-07/2023\\_revised\\_horizontal\\_guidelines\\_en.pdf](https://competition-policy.ec.europa.eu/system/files/2023-07/2023_revised_horizontal_guidelines_en.pdf)
- Confederation, I. T. U. (2023). *ITUC Global Rights Index 2023*. A. G. S. Luc Triangle. <https://www.ituc-csi.org/ituc-global-rights-index-2023>
- Corinna Cagliano, A., De Marco, A., Rafele, C., & Arese, M. (2012). A decision-making approach for investigating the potential effects of near sourcing on supply chain. *Strategic Outsourcing: An International Journal*, 5(2), 100-120. [https://doi.org/https://doi.org/10.1108/17538291Corporate Sustainability Due Diligence. \(2022, May 2024\). European Commission. Retrieved March 24 from \[https://commission.europa.eu/business-economy-euro/doing-business-eu/corporate-sustainability-due-diligence\\\_en\]\(https://commission.europa.eu/business-economy-euro/doing-business-eu/corporate-sustainability-due-diligence\_en\)](https://doi.org/https://doi.org/10.1108/17538291Corporate Sustainability Due Diligence. (2022, May 2024). European Commission. Retrieved March 24 from https://commission.europa.eu/business-economy-euro/doing-business-eu/corporate-sustainability-due-diligence_en)
- Proposal for a DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on Corporate Sustainability Due Diligence and amending Directive (EU) 2019/1937 - Letter to the Chair of the JURI Committee of the European Parliament, 1-127 (2024). <https://data.consilium.europa.eu/doc/document/ST-6145-2024-INIT/en/pdf>
- Easterbrook, F. H., & Fischel, D. R. (1996). *The Economic Structure of Corporate Law*. Harvard University Press. <https://www.hup.harvard.edu/books/9780674235397>
- Eisenhardt, K. M. (1989). Agency Theory: An Assessment and Review. *The Academy of Management Review*, 14(1), 57-74. <https://doi.org/10.2307/258191>
- Etikan, I., Abubakar Musa, S., & Sunusi Alkassim, R. (2016). Comparison of Convenience Sampling and Purposive Sampling. *American Journal of Theoretical and Applied Statistics*, 5(1), 1-4. <https://doi.org/10.11648/j.ajtas.20160501.11>
- Fasterling, B., & Demuijnck, G. (2013). Human Rights in the Void? Due Diligence in the UN Guiding Principles on Business and Human Rights. *Journal of Business Ethics*, 116(4), 799-814. <https://doi.org/10.1007/s10551-013-1822-z>
- Fayezi, S., O'Loughlin, A., & Zutshi, A. (2012). Agency theory and supply chain management: a structured literature review. *Supply Chain Management: An International Journal*, 17(5), 556-570. <https://doi.org/10.1108/13598541211258618>
- Felbermayr, G., Godart, O., Langhammer, R. J., & Sandkamp, A. (2021). *Opportunities and risks of a due diligence law*. I. Foundation. <https://www.ifw->



- [kiel.de/publications/opportunities-and-risks-of-a-due-diligence-law-21046/](https://www.kiel.de/publications/opportunities-and-risks-of-a-due-diligence-law-21046/)
- Felbermayr, G., Langhammer, R. J., Sandkamp, A., Herrmann, C., & Trapp, P. (2021). *Economic evaluation of a due diligence law*. <https://www.ifw-kiel.de/publications/economic-evaluation-of-a-due-diligence-law-21644/>
- Findlay, R., & O'Rourke, K. H. (2009). *Power and Plenty: Trade, War, and the World Economy in the Second Millennium* (6 ed.). Princeton University Press. <https://press.princeton.edu/books/paperback/9780691143279/power-and-plenty>
- Flores, S. (2023, March 24). What is the Corporate Sustainability Due Diligence Directive? *Deloitte EMEA Centre for Regulatory Strategy*. <https://www2.deloitte.com/uk/en/blog/emea-centre-for-regulatory-strategy/2023/what-is-the-european-corporate-sustainability-due-diligence-directive.html>
- Frieden, J. A. (2006). *Global Capitalism: Its Fall and Rise in the Twentieth Century* (1 ed.). W.W. Norton & Company. <https://scholar.harvard.edu/jfrieden/pages/global-capitalism-its-fall-and-rise-twentieth-century>
- Hansmann, H. (1996). *The Ownership of Enterprise*. Harvard University Press. <https://doi.org/10.2307/j.ctv1pncrw1>
- Hasan, R., Moore, M., & Handfield, R. (2020). Addressing social issues in commodity markets: Using cost modeling as an enabler of public policy in the Bangladeshi apparel industry. *Journal of Supply Chain Management*, 56(4), 25-44. <https://doi.org/https://doi.org/10.1111/jscm.12228>
- Heracleous, L., & Lan, L. L. (2012). Agency Theory, Institutional Sensitivity, and Inductive Reasoning: Towards a Legal Perspective. *Journal of Management Studies*, 49(1), 223-239. <https://doi.org/https://doi.org/10.1111/j.1467-6486.2011.01009.x>
- Hofmann, H., Schleper, M. C., & Blome, C. (2018). Conflict Minerals and Supply Chain Due Diligence: An Exploratory Study of Multi-tier Supply Chains. *Journal of Business Ethics*, 147(1), 115-141. <https://doi.org/10.1007/s10551-015-2963-z>
- Holly, G., Lysgaard, S. A., Veiberg, C. B., Morris, D., Dicalou, M., Feld, L., & Caygin, F. (2023). *How do the pieces fit in the puzzle? Making sense of EU regulatory initiatives related to business and human rights* (VI ed.). The Danish Institute for Human Rights. [https://www.humanrights.dk/files/media/document/EU-RegulatoryMeasuresExplainer\\_EN\\_august2023.pdf](https://www.humanrights.dk/files/media/document/EU-RegulatoryMeasuresExplainer_EN_august2023.pdf)
- Holweg, M., Reichhart, A., & Hong, E. (2011). On risk and cost in global sourcing. *International Journal of Production Economics*, 131(1), 333-341. <https://doi.org/https://doi.org/10.1016/j.ijpe.2010.04.03>
- Ireland, R. (2017). Rights and Modern Slavery: The Obligations of States and Corporations in Relation to Forced Labour in Global Supply Chains. *UCLJLJ*, 6, 100-129. <https://doi.org/10.14324/111.2052-1871.090>
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305-360. [https://doi.org/https://doi.org/10.1016/0304-405X\(76\)90026-X](https://doi.org/https://doi.org/10.1016/0304-405X(76)90026-X)
- Jones Day. (2024, March, 2024). *Third Time's a Charm: EU Moves to Approve the Sustainability Due Diligence Directive*. Jones Day. Retrieved 1 April from <https://www.jonesday.com/en/insights/2024/03/third-time-is-a-charm-eu-moves-to-approve-the-sustainability-due-diligence-directive>
- Kanda, H. (1992). Debtholders and Equityholders. *The Journal of Legal Studies*, 21(2), 431-448. <http://www.jstor.org/stable/724489>
- Kang, M., Wu, X., & Hong, P. (2009). Strategic outsourcing practices of multi-national corporations (MNCs) in China. *Strategic Outsourcing: An International Journal*, 2(3), 240-256. <https://doi.org/https://doi.org/10.1108/1753829091105153>
- Kinkel, S., & Maloca, S. (2009). Drivers and antecedents of manufacturing offshoring and backshoring—A German perspective. *Journal of Purchasing and Supply Management*, 15(3), 154-165. <https://doi.org/https://doi.org/10.1016/j.pursup.2009.05.007>
- Kolev, G. V., & Neligan, A. (2022). *Effects of a supply chain regulation: Survey-based results on the expected effects of the German Supply Chains Act* [IW-Report]. I. d. d. W. (IW). <https://hdl.handle.net/10419/251050>
- Kraakman, R., Armour, J., Davies, P., Enriques, L., Hansmann, H., Hertig, G., Hopt, K., Kanda, H., Pargendler, M., Ringe, W.-G., & Rock, E. (2017). *The Anatomy of Corporate Law: A Comparative and Functional Approach* (3 ed.). Oxford University Press. <https://doi.org/10.1093/acprof:oso/9780198739630.001.0001>
- Kshetri, N., & Loukoianova, E. (2019). Blockchain Adoption in Supply Chain Networks in Asia. *IT Professional*, 21(1), 11-15. <https://doi.org/10.1109/MITP.2018.2881307>
- Lafortune, G., Fuller, G., Kloke-Lesch, A., Koundouri, P., & Riccaboni, A. (2024). *European Elections, Europe's Future and the Sustainable Development Goals*. D. U. Press.
- Lassar, W. M., & Kerr, J. L. (1996). Strategy and Control in Supplier-Distributor Relationship: An Agency Perspective. *Strategic Management Journal*, 17(8), 613-632. [https://doi.org/https://doi.org/10.1002/\(SICI\)1097-0266\(199610\)17:8<613::AID-SMJ836>3.0.CO;2-B](https://doi.org/https://doi.org/10.1002/(SICI)1097-0266(199610)17:8<613::AID-SMJ836>3.0.CO;2-B)
- Lightle, B., Corrigan, S., Zipperer, K., Bible, M., Hoffman, R., Shah, T., Hilburn, J., Nelson, M., & Thiessen, B. (2024). *2024 ESG in M&A Trends Survey Rising influence of ESG*. Deloitte US. <https://www2.deloitte.com/content/dam/Deloitte/us/Documents/mergers-acquisitions/us-2024-ma-esg-survey.pdf>
- Lundan, S. M., & Muchlinski, P. (2012). Human Rights Due Diligence in Global Value Chains. In R. Van Tulder, A. Verbeke, & L. Voinea (Eds.), *New Policy Challenges for European Multinationals* (Vol. 7, pp. 181-201). Emerald Group Publishing Limited. [https://doi.org/10.1108/S1745-8862\(2012\)0000007011](https://doi.org/10.1108/S1745-8862(2012)0000007011)
- Maestrini, V., Luzzini, D., Caniato, F., & Ronchi, S. (2018). Effects of monitoring and incentives on supplier performance: An agency theory perspective. *International Journal of Production Economics*, 203, 322-332. <https://doi.org/https://doi.org/10.1016/j.ijpe.2018.07.08>
- Maneschi, A. (1992). Ricardo's international trade theory: beyond the comparative cost example. *Cambridge Journal of Economics*, 16(4), 421-437.



- <https://doi.org/https://doi.org/10.1093/oxfordjournals.cje.a035212>
- Mares, R. (2010). The limits of supply chain responsibility: A critical analysis of corporate responsibility instruments. *Nordic Journal of International Law*, 79(2), 193-244. <https://doi.org/https://doi.org/10.1163/157181010X12668401898995>
- Marques, J. C. (2017). Industry Business Associations: Self-Interested or Socially Conscious? *Journal of Business Ethics*, 143(4), 1-26. <https://doi.org/10.1007/s10551-016-3077-y>
- McCorquodale, R., Smit, L., Neely, S., & Brooks, R. (2017). Human Rights Due Diligence in Law and Practice: Good Practices and Challenges for Business Enterprises. *Business and Human Rights Journal*, 2(2), 195-224. <https://doi.org/10.1017/bhj.2017.2>
- Monczka, R. M., Handfield, R. B., Giunipero, L. C., & Patterson, J. L. (2021). *Purchasing & supply chain management* (7 ed.). Cengage Learning. <https://www.cengage.uk/c/purchasing-and-supply-chain-management-7e-monczka-handfield-giunipero-patterson/9780357442142/?searchISBN=0357442148>
- Nations, U. (2011). *Guiding Principles on Business and Human Rights: Implementing the United Nations 'Protect, Respect and Remedy' Framework*. P. S. U. N. Geneva. [https://www.ohchr.org/documents/publications/guidingprinciplesbusinesshr\\_en.pdf](https://www.ohchr.org/documents/publications/guidingprinciplesbusinesshr_en.pdf)
- Nemoto, T. (2022). *Supply chains, international trade and human rights – Policy brief* 2022/46). E. U. Institute. <https://data.europa.eu/doi/10.2870/965008>
- Noerr. (2024, 21 March, 2024). *CSDDD update: Breakthrough in European Corporate Sustainability Due Diligence Directive (CSDDD)?* Noerr. Retrieved 1 April from <https://www.noerr.com/en/insights/csddd-update-breakthrough-in-european-corporate-sustainability-due-diligence-directive>
- OECD. (2018). *OECD Due Diligence Guidance for Responsible Business Conduct*. <https://mneguidelines.oecd.org/OECD-Due-Diligence-Guidance-for-Responsible-Business-Conduct.pdf>
- OECD. (2023). *OECD Guidelines for Multinational Enterprises on Responsible Business Conduct*. OECD Publishing. <https://doi.org/doi:https://doi.org/10.1787/81f92357-en>
- Outhwaite, O., & Martin-Ortega, O. (2016). Human rights in global supply chains: Corporate social responsibility and public procurement in the European Union. *Hum. Rts. & Int'l Legal Discourse*, 10(1), 41-71. <https://research.stmarys.ac.uk/id/eprint/4316>
- Parliament, E. (2021, 23 September, 2021). *Corporate due diligence and corporate accountability: European Parliament resolution of 10 March 2021 with recommendations to the Commission on corporate due diligence and corporate accountability (2020/2129(INL))*. European Parliament. Retrieved 1 April from [https://www.europarl.europa.eu/doceo/document/TA-9-2021-0073\\_EN.html#title1](https://www.europarl.europa.eu/doceo/document/TA-9-2021-0073_EN.html#title1)
- Pedersen, E. R., & Andersen, M. (2006). Safeguarding corporate social responsibility (CSR) in global supply chains: how codes of conduct are managed in buyer-supplier relationships. *Journal of Public Affairs*, 6(3-4), 228-240. <https://doi.org/https://doi.org/10.1002/pa.232>
- Perrow, C. (1986). Economic theories of organization. *Theory and Society*, 15(1), 11-45. <https://doi.org/10.1007/BF00156926>
- Pianezzi, D., & Cinquini, L. (2016). Assessing the validity of accounting for human rights. *Qualitative Research in Accounting & Management*, 13(3), 370-391. <https://doi.org/10.1108/ORAM-09-2015-0084>
- PricewaterhouseCoopers. (2023, December 12). *The CSDDD: duties of care for sustainability*. PwC NL. Retrieved March 24 from <https://www.pwc.nl/en/insights-and-publications/themes/sustainability/the-csddd-duties-of-care-for-sustainability.html>
- Questions and Answers: Just and sustainable economy [Press release]*. (2022, February 23). [https://ec.europa.eu/commission/presscorner/detail/en/qanda\\_22\\_1146](https://ec.europa.eu/commission/presscorner/detail/en/qanda_22_1146)
- Rapezzi, M., Pizzi, G., & Marzocchi, G. (2024). What you see is what you get: the impact of blockchain technology transparency on consumers. *Marketing Letters*, 1-14. <https://doi.org/10.1007/s11002-024-09723-9>
- Ringe, W.-G., & Gözlüglöl, A. A. (2022). A Critique of EU Policymaking on Sustainable Corporate Governance and Finance. *Rethinking Europe: Geopolitical Perspectives by Groupe d'études géopolitiques*, 3(4), 127-134. <https://geopolitique.eu/wp-content/uploads/2022/08/RED-4-Rethinking-Capitalism-Summer-2022-VD.pdf>
- Ross, S. (1973). The Economic Theory of Agency: The Principal's Problem. *American Economic Review*, 63(2), 134-139. <https://www.aeaweb.org/aer/top20/63.2.134-139.pdf>
- Rubin, H. J., & Rubin, I. S. (2012). *Qualitative Interviewing: The Art of Hearing Data* (3 ed.). SAGE Publications. <https://us.sagepub.com/en-us/nam/qualitative-interviewing/book234196#description>
- Ruggie, J. G. (2007). Business and human rights: the evolving international agenda. *American Journal of International Law*, 101(4), 819-840. <https://doi.org/10.1017/S0002930000037738>
- Sarfaty, G. A., & Deberdt, R. (2024). Supply Chain Governance at a Distance. *Law & Social Inquiry*, 49(2), 1036-1059. <https://doi.org/10.1017/lsi.2023.17>
- Saunders, M., Lewis, P., & Thornhill, A. (2007). *Research methods for business students* (4 ed.). Pearson education.
- Schnurbein, G. v. (2009). Patterns of governance structures in trade associations and unions. *Nonprofit Management and Leadership*, 20(1), 97-115. <https://doi.org/https://doi.org/10.1002/nml.243>
- Sillanpää. (1998). The Body Shop values report—towards integrated stakeholder auditing. *Journal of Business Ethics*, 17(13), 1443-1456. <https://doi.org/info:doi/10.1023/A:1006099731105>
- Smit, L., Bright, C., McCorquodale, R., Bauer, M., Deringer, H., Baeza-Breinbauer, D., Torres-Cortés, F., Alleweldt, F., Kara, S., Salinier, C., Tejero Tobed, H., & Heasman, L. (2020). *Study on due diligence requirements through the supply chain*. E. Union. <https://researchportal.helsinki.fi/files/141073646/DSO120017ENN.en.pdf>
- Smit, L., Holly, G., McCorquodale, R., & Neely, S. (2020). Human rights due diligence in global supply chains: evidence of corporate practices to inform a legal standard. *The International Journal of Human Rights*, 25(6), 945-973. <https://doi.org/10.1080/13642987.2020.1799196>

- Smith-Roberts, A. (2022, 3 May, 2022). *Everything you need to know about the EU CSDD & EU CSRD*. Levin Sources. Retrieved 1 April from <https://www.levinresources.com/knowledge-centre/insights/eu-csdd-eu-csrd-mining>
- Social and Economic Council of the Netherlands (SER), & Dutch Accounting Standards Board (DASB). (2023). *CSRD and ESRS: Questions and answers*. <https://www.ser.nl/-/media/ser/downloads/thema/imvo/csrd-en-esrs-en.pdf?la=nl&hash=07FB0582C451A5D8FEB8D7317B45EA8D>
- Steinle, C., Schiele, H., & Ernst, T. (2014). Information Asymmetries as Antecedents of Opportunism in Buyer-Supplier Relationships: Testing Principal-Agent Theory. *Journal of Business-to-Business Marketing*, 21(2), 123-140. <https://doi.org/10.1080/1051712X.2014.903457>
- Stephens, T., & French, D. (2016). *ILA Study Group on Due Diligence in International Law - Second Report*. [https://www.ila-hq.org/en\\_GB/documents/draft-study-group-report-johannesburg-2016](https://www.ila-hq.org/en_GB/documents/draft-study-group-report-johannesburg-2016)
- Taherdoost, H., & Brard, A. (2019). Analyzing the Process of Supplier Selection Criteria and Methods. *Procedia Manufacturing*, 32, 1024-1034. <https://doi.org/https://doi.org/10.1016/j.promfg.2019.02.317>
- The Danish Institute for Human Rights. (2024, 10 January, 2024). *Promising yet flawed: EU Law on corporate sustainability faces key challenges*. The Danish Institute for Human Rights. Retrieved 1 April from <https://www.humanrights.dk/news/promising-yet-flawed-eu-law-corporate-sustainability-faces-key-challenges>
- Torrecchia, P. (2013). Social Accounting. In S. O. Idowu, N. Capaldi, L. Zu, & A. D. Gupta (Eds.), *Encyclopedia of Corporate Social Responsibility* (pp. 2167-2172). Springer Berlin Heidelberg. [https://doi.org/10.1007/978-3-642-28036-8\\_191](https://doi.org/10.1007/978-3-642-28036-8_191)
- Torres-Cortés, F., Salinier, C., Deringer, H., Bright, C., Baeza-Breinbauer, D., Smit, L., Tejero Tobed, H., Bauer, M., Kara, S., Alleweldt, F., & McCorquodale, R. (2020). *Study on due diligence requirements through the supply chain – Final report*. Publications Office of the European Union.
- Vachon, S., & Klassen, R. D. (2006). Extending green practices across the supply chain. *International Journal of Operations & Production Management*, 26(7), 795-821. <https://doi.org/10.1108/01443570610672248>
- Wagner, E., Matzutt, R., Pennekamp, J., Bader, L., Bajelidze, I., Wehrle, K., & Henze, M. (2022, May ). Scalable and Privacy-Focused Company-Centric Supply Chain Management. 2022 IEEE International Conference on Blockchain and Cryptocurrency (ICBC).
- Walter, A., & Burg, F. (2023, 6 July, 2023). *Preparing for the EU Corporate Sustainability Due Diligence Directive*. Pinsent Masons. Retrieved 1 April from <https://www.pinsentmasons.com/out-law/analysis/preparing-for-the-eu-corporate-sustainability-due-diligence-directive>
- Watson, D. H. (1988). *Managers of discontent* (1 ed.). Routledge. <https://doi.org/10.4324/9780203990452>
- Watt, H. M. (2011). Private international law beyond the schism. *Transnational legal theory*, 2(3), 347-428. <https://doi.org/10.5235/204140011800664120>
- Wormington, J. (2024). *Asleep at the Wheel*. Car Companies' Complicity in Forced Labor in China. <https://www.hrw.org/report/2024/02/01/asleep-wheel/car-companies-complicity-forced-labor-china>
- Yang, Y. S., Choi, T. Y., Carter, C. R., & Yin, R. (2022). Expanding the boundaries of buyer-supplier agency problems: Moving from dyad to triad. *Journal of Purchasing and Supply Management*, 28(3), 1-11. <https://doi.org/https://doi.org/10.1016/j.pursup.2022.100749>
- Yin, R. K. (2015). *Qualitative Research from Start to Finish* (2 ed.). Guilford Publications. <https://books.google.nl/books?id=DvpPCgAAQBAJ>
- Young, D. R. (1985). *Casebook of management for nonprofit organizations: Entrepreneurship and organizational change in the human services*. The Haworth Press. [https://books.google.nl/books/about/Casebook\\_of\\_Management\\_for\\_Nonprofit\\_Org.html?id=dxPHg1Z-NXMC&redir\\_esc=y](https://books.google.nl/books/about/Casebook_of_Management_for_Nonprofit_Org.html?id=dxPHg1Z-NXMC&redir_esc=y)

8. APPENDIX  
8.1. Appendix A

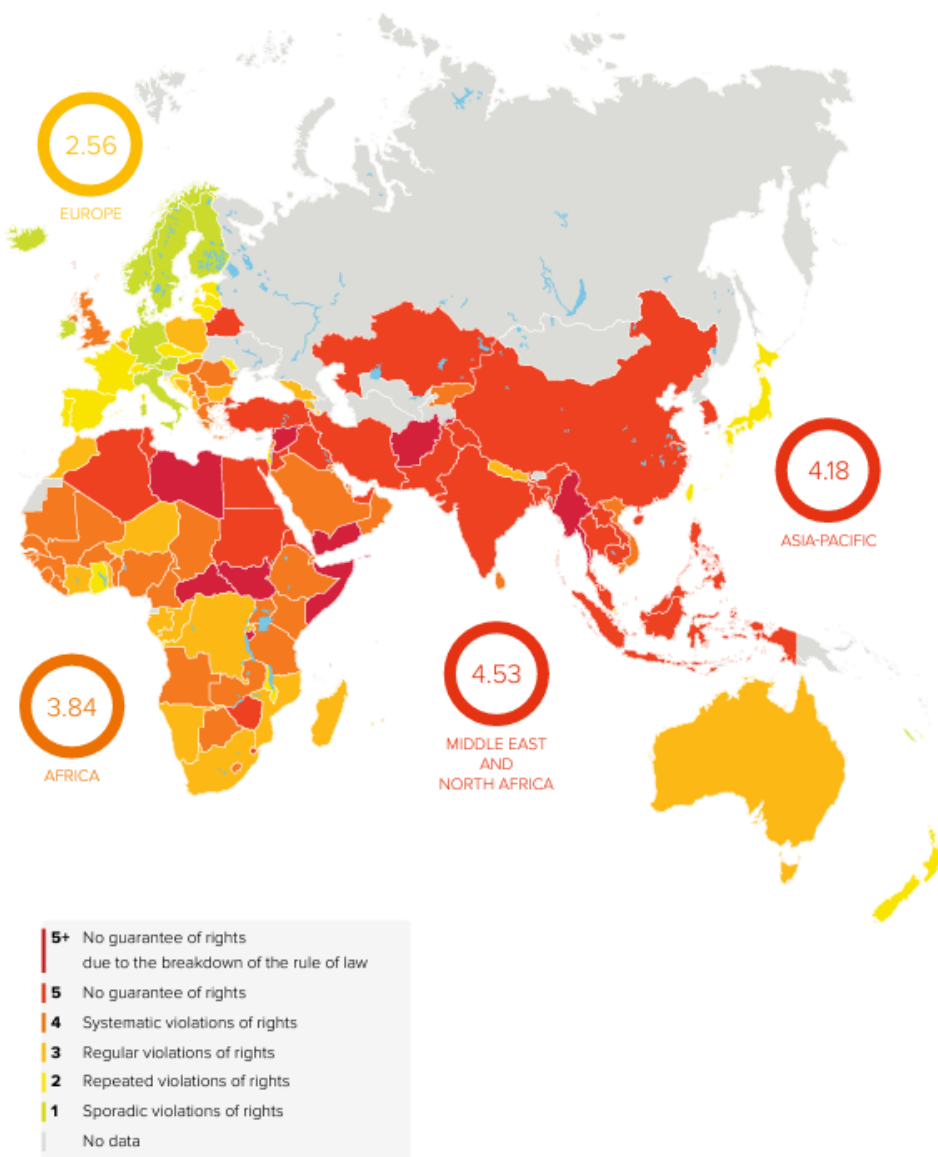


Figure 1. Violations of worker's rights rating per country (Confederation, 2023, p. 15).

## 8.2. Appendix B

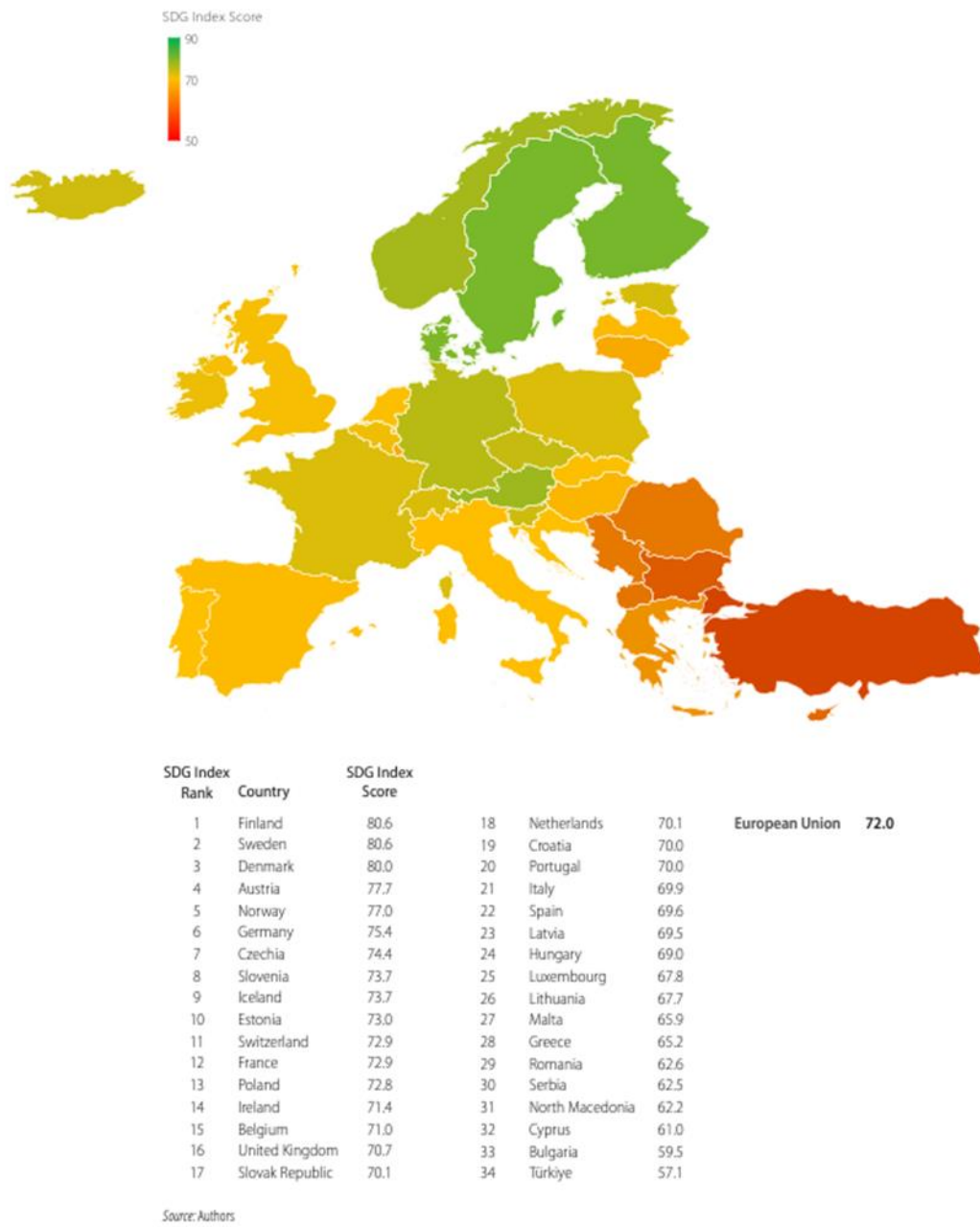


Figure 2. The 2023/24 SDG Index scores and rankings by country (Lafortune et al., 2024, p. 18).

### 8.3. Appendix C

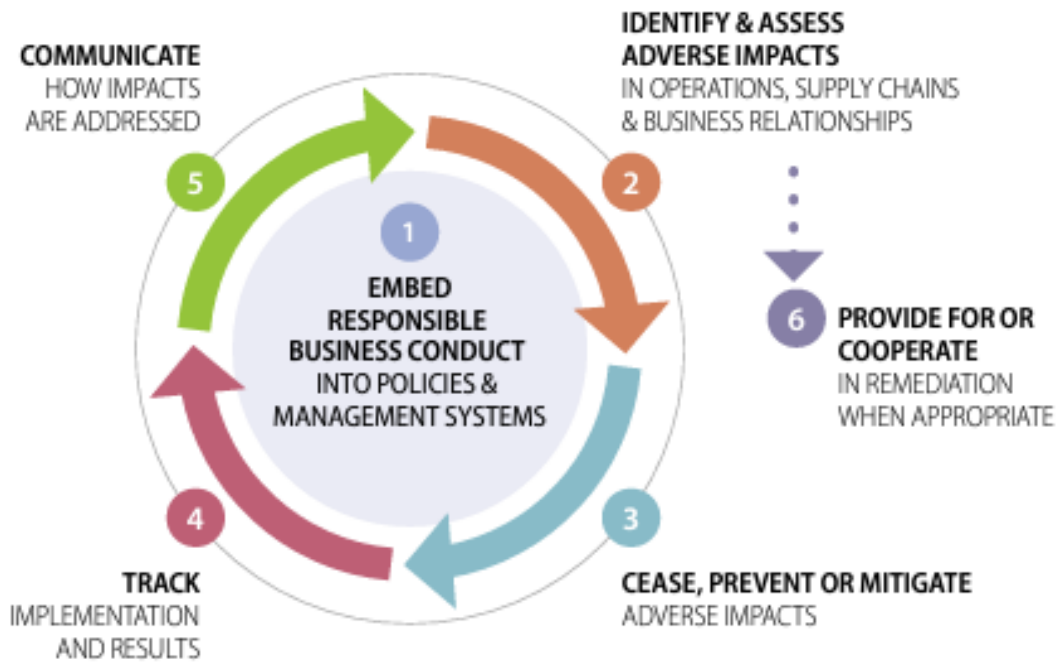


Figure 3. Due diligence process and supporting measures (OECD, 2018, p. 21).

## 8.4. Appendix D



Figure 4. Framework for social auditing (Sillanpää, 1998, p. 1447).

## 8.5. Appendix E1

It is important to note that a consent form was used before every interview to ask respondents for consent to process data and record the interview.

1. Every interview starts with introductions. The researcher introduces themselves and the research. The respondent introduces their function and organisation. An explanation is given about how the interview will proceed.
2. Challenges
  - 2.1. Can you discuss how well-prepared organisations are for integrating due diligence into policies and management systems?
  - 2.2. As the first part of the due diligence process under CSDDD (defined by OECD guidelines), companies must map/scope their chain of activities to identify high-risk areas through increasing transparency. Concerning this, what do you think are the main challenges in achieving transparency within supply chains?
    - i. Are there specific areas where transparency is particularly challenging?
  - 2.3. What types of information are challenging to obtain from your suppliers, and how do these gaps impact efforts to comply with regulations like the CSDDD?
    - i. How does this affect your ability to identify and assess adverse impacts?
  - 2.4. What challenges could you anticipate in managing supplier relationships to ensure compliance with CSDDD?
    - i. How difficult is implementing strategies that prevent, cease, or minimise adverse impacts? And why?
  - 2.5. What challenges do you anticipate or have experienced in engaging rights holders to ensure effective communication and remediation actions?
  - 2.6. How do you think introducing the prior sustainability initiatives impacted budget and resource allocation?
  - 2.7. What significant challenges do you anticipate in monitoring and assessing the measures' effectiveness?
  - 2.8. Are there other sustainability or due diligence challenges that concern you in relation to CSDDD implementation?
3. Measures
  - 3.1. What measures could you consider to manage your suppliers effectively under regulations like the CSDDD?
    - i. What technologies could facilitate due diligence processes?
  - 3.2. Do you anticipate introducing new contractual terms to ensure compliance with the CSDDD?
    - i. What are these terms, and how do they facilitate compliance?
  - 3.3. What are your views on collaborating with other firms to share due diligence efforts and costs?
  - 3.4. How do you plan to manage the financial burdens associated with CSDDD compliance?
    - i. Have there been any operational changes, such as price adjustments or changes in labour costs, that help meet the directive's requirements, or do you anticipate such?
  - 3.5. What proactive measures or innovative approaches would you consider effective in enhancing your organisation's due diligence and compliance practices?
    - i. What changes or improvements would you like to see?
  - 3.6. In case of non-compliance, what measures do you plan to address these violations or see companies take?
  - 3.7. Are there additional measures or strategies you think would be important to discuss regarding compliance with sustainability regulations?

Every interview closes with an explanation of how the data will be handled and a question about whether the respondent would like to receive the finished report in the future. Lastly, every respondent is thanked for taking the time to be interviewed and contributing to the research.



## 8.6. Appendix E2

IP#	Country	Role
1	Sweden	Social Sustainability Manager
2	Denmark	Senior Sustainability Manager
3	Sweden	Category Specialist
4	Finland	Senior Sourcing Manager
5	Denmark	Human Rights Manager
6	Finland	Sustainable Sourcing Manager
7	Sweden	Sustainability Manager
8	Sweden	ESG Reporting Analyst
9	Finland	Sustainability Manager
10	Finland	Sustainability Specialist
11	Finland	Head of Human Rights
12	Denmark	Group Sustainability Program Manager

Table 2. Interview participant profiles

## 8.7. Appendix F1

<i>Theme</i>	<i>Challenges</i>
<i>Organisation internal preparedness</i>	Lack of internal preparedness for CSDDD implementation
	Difficulty in instilling a sustainability mindset across a globally dispersed workforce
	Misalignment between sustainability and other functions due to lack of awareness and regulatory compliance
	Perception of sustainability as mainly environmental neglects social aspects, complicating comprehensive RBDD measures implementation
<i>Risk Mapping and Data Management</i>	The complexity of mapping risks across extensive and fragmented supply chains
	Difficulty in maintaining accurate and up-to-date information due to lengthy and constantly changing supply chains
	The unwillingness of suppliers to share information
	Defining and measuring social risks
	Managing extensive data generated by risk mapping, ensuring transparency and accessibility
<i>Supplier Management</i>	Insufficient motivation and low leverage to ensure supplier compliance
	Low trust and insufficient supplier incentives hinder the RBDD process
	Challenges in terminating contracts with non-compliant, high-dependency suppliers without disrupting the supply chain
	Difficulty in engaging with suppliers in regions with less developed technical capabilities and regulatory frameworks
	Supplier lack of resources and information to comply with due diligence requirements
	Supplier compliance monitoring, especially regarding social aspects
<i>Collaboration and Low Leverage</i>	Challenges in collecting information from traders due to competitive concerns and business secrets
	The reluctance of competitors within the supply chain to collaborate due to market rivalry and competitive pressures
	Difficulty in enforcing CSDDD compliance with large suppliers who have a dominant market position
	Increasingly reduced leverage over indirect suppliers and in circular business models
<i>Engagement with Rights Holders</i>	Lack of active engagement with rights holders and minimal existing efforts
	Challenges in establishing effective rights-holder dialogue due to power imbalances, language barriers, and logistical issues
	Difficulty in identifying legitimate and politically neutral stakeholders, particularly in foreign contexts
	Establishing effective communication channels to inform rights holders and internal stakeholders without overwhelming them, ensuring awareness and engagement
	Reluctance to communicate openly about difficult issues due to reputational risks and increased scrutiny
<i>Costs of Enhanced Due Diligence</i>	Increased costs associated with integrating an increased chain of actions wide RBDD
	Pressure to enhance sustainability efforts while also being pressured to reduce costs

Table 3. Results-based overview of the CSDDD implementation challenges

## 8.8. Appendix F2

<i>Theme</i>	<i>Measures</i>
<b><i>Sustainability Internal Integration</i></b>	Conduct comprehensive corporate-wide gap assessments, possibly with third-party involvement
	Integrate due diligence into tendering and contracting phases, requiring evidence of sustainability commitment from suppliers
	Establish transparent, sustainable procurement practices and supplier selection criteria
	Embed sustainability in everyday business decisions by integrating policies across the supply chain
	Implement internal training and awareness programs, including e-learning, face-to-face workshops, and annual sustainability policy training
	Appoint sustainability champions within each department to facilitate better implementation
	Translate sustainability language into department-specific terms to align goals with business objectives
<b><i>Risk Mapping and Monitoring</i></b>	Ask suppliers about their code of conduct towards their suppliers and sustainability practices, assessing the maturity of their due diligence processes to categorise suppliers based on risk levels
	Use verified management tools and third-party audits to maintain compliance and accuracy in risk assessments
	Implement sustainability surveys during high-leverage phases like tendering, onboarding, or contract negotiations to establish the current level of compliance and the need for development
	Develop social auditing programs for verifying compliance and addressing potential risks, with a focus on broader supply chain audits
<b><i>Supply Chain Restructuring</i></b>	Consider backshoring or localising suppliers in mutually beneficial ways to simplify supply chains and improve sustainability outcomes
	Engage with sustainably mature first-tier suppliers to reduce the need for involvement with lower-tier suppliers
<b><i>Supplier Relationship Management</i></b>	Establish robust supplier onboarding systems to collect necessary information before establishing partnerships
	Foster collaborative, consistent, and culturally aware communication to build trust and cooperation with suppliers
	Develop sustainable supplier development programs to build suppliers' capacity and sustainability knowledge
	Implement time-bound corrective action plans based on the severity of violations and conduct follow-up audits to ensure compliance
<b><i>Rights Holder Engagement</i></b>	Ensure contact points and grievance mechanisms are well-known, understandable, and operational
	Involve the communication department to enhance clarity and effectiveness of engagement
	Engage rights holders early in the due diligence process to address power dynamics and communication barriers
	Establish clear guidelines for rights holder involvement to streamline engagement and obtain meaningful insights
	Leverage local expertise for culturally sensitive communication, particularly in high-risk regions
<b><i>Collective Measures</i></b>	Collaborate across the industry to increase leverage, share best practices, and address structural issues
	Participate in associations and initiatives that facilitate collective RBDD measures
	Conduct joint audits and share requirements among competitors to streamline supplier engagement, drive changes, and audit fatigue
<b><i>Technological Solutions</i></b>	Implement blockchain technology to trace materials from high-risk areas and streamline data management
	Use worker voice technology to gain direct insights from workers, especially in high-risk supply chains
<b><i>Pricing and Contractual Clauses</i></b>	Consider increasing prices to incentivise suppliers to adopt more sustainable practices and to facilitate the cost of compliance
	Integrate human rights into the supplier code of conduct and contractual clauses to ensure effective monitoring and enforcement

Table 4. Results-based overview of the CSDDD implementation measures