administrative sciences

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Review

The Entrepreneurial Impact of the European Directive on Corporate Sustainability Due Diligence

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Abstract: The European Commission's Directive on Corporate Sustainability Due Diligence, adopted in 2022 and approved in 2024, mandates that companies identify, prevent, and mitigate hostile human rights and environmental impacts across their operations and supply chains, integrating sustainability into corporate governance. This article examines the directive's influence on European entrepreneurial activity, ecosystems, and innovation using a qualitative descriptive literature analysis, comparative frameworks, impact assessments, policy recommendations, and case studies. Findings suggest that while the directive imposes compliance challenges and costs, particularly for startups and small and medium-sized enterprises, it offers significant long-term benefits, such as improved risk management, enhanced reputation, and market differentiation. The directive promotes accountability and ethical practices, harmonizing due diligence across the EU and fostering a culture of sustainability. It concludes that companies addressing these impacts can gain a competitive edge and attract sustainability-focused investors, necessitating support mechanisms for startups and small and medium-sized enterprises to mitigate burdens and encourage compliance.

Keywords: sustainability; corporate social responsibility; corporate sustainability; due diligence; ESG; European Union; corporate governance

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Citation: Dempere, Juan, Eseroghene Udjo, and Paulo Mattos. 2024. The Entrepreneurial Impact of the European Directive on Corporate Sustainability Due Diligence. *Administrative Sciences* 14: 266. https://doi.org/10.3390/admsci14100266

Received: 5 August 2024
Revised: 6 September 2024
Accepted: 17 October 2024
Published: 20 October 2024

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1. Introduction

The European Commission's Directive on Corporate Sustainability Due Diligence (the directive henceforth) represents a landmark regulatory effort to embed sustainability principles into the fabric of business operations within the European Union (EU). Starting its adoption process on 23 February 2022, this directive sets forth stringent requirements for companies to systematically identify, prevent, and mitigate harmful effects on human rights and the environment throughout their operations and supply chains (European Commission 2022). The directive's adoption followed extensive consultations and negotiations, reflecting the EU's commitment to addressing global sustainability challenges and promoting responsible business conduct (Santaguida 2023).

The aim of this research article is to analyze the impact of the European Commission's Directive on Corporate Sustainability Due Diligence on European entrepreneurial activity, ecosystems, and innovation. The methodology adopted for this research is a comprehensive literature review, guided by the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) approach, which ensures a systematic and transparent process in identifying, screening, and synthesizing relevant studies. Through this method, this study critically examines the existing literature and case studies, applying comparative frameworks and impact assessments to understand the challenges and opportunities presented by the directive. The findings provide insights into how the directive influences startups and small and medium-sized enterprises, along with potential policy recommendations to support these entities in navigating compliance while fostering innovation and sustainability.

One of the innovative aspects of this directive is the introduction of a 'safe harbor' exemption, which could release companies from legal actions upon proof of a valid due diligence assessment (Poiedynok 2023). This provision balances corporate accountability with companies' practical challenges in ensuring compliance across complex global value chains. The directive also includes obligations related to climate change targets and harmonizes aspects of directors' fiduciary duties, further embedding sustainability into corporate governance frameworks (Ventura 2023).

On 24 May 2024, the EU Council formally approved the directive, marking a significant milestone in the EU's legislative process. This formal approval underscores the importance of EU institutions on corporate accountability and sustainable development (Bueno et al. 2024). The directive mandates that companies integrate due diligence processes into their corporate policies, continuously monitor compliance, and report on their efforts to address adverse impacts (Santaguida 2023). These requirements apply not only to large enterprises but also to startups and small and medium-sized enterprises (SUs and SMEs) operating in high-impact sectors, thereby broadening the scope of the regulation to include a significant portion of the EU's business landscape (Korka-Knuts 2024).

A notable aspect of the directive is its focus on human rights and environmental obligations within global value chains. This comprehensive approach ensures that European companies are held accountable for their operations worldwide, promoting ethical business practices and sustainability (Partzsch 2024). For instance, the directive includes provisions that require firms to develop and implement climate change plans, a significant step towards aligning corporate activities with the EU's climate goals (Feigerlová 2024).

The directive aims to harmonize due diligence procedures across the EU, creating a level playing field for firms and ensuring that all businesses contribute to sustainable development (Solodovnik 2022). This effort is crucial as it builds on existing international frameworks, such as the United Nations Guiding Principles (UNGPs) on Business and Human Rights and the OECD Guidelines for Multinational Enterprises (OECD-GME), reinforcing the EU's leadership role in promoting global sustainability standards (OECD 2011; United Nations 2011). This directive's adoption and formal approval signals a robust regulatory approach to corporate responsibility, with far-reaching implications for business operations, supply chain management, and stakeholder engagement within the EU (Santaguida 2023; Simons 2015).

The directive represents a comprehensive regulatory framework to foster sustainable business practices, protect human rights, and mitigate environmental harm. By requiring companies to take proactive measures to address adverse impacts, the directive seeks to drive a transformative change in how businesses operate and interact with their stakeholders (Buhmann 2024).

In analyzing the potential impacts of this directive on European entrepreneurial activity, ecosystems, and innovation, it is crucial to consider both the challenges and opportunities it presents. This harmonization standardizes compliance and promotes a more consistent application of sustainability principles across diverse industries (Szmelter-Jarosz 2022).

One of the primary challenges associated with the directive is the increased compliance costs for businesses, particularly SUs and SMEs operating in sensitive industries. These costs include implementing new reporting systems, staff training, and ongoing monitoring to ensure adherence to the directive's requirements (Esenduran et al. 2012). Nonetheless, these expenses can be compensated by the long-term gains of sustainable practices, such as improved risk management and enhanced reputation (Bachev 2007).

The directive mandates comprehensive due diligence processes for companies operating within the EU, which represents a significant regulatory shift to enhance corporate accountability and promote sustainable business practices (Ventura 2023). By introducing a general due diligence duty for companies and directors, the directive aims to foster sustainable corporate behavior and redefine the boundaries of firms toward a more sustainable economy (Ventura 2023).

One of the central areas of focus is the impact on entrepreneurial activity. The directive imposes new compliance obligations on businesses, which can directly and indirectly affect SUs and SMEs. These effects include increased compliance costs, administrative burdens, and potential barriers to market entry (Solodovnik 2022). For SUs and SMEs, which often run with constrained resources, the financial and administrative demands of complying with the directive can be particularly burdensome (Esenduran et al. 2012). These additional costs and complexities may deter new market entrants, thus potentially stifling innovation and competition (Prezioso and Coronato 2013).

However, the directive also offers opportunities for SUs and SMEs to enhance their competitiveness by adopting sustainable business practices. Compliance with the directive can improve risk management, enhance reputation, and open new markets prioritizing sustainability (Bachev 2007). For example, companies implementing robust due diligence processes may gain a competitive edge by attracting customers and investors, who are increasingly focused on corporate responsibility and sustainability (Bueno et al. 2024).

Another critical area of examination is the influence of the directive on business ecosystems within the EU. The directive's requirements for due diligence in supply chains necessitate changes in how companies manage their relationships with suppliers, customers, and other stakeholders (Ventura 2021). This due diligence can lead to shifts in supply chain management practices, fostering greater transparency and collaboration (Martín-Ortega 2018). However, it can also introduce complexities and costs that could impact the dynamics of business ecosystems (Ventura 2021). By requiring businesses to report on their environmental, social, and human rights impacts, the directive aims to promote sustainable business practices across entire supply chains (Martín-Ortega 2018). Through this analysis, we seek to uncover how the directive might reshape entrepreneurial interactions and networks within the EU, promoting or hindering collaboration among various entities, including businesses, non-governmental organizations (NGOs), and government bodies. Understanding these dynamics is critical for considering the broader implications of the directive on the EU's business landscape and its contribution to sustainable development.

Innovation is another key dimension to consider. The directive's emphasis on sustainability can serve as a catalyst for innovation in sustainable practices and technologies. Companies may be incentivized to invest in research and development (R&D) to advance new solutions that comply with the directive's requirements and mitigate adverse impacts (Sarkar 2013). This aspect of the analysis will explore whether the directive encourages or stifles innovation and how it influences the allocation of resources toward sustainable development initiatives (Kus and Grego-Planer 2021). For instance, the EU directive promoting energy use from renewable sources has offered small enterprises in the renewable energy sector opportunities for economic growth through innovation despite challenges related to financial factors and limited resources (Kus and Grego-Planer 2021).

This article is structured as follows: the next section provides a detailed overview of the European Commission's Directive on Corporate Sustainability Due Diligence, outlining its key provisions and objectives. Following this, the methodology section describes the systematic literature review approach, emphasizing the use of the PRISMA framework for data collection and analysis. The results section presents the findings of the review, highlighting the directive's implications for European entrepreneurial activity, ecosystems, and innovation. This is followed by a discussion that contextualizes the results within the broader sustainability and corporate governance landscape. Finally, the article concludes with policy recommendations and suggestions for future research, aiming to support entrepreneurs and policymakers in adapting to the directive's challenges and leveraging its opportunities for sustainable development.

2. Methods

2.1. Preferred Reporting Items for Systematic Reviews and Meta-Analyses

This research utilizes a scoping review methodology to explore the entrepreneurial impact of the directive. Scoping reviews systematically gather, assess, and synthesize the

existing literature to highlight key concepts, evidence types, and research gaps within a field (Arksey and O'Malley 2005). This method effectively maps the directive's multifaceted implications by examining the literature, frameworks, impact assessments, and case studies (European Commission 2022). It offers a thorough analysis of how the directive affects various business operations, with a particular focus on SUs and SMEs (European Innovation Council and SMEs Executive Agency n.d.).

This study applies the scoping review method following the PRISMA framework for scoping reviews (Tricco et al. 2018). The analysis draws on a broad range of sources, including legal texts, policy documents, and the academic literature. Primary materials comprise the European Commission's Directive and related EU regulations (European Commission 2022) while secondary sources include academic research, international reports, and policy briefs that provide context and insights into the directive's framework. Foundational documents, like the OECD-GME and the UNGPs, are integral in shaping the directive's objectives (OECD 2018; United Nations 2011). A systematic search of academic databases, legal repositories, and official EU resources was conducted to capture a comprehensive view of the directive and its broader impacts (International Monetary Fund 2024; World Bank 2020).

The scoping review method is especially suited for this study as it facilitates an extensive examination of the directive's entrepreneurial impact. This method aids in pinpointing crucial sources and evidence types, enabling a detailed assessment of research methodologies and offering a clearer understanding of key insights within the domain (Peters et al. 2021; Nadkarni and Prügl 2021). Additionally, it plays a vital role in identifying gaps in the current literature, helping guide future research directions (Cooper et al. 2018). By conducting a comparative analysis of international sustainability standards, such as the UNGPs, OECD-GME, UK's Modern Slavery Act, and US Dodd-Frank Act, this method situates the directive within the global regulatory landscape (United Nations 2011; OECD 2011; UK Government 2015; US Congress 2010). The selected criteria for these comparisons—relevance to corporate sustainability, business impact, and scope—help contextualize the directive and highlight potential best practices and challenges (Bartley 2018; Sethi et al. 2017).

The impact analysis evaluates the directive's likely effects on key business areas, such as compliance costs, administrative load, supply chain management, innovation, and regional disparities (European Commission 2022). This qualitative analysis relies on a thorough review of the directive's provisions and their practical outcomes for companies, with a particular focus on SUs and SMEs. Information was gathered through case study reviews, industry report analysis, and expert consultations to pinpoint challenges and opportunities posed by the directive (Kourula et al. 2017). This approach ensures a comprehensive understanding of how the directive could reshape business practices and interactions within the EU.

Drawing from the literature review and impact analysis, this study offers policy recommendations aimed at optimizing the directive's impact while minimizing its negative effects on businesses. These recommendations are crafted by identifying best practices from other regulatory models. The focus is on delivering targeted assistance to SUs and SMEs, streamlining compliance procedures, and encouraging innovative solutions to sustainability challenges. This ensures that the directive successfully achieves its sustainability objectives without hindering economic progress (European Commission 2022; International Monetary Fund 2024).

To comprehensively identify the relevant literature, this process involves a structured and systematic search across multiple databases and information platforms, ensuring a thorough evaluation of the existing evidence. The search strategy is carefully crafted to address the specific research inquiry, utilizing precise keywords and Boolean operators to capture all pertinent studies. This extensive search includes authoritative databases, such as PubMed, Web of Science, IEEE Xplore, Scopus, Google Scholar, ACM Digital Library, ScienceDirect, JSTOR, ProQuest, SpringerLink, EBSCOhost, and ERIC. The search is expansive, encompassing not only peer-reviewed academic articles but also grey literature,

reports, guidelines, case notes, and other relevant materials to ensure a comprehensive review of the topic.

This study incorporates case studies and examples from non-EU countries that have implemented comparable regulations to shed light on the directive's possible impacts. Selection criteria include alignment with the directive's goals, detailed available documentation, and demonstrated effects on business operations (OECD 2021). This approach extracts valuable lessons that can guide the directive's implementation within the EU, offering practical insights for policymakers and businesses (Kourula et al. 2017).

The search strategy utilized is dynamic and continuously refined, adapting as new relevant studies emerge. This flexible approach ensures a comprehensive and up-to-date portrayal of the research landscape. Additionally, the process is enhanced by manually reviewing the reference lists of initially identified studies. This careful hand-searching of bibliographies and relevant reviews serves as a crucial complement, uncovering additional studies that may have been missed during the initial database search. This multi-layered and meticulous method ensures the inclusion of the most pertinent and current research in the field (Horsley et al. 2011).

Figure 1 visually represents the article selection process for this review, detailing the progression from initial identification to the final inclusion of sources. It clearly delineates each phase of selection and specifies the reasons for excluding certain studies. In the initial stage, labeled 'Identification of sources via other methods,' 97 records were identified, consisting of 74 from websites and 23 from news organizations. Of these, 77 papers were deemed eligible for further retrieval, with 17 being excluded for not meeting the inclusion criteria. Out of the 60 remaining studies, 23 were excluded due to their length, leaving a final total of 37 reports that were thoroughly reviewed and included in the analysis. This rigorous process not only guarantees the careful selection of the pertinent literature but also enhances transparency in the methodology used for article inclusion.

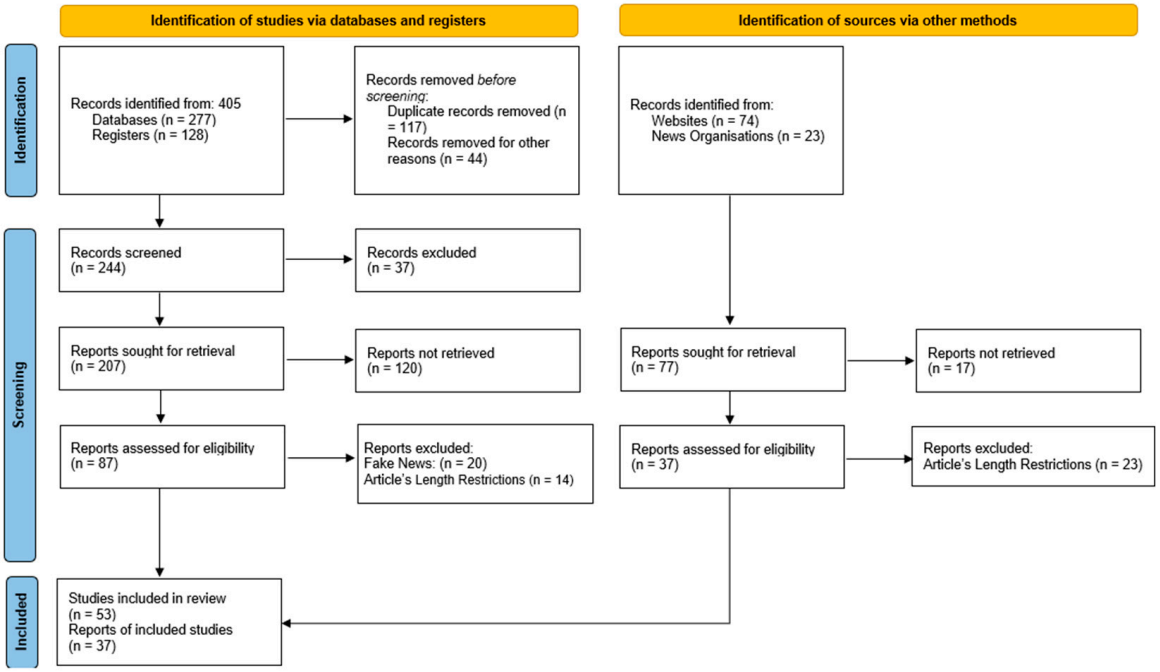


Figure 1. PRISMA flow diagram. Source: Page et al. (2021). For more information, visit http://www.prisma-statement.org/ (accessed on 19 July 2024).

In the subsequent phase, 'Identification of sources via databases and registers,' we initially identified 405 entries—comprising 277 documents from various databases and 128 records from registers. Prior to the screening stage, we excluded 161 papers: in total, 117 were duplicates while 44 were removed for other reasons. This reduced the pool to

244 records for screening. Of these, 37 were omitted for not meeting the inclusion criteria. We initially aimed to assess 207 papers post-screening but 120 were excluded based on the exclusion criteria. Following a thorough evaluation, we reviewed 87 records and excluded 34 articles—20 containing inaccuracies and 14 due to excessive length. Ultimately, we incorporated 53 articles from databases and registers and 37 from other sources, resulting in 90 secondary sources being included in our analysis. This systematic approach ensured a thorough and accurate selection of the pertinent literature for our research.

After pinpointing the relevant literature, a thorough examination and synthesis are carried out to address the research inquiry. This phase involves systematically extracting essential data from each chosen study, encompassing their attributes, methodologies, and key outcomes (Cooper et al. 2018; Atkinson and Cipriani 2018). The data extraction process adheres to a structured methodology, employing a pre-designed template to ensure consistency and precision across all analyzed studies (Taylor et al. 2021).

The PRISMA framework serves as a solid foundation for assessing the directive's comprehensive impacts. By integrating the literature review, comparative analysis, impact assessment, policy recommendations, and case studies, this article delivers a holistic view of the directive's effects on European businesses (European Commission 2022). The strength of the PRISMA method lies in its systematic approach, allowing for a nuanced understanding of the complex relationship between regulatory requirements and business operations (Bartley 2018). Overall, PRISMA enhances this study's goals by providing detailed, actionable insights into how the directive supports sustainable business practices within the EU (OECD 2021).

2.2. Research Strategy and Data

To structure the literature review, the references from the article can be categorized into several groups: academic articles, regulatory documents, industry reports, and institutional publications. Each of these categories contributes to the overall understanding of the research area by providing insights from different perspectives:

- Academic *Articles:* Academic research in the field of business, human rights, and sustainability is well-represented. For instance, studies like those by Bartley (2018), which examine private authority in the global economy, and Jamali and Karam (2018), focusing on corporate social responsibility in developing countries, provide a strong theoretical foundation for the role of corporations in global supply chains (Bartley 2018; Jamali and Karam 2018). Other important contributors include LeBaron and Lister (2021), who explore ethical audits and the supply chains of global corporations (LeBaron and Lister 2021);
- *Regulatory Documents:* Regulatory frameworks, such as the Modern Slavery Act of both the Australian Government (2018) and the UK Government (2015), highlight the legal measures taken by different nations to address labor exploitation and modern slavery in global supply chains (Australian Government 2018; UK Government 2015). Similarly, the Dodd-Frank Wall Street Reform and Consumer Protection Act by the US Congress (2010) introduces conflict minerals regulations, contributing to corporate social responsibility in global industries (US Congress 2010);
- *Industry Reports:* Several industry reports focus on the sustainability practices and transparency measures within global supply chains. For example, the OECD (2023a) guidelines on responsible business conduct provide comprehensive recommendations for companies engaging in international trade (OECD 2023a). Reports by the Global Reporting Initiative (2020) and World Bank (2020) further emphasize sustainability and transparency in supply chain management (Global Reporting Initiative 2020; World Bank 2020);
- *Institutional Publications:* Publications from institutions like Amnesty International (2016) and the Clean Clothes Campaign (2024) bring attention to the human rights issues within global supply chains, especially in industries with vulnerable labor forces, such as palm oil production and garment manufacturing (Amnesty International 2016;

Clean Clothes Campaign 2024). These reports highlight the challenges of ensuring ethical practices in complex global networks.

This categorization offers a comprehensive view of the different dimensions of sustainability, corporate responsibility, and regulatory compliance in global supply chains, as reflected in the secondary sources of the article.

3. Results

3.1. Overview of the Directive: Purpose and Scope

The directive, initially adopted on 23 February 2022 and formally approved by the EU Council on 24 May 2024, marks a significant milestone in the EU's commitment to promoting sustainable business practices. The directive's primary objective is to ensure that companies operating within the EU address harmful human rights and environmental effects arising from their operations and supply chains. This comprehensive regulatory framework fosters responsible corporate behavior, enhances transparency, and promotes sustainable development across various sectors (European Commission 2022).

By mandating due diligence processes, the directive encourages firms to integrate social and environmental concerns into their business strategies, ultimately leading to more sustainable and ethical business practices (Bueno et al. 2024). The directive mandates that companies integrate due diligence processes into their corporate strategies and operations. This integration involves identifying, preventing, and mitigating current or prospective harmful effects on human rights and the environment (Mak 2022). The directive applies to a variety of companies, including SUs and SMEs and large corporations, albeit with varying obligations based on the company's size, sector, and operational reach (Poiedynok 2023). By imposing these requirements, the directive seeks to create a common ground where all firms are held accountable for their environmental and social impacts (Thorens et al. 2024).

The scope of the directive extends to all sectors, with particular emphasis on high-impact industries, such as textiles, agriculture, and extractive industries. Due to the nature of their operations and the complexity of their supply chains, companies within these sectors are often linked to significant human rights and environmental risks. Focusing on these high-risk sectors, the directive aims to address some of the most imperative sustainability challenges and drive meaningful change to where it is most needed (Mak 2022).

Moreover, the directive outlines specific steps companies must take to comply with its requirements. These steps include integrating due diligence into corporate policies, conducting risk assessments, implementing preventive and corrective measures, and establishing grievance mechanisms (European Commission 2022). By embedding due diligence into corporate strategies, companies ensure that sustainability considerations become integral to their decision-making processes (Bonnitcha and McCorquodale 2017). Comprehensive risk assessments allow companies to identify and prioritize potential adverse impacts on human rights and the environment, which is crucial for developing targeted and effective mitigation strategies (OECD 2018).

Implementing preventive and corrective measures involves taking proactive steps to avoid potential risks and addressing any issues that arise promptly. This strategy helps manage risks and fosters a culture of permanent improvement and accountability within organizations (United Nations 2011). Establishing grievance mechanisms allows stakeholders to voice concerns and seek redress, enhancing transparency and trust between companies and their stakeholders (Shift Project 2014).

Furthermore, companies must monitor the effectiveness of their due diligence processes and report publicly on their findings and actions. This ongoing monitoring ensures that companies remain vigilant and responsive to emerging risks while public reporting fosters transparency and accountability (Global Reporting Initiative 2020).

This structured approach ensures that companies systematically address sustainability risks and continuously improve their practices. By adhering to these comprehensive due diligence requirements, businesses mitigate risks and contribute to broader sustain-

able development goals, promoting a more ethical and sustainable business environment (European Commission 2022).

A key feature of the directive is its emphasis on supply chain management. Recognizing that many adverse impacts occur at various supply chain stages, the directive requires companies to extend their due diligence efforts beyond their immediate operations to include their suppliers and business partners (European Commission 2022). This holistic approach encourages companies to foster stronger relationships with their suppliers, promote sustainable practices throughout the value chain, and enhance overall supply chain resilience (OECD 2018).

By mandating due diligence across the supply chain, the directive aims to mitigate risks associated with human rights harms and environmental deprivation, which are often prevalent in the lower tiers of supply chains (United Nations 2011). This comprehensive strategy ensures that companies take responsibility not only for their direct actions but also for the actions of their business partners, thereby advancing a more sustainable and ethical corporate environment (Thorlakson et al. 2018). Moreover, this approach aligns with global sustainability frameworks, such as the United Nations Sustainable Development Goals, particularly Goal 12, which focuses on responsible consumption and production (United Nations 2015). By integrating these principles into supply chain management, businesses can contribute to broader sustainability objectives, fostering long-term economic, social, and environmental benefits (Sustainable Supply Chain Initiative 2020).

Overall, the directive's focus on supply chain management is a critical step towards ensuring that companies adopt a proactive stance in mitigating adverse impacts and promoting sustainability across their operations. This approach strengthens the resilience and integrity of global supply chains and enhances corporate accountability and stakeholder trust (Bonnitcha and McCorquodale 2017).

3.2. Key Provisions

The directive imposes several key requirements and obligations on companies to promote responsible business conduct and sustainable practices. These provisions ensure that companies proactively address the human rights and environmental effects of their activities and supply chains. Table 1 summarizes such key provisions below.

Table 1. Key provisions of the EU Commission's Directive on Corporate Sustainability Due Diligence.

Key Provisions	Description	Article Reference
Due Diligence Measures	Companies must integrate comprehensive due diligence measures into their corporate policies to identify, avoid, mitigate, and account for harmful human rights and environmental impacts. This includes conducting risk assessments and implementing preventive and corrective actions.	Article 6
Stakeholder Engagement	Companies are required to engage with stakeholders, such as workers, civil society, and trade unions, to ensure that those potentially affected by operations are involved in the due diligence process.	Article 6
Reporting Requirements	Firms must publicly report on their due diligence activities, including risks identified, measures taken, and outcomes, in an annual statement published on their website by 30 April each year.	Article 11
Corrective Action Plans	When adverse impacts are identified, companies must take corrective actions to neutralize the impact or minimize its extent. This may include providing compensation or seeking assurances from business partners for compliance.	Article 8
Grievance Mechanisms	Companies must establish effective grievance mechanisms, allowing individuals and businesses to submit complaints regarding harmful impacts. These complaints should be addressed promptly and transparently.	Article 9
Monitoring and Continuous Improvement	Companies are required to carry out periodic assessments of their operations and value chains to evaluate the effectiveness of their due diligence measures. Based on the findings, companies must update their policies to remain aligned with evolving standards and risks.	Article 10

3.3. Affected Entities

The directive encompasses a wide range of companies and sectors throughout the EU. Its scope extends to entities based on factors such as size, industry, and operational scale, ensuring that major economic players uphold sustainable business practices (European Commission 2022). The directive predominantly focuses on large enterprises due to their substantial role in global supply chains and their significant environmental and social impacts (OECD 2018). Article 2 mandates compliance for firms with more than 500 employees and a net global turnover exceeding EUR 150 million in the previous fiscal year (European Union 2022). These large corporations, being key drivers of international trade, have the resources to adopt robust due diligence processes, which are essential for mitigating human rights and environmental risks (Bonnitcha and McCorquodale 2017).

Beyond large corporations, the directive also targets high-risk sectors prone to significant human rights and environmental issues. Businesses in these industries fall under the directive if they maintain an average workforce of over 250 employees and a global turnover exceeding EUR 40 million, with at least 50% of their income derived from high-risk activities (European Union 2022). These sectors are outlined in Table 2 below.

Table 2. Industry sectors affected by the EU Commission's Directive on Corporate Sustainability Due Diligence.

Affected Entities	Description	Reference
Large Enterprises	Companies with more than 500 employees and a net worldwide turnover exceeding EUR 150 million. These enterprises, often influential in global supply chains, are expected to implement comprehensive due diligence.	Article 2 (European Union 2022)
High-Impact Sectors	Companies with more than 250 employees and a net worldwide turnover of over EUR 40 million, where at least 50% of turnover is generated from high-risk industries.	Article 2 (European Union 2022)
Textiles and Apparel	The sector faces challenges related to labor rights violations, unsafe working conditions, and environmental impacts. The Rana Plaza tragedy highlighted these issues within global supply chains.	Clean Clothes Campaign (2024)
Agriculture and Food	Industries involved in agriculture, forestry, and food production, often dealing with challenges such as land use, deforestation, and labor rights. The palm oil industry exemplifies the need for oversight.	Amnesty International (2016); FAO (2023)
Extractive Industries	Mining and resource extraction sectors are known for environmental damage, community displacement, and human rights abuses. The Democratic Republic of Congo's mining industry is a key example.	World Bank (2021a); UNICEF (2012)
Manufacturing and Trade of Chemicals and Fuels	Involves primary metals manufacturing and wholesale trade of minerals and intermediate products. The sector's environmental impacts, such as pollution, demand comprehensive due diligence.	OECD (2018); European Environment Agency (2020)

The directive also covers certain financial sector entities, given their pivotal role in funding and enabling business operations. Regulated financial undertakings, such as credit institutions, investment firms, insurance companies, and pension funds, are required to conduct due diligence on the activities of their clients and the companies they invest in (European Commission 2022). Article 3 specifies that the value chain of financial services should include the activities of clients receiving financial services and the companies related to these activities, thus extending the directive's reach to the financial sector's indirect impacts (European Commission 2022). This extension is particularly significant in ensuring financial institutions consider environmental, social, and governance (ESG) factors in their investment decisions, promoting sustainable finance (European Banking Authority 2020).

While the primary focus is on large companies and high-impact sectors, the directive also indirectly affects SUs and SMEs within the value chains of larger companies. Although not directly targeted, SUs and SMEs may be required to conform to due diligence requirements levied by their larger business partners (OECD 2018). This cascading effect ensures that smaller entities adhere to responsible business practices, even if not within the directive's scope (OECD 2018). However, it also poses challenges for SUs and SMEs, which may need additional support and resources to meet these requirements (European Innovation Council and SMEs Executive Agency n.d.).

The directive's influence extends beyond the EU, covering third-country companies that generate significant turnover within the union. Article 2 applies to non-EU companies with net turnover exceeding EUR 150 million in the union or those generating between EUR 40 million and EUR 150 million with substantial operations in high-impact sectors (European Commission 2022). This inclusion ensures that foreign companies with considerable business activities in the EU are held to the same standards as domestic companies, promoting a level playing field and global accountability (UNCTAD 2020).

3.4. Potential Negative Impact on Entrepreneurial Activity

3.4.1. Initial Implementation Costs

Implementing the directive requires substantial upfront investment from SUs and SMEs, particularly in enhancing their systems and processes to align with new mandates. The directive necessitates that companies establish thorough due diligence frameworks, integrating advanced software solutions for tracking and reporting sustainability metrics (European Commission 2022). These improvements are both technical and procedural, demanding the adoption of new methodologies for identifying, preventing, mitigating, and accounting for adverse human rights and environmental impacts within operations and supply chains (OECD 2011).

To comply with these obligations, SUs and SMEs must deploy or upgrade IT systems capable of managing extensive data collection and reporting requirements specified by the directive. This includes implementing platforms that monitor compliance across complex value chains, crucial for identifying and mitigating potential negative impacts as required by Article 6 of the directive. The directive stipulates that companies must "*... integrate due diligence into all their corporate policies and have in place a due diligence policy...*" (European Commission 2022, p. 56), covering the firm's due diligence approach, code of conduct, and implementation procedures, all necessitating robust digital solutions.

The directive also emphasizes the need for continuous monitoring and regular assessments of due diligence measures, further underscoring the importance of adaptable IT infrastructures. These systems must be capable of conducting periodic evaluations, at least annually, and revising strategies in response to new risks, as mandated by Article 10 (European Commission 2022). Companies like SAP and IBM offer sustainability solutions that automate compliance reporting, showcasing how advanced IT systems can support regulatory adherence (SAP n.d.; IBM n.d.). However, these solutions may be cost-prohibitive for some SUs and SMEs.

Additionally, SUs and SMEs will incur significant expenses related to workforce training and education. The directive mandates that companies "*. . .provide targeted and proportionate support . . .*" (European Commission 2022, p. 57), including employee training, to ensure effective implementation of the new compliance measures. This requires comprehensive training programs to educate staff on the directive's details, the specific procedures they must follow, and broader principles of corporate sustainability and human rights (OECD 2021).

Ongoing training programs are essential to keep employees updated on compliance requirements and methodologies (International Labour Organization n.d.). This is particularly important given the directive's focus on continuous improvement and the need for a workforce capable of adapting to emerging risks (UN Global Compact n.d.). Costs associated with these training initiatives include the development and delivery of training

materials and potentially hiring external consultants or experts for specialized knowledge (International Finance Corporation 2015).

In summary, the initial costs for SUs and SMEs to comply with the directive are considerable, stemming from the need to establish and enhance systems and processes and significant investments in training and education (European Commission 2022). These investments enable SUs and SMEs to effectively integrate due diligence into their corporate strategies and operations, aligning with the directive's goals of promoting sustainable and responsible business practices across the EU (European Parliament 2021).

3.4.2. Ongoing Compliance Costs

One of the significant ongoing costs that SUs and SMEs will face under the directive is the continuous need for monitoring and reporting compliance activities. The directive mandates that companies, including SUs and SMEs, regularly track and report their due diligence efforts and impacts on human rights and the environment. This obligation will require additional staff or consultants specializing in sustainability and compliance management (European Commission 2022). These professionals will ensure that all compliance activities are accurately monitored, documented, and reported to the relevant authorities.

The directive states that companies must "*. . .respect of the human rights and environment in their own operations and through their value chains, by identifying, preventing, mitigating and accounting for their adverse human rights, and environmental impacts, and having adequate governance, management systems and measures in place to this end. . .*" (European Commission 2022, p. 5). This requirement involves regular updates to compliance reports, ongoing risk assessments, and implementing corrective actions when necessary. For SUs and SMEs, this could mean setting up dedicated compliance teams or departments, which is a substantial financial and administrative burden. Moreover, the complexity of the reporting requirements will likely require integrating sophisticated software solutions to manage and automate the monitoring and reporting processes effectively (KPMG 2023).

In addition to ongoing monitoring and reporting, SUs and SMEs will face considerable costs associated with periodic audits and obtaining certifications to demonstrate compliance with the directive. These audits are essential to verify that due diligence processes and practices meet the standards mandated by the directive. Article 6 requires companies to conduct periodic assessments to ensure the effectiveness of their due diligence measures. The need for regular third-party audits presents a substantial financial challenge for SUs and SMEs as these external reviews can be costly and require specialized expertise (KPMG 2023).

The directive stipulates that companies will bear the cost of independent third-party verification, defined as "*. . .verification of the compliance by a company, or parts of its value chain, with human rights and environmental requirements resulting from the provisions of this Directive by an auditor which is independent from the company, free from any conflicts of interests, has experience and competence in environmental and human rights matters and is accountable for the quality and reliability of the audit. . .*" (European Commission 2022, p. 54). This verification process, which includes periodic audits, represents a significant financial burden for SUs and SMEs. Additionally, obtaining certifications from recognized bodies to prove compliance will further increase costs.

The directive also imposes continuous monitoring and reporting obligations. SUs and SMEs must implement systems capable of consistently tracking their compliance with sustainability criteria, including regular updates and reporting. Article 10 requires companies to report annually on their due diligence activities, detailing any identified adverse impacts and the measures taken to address them (European Commission 2022). Establishing and maintaining a comprehensive data collection and management system to meet these obligations can be expensive, particularly for smaller businesses. The costs associated with hiring or training personnel to manage these systems and generate the necessary reports will add to the financial strain on SUs and SMEs.

Overall, the directive will impose significant ongoing compliance costs on SUs and SMEs, including continuous monitoring and reporting, periodic audits, and obtaining

necessary certifications. While these requirements are crucial for ensuring sustainable and ethical business practices, they pose substantial financial and administrative challenges for SUs and SMEs.

3.4.3. Administrative Burdens

The directive places substantial documentation and record-keeping demands on companies to ensure compliance. Article 4 requires firms to "*. . .conduct human rights and environmental due diligence. . .*" (European Commission 2022, p. 55), which involves integrating due diligence into company policies, identifying adverse impacts, and taking preventive or corrective actions. This necessitates comprehensive documentation and meticulous record keeping, a significant burden for SUs and SMEs with limited administrative resources (European Commission 2023).

Companies must also establish and annually update a due diligence policy, including a code of conduct and processes for implementing due diligence measures, as mandated by Article 5. This ongoing task increases the administrative workload (European Commission 2022). Additionally, periodic assessments of operations, subsidiaries, and business partners must be documented and reported, requiring continuous resource allocation for record management (OECD 2018).

The directive emphasizes stakeholder engagement, requiring companies to consult with various stakeholders to gather information on actual and potential adverse impacts (European Commission 2022). For SUs and SMEs, engaging stakeholders—such as suppliers, customers, and community groups—throughout the supply chain can be resource-intensive (OECD 2018). This process involves not only initial consultations but also ongoing dialogue to monitor and mitigate risks, adding complexity to their administrative tasks (UN Global Compact n.d.).

SUs and SMEs are also required to obtain contractual commitments from their business partners to adhere to the company's code of conduct and due diligence measures (European Commission 2022). This process, known as contractual cascading, along with the necessary compliance verification, requires substantial administrative effort (International Labour Organization n.d.). Companies must develop and manage contracts, monitor compliance, and potentially support their partners in meeting these requirements (KPMG 2023).

Given the comprehensive nature of the due diligence process required by the directive, SUs and SMEs must be diligent regarding documentation and stakeholder engagement to avoid sanctions (OECD 2018). Article 18 allows supervisory authorities to request information and conduct investigations regarding compliance, requiring companies to provide the necessary documentation upon request (European Commission 2022). Non-compliance could lead to corrective measures or financial penalties, making it crucial for SUs and SMEs to maintain detailed records and documentation (International Labour Organization n.d.).

Moreover, the directive obliges companies to integrate due diligence into all corporate policies and operations, which may require creating new systems or upgrading existing ones to manage documentation and record keeping efficiently (European Commission 2022). This integration includes establishing procedures for handling complaints (Article 9) and monitoring the effectiveness of due diligence measures (Article 10), further increasing the administrative burden on SUs and SMEs (OECD 2018). For example, implementing effective grievance mechanisms requires setting up channels for stakeholders to report issues and ensuring timely responses, which demands dedicated resources and continuous oversight (UN Global Compact n.d.).

While the directive aims to foster sustainable practices and abate harmful human rights and environmental effects, its administrative burdens can be particularly challenging for SUs and SMEs (International Labour Organization n.d.). These businesses often need more resources and administrative capacity than larger enterprises, making compliance potentially daunting (KPMG 2023). The need to allocate significant time and resources to documentation, record keeping, and stakeholder engagement can strain the operational

capabilities of SUs and SMEs and divert focus from growth and innovation initiatives (OECD 2018).

3.4.4. Financial Strain on SUs and SMEs

Implementing the directive poses significant financial challenges for SUs and SMEs, particularly concerning cash flow. SUs and SMEs are often more vulnerable to financial strain due to their limited resources and smaller profit margins than larger corporations (European Commission 2022). The directive's requirement for extensive documentation, stakeholder engagement, and continuous monitoring necessitates considerable upfront and ongoing investments in systems, processes, and personnel (OECD 2018). For example, the costs associated with upgrading IT infrastructure to manage sustainability data and implementing employee training programs can be substantial (UN Global Compact n.d.).

These rising compliance costs may also hinder SUs' and SMEs' ability to secure financing. Lenders and investors typically evaluate a company's financial health and risk profile before extending credit (International Monetary Fund 2024). The additional financial burden of complying with the directive could be viewed as a risk factor, making financial institutions more hesitant to provide funding to SUs and SMEs (KPMG 2023). To attract investment, these smaller businesses may need to prove that they have robust compliance frameworks, which can be difficult without adequate financial resources.

Article 18 of the directive allows supervisory authorities to impose fines for non-compliance, adding to the financial risks faced by SUs and SMEs (European Commission 2022). The potential for penalties could further discourage lenders, as the associated financial instability increases the perceived risk of lending to these companies (World Bank 2020). As a result, SUs and SMEs may struggle to secure loans or attract investors, limiting their access to the capital needed for growth and innovation (OECD 2018).

Additionally, the directive's extensive requirements for stakeholder engagement and documentation complicate the financial evaluation process for lenders (OECD 2018). Article 7 requires companies to obtain contractual commitments from business partners and verify compliance through industry initiatives or independent third-party audits (European Commission 2022). These complex and resource-heavy processes may be seen as additional operational risks, further impacting the creditworthiness of SUs and SMEs (KPMG 2023).

The financial pressures imposed by the directive could have far-reaching implications for the growth and sustainability of SUs and SMEs (International Monetary Fund 2024). Limited access to finance and cash flow constraints could hamper these firms' ability to invest in new technologies, enter new markets, or develop innovative products (World Bank 2020). This could weaken their competitive position, especially against larger firms better equipped to absorb compliance costs (OECD 2018).

Moreover, focusing on compliance may divert resources from essential business activities like R&D, marketing, and customer service (UN Global Compact n.d.). This diversion could lead to missed opportunities for innovation and market expansion, ultimately affecting the long-term success of SUs and SMEs. While the directive's goal is to promote sustainable practices, managing the financial challenges it imposes is crucial to ensuring that these businesses can thrive while contributing to broader sustainability goals (OECD 2018). Policymakers and financial institutions must work together to provide support, such as grants, low-interest loans, and technical assistance, to help SUs and SMEs meet these regulatory demands effectively (International Labour Organization n.d.).

In summary, while the directive aims to foster sustainable business practices and protect human rights and the environment, its implementation presents significant financial hurdles for SUs and SMEs. Addressing these challenges through targeted support and innovative solutions is essential to ensuring compliance without undermining these businesses' growth and operational capabilities (OECD 2018).

3.4.5. Competitive Disadvantage

The directive introduces compliance costs that may disproportionately impact SUs and SMEs compared to their larger counterparts (OECD 2018). Larger firms often benefit from economies of scale, allowing them to absorb these additional costs more effectively due to their extensive resources and well-established infrastructures (European Commission 2022). On the other hand, SUs and SMEs typically operate with tighter budgets and fewer resources, making it more challenging to manage the financial and administrative burdens imposed by the directive (International Monetary Fund 2024).

Article 4 of the directive outlines the comprehensive due diligence obligations that companies must embed into their corporate policies and operations, including identifying, preventing, and mitigating adverse impacts on human rights and the environment (European Commission 2022). While larger companies, with their substantial financial resources, can more easily invest in advanced compliance management systems, hire specialized personnel, and distribute costs across a broader revenue base, SUs and SMEs may struggle to allocate sufficient resources for such extensive compliance efforts without jeopardizing their financial stability and operational efficiency (KPMG 2023; World Bank 2020).

Furthermore, the directive's requirement for ongoing monitoring and reporting (Article 10) necessitates continuous investment in compliance activities, which can be more burdensome for SUs and SMEs (European Commission 2022). Larger companies are better positioned to absorb these recurrent costs due to their greater financial flexibility and economies of scale, which can dilute the impact of such expenses (OECD 2018). This disparity places SUs and SMEs at a competitive disadvantage, as they may need to divert resources from other critical areas, such as innovation, marketing, and growth initiatives, to meet compliance requirements (International Monetary Fund 2024).

The stringent compliance requirements may also restrict SUs' and SMEs' access to certain markets, especially where meeting these standards is a prerequisite for doing business. Article 8 mandates that companies take appropriate measures to end actual adverse impacts, including making necessary investments and securing contractual assurances from business partners to ensure compliance across the supply chain (European Commission 2022). For SUs and SMEs, these demands are particularly challenging, as they may lack the leverage needed to enforce compliance among their suppliers and partners (World Bank 2020).

The need for extensive stakeholder engagement and documentation complicates this situation further. Article 7 of the directive requires companies to seek contractual assurances and verify compliance through industry initiatives or independent third-party verification (European Commission 2022). While larger firms can leverage their market influence and resources to ensure compliance throughout their supply chains, SUs and SMEs may find it difficult to secure similar commitments, particularly if they lack the influence to enforce these standards (OECD 2018). This could limit their ability to compete in markets where adherence to these sustainability standards is mandatory, thereby restricting their market access (World Bank 2020).

Moreover, the competitive disadvantage SUs and SMEs face can be exacerbated by the potential for increased operational costs and reduced profitability. The financial strain of compliance explained above can impact their pricing strategies, making it harder for them to offer competitive prices compared to larger firms that can spread compliance costs over a more extensive product range (International Monetary Fund 2024). This pricing pressure can further limit SUs' and SMEs' market access, particularly in price-sensitive markets where cost competitiveness is crucial (KPMG 2023).

In brief, the directive presents significant challenges for SUs and SMEs, particularly regarding economies of scale and market access. The extensive compliance requirements and associated costs can place SUs and SMEs at a competitive disadvantage compared to larger companies with greater resources and influence (World Bank 2020). Addressing this disparity through targeted support measures and innovative solutions is essential to ensure that SUs and SMEs can comply with the directive without sacrificing their competitive position in the market (International Monetary Fund 2024). By fostering a supportive

regulatory environment and providing the necessary resources, policymakers can help SUs and SMEs pass through these challenges and aid a more sustainable and inclusive business landscape in the EU (OECD 2018).

3.5. Potential Positive Impact on Entrepreneurial Activity

3.5.1. Long-Term Benefits

Although the initial implementation costs of the directive are substantial, they are likely to yield significant long-term benefits for SUs and SMEs by fostering sustainable business practices (European Commission 2022). Investing in sustainable practices can lead to more efficient resource use, reduced waste, and lower operational costs over time (OECD 2018). For instance, companies that adopt energy-efficient technologies and sustainable supply chain practices can benefit from reduced energy bills and lower material costs (World Bank 2020). Moreover, sustainable practices can help companies mitigate risks associated with regulatory compliance, environmental liabilities, and supply chain disruptions, thereby ensuring more stable and predictable operations in the long run (International Monetary Fund 2024).

Furthermore, focusing on sustainability can significantly enhance a company's reputation (KPMG 2023). Consumers and investors increasingly prioritize sustainability and ethical considerations in purchasing and investment decisions (OECD 2018). By demonstrating a commitment to sustainable practices, SUs and SMEs can strengthen their brand reputation, build customer loyalty, and foster stakeholder trust. This enhanced reputation can translate into competitive advantages and open new business opportunities in markets prioritizing sustainability.

Successfully implementing the requirements of the directive can also serve as a powerful differentiator for SUs and SMEs in the marketplace. Companies that proactively address human rights and environmental impacts will likely stand out as industry leaders in sustainability. Article 7 of the directive requires companies to take "*. . .appropriate measures to prevent, or where prevention is not possible or not immediately possible, adequately mitigate potential adverse human rights impacts and adverse environmental impacts. . .*" (European Commission 2022, p. 57). This proactive approach to risk management and sustainability can set SUs and SMEs apart from competitors who may be slower to adopt similar practices.

Market differentiation through sustainability can attract a growing segment of conscious consumers who prefer to support businesses that align with their values (Ottman et al. 2006). Additionally, investors are increasingly incorporating ESG criteria into their investment strategies. SUs and SMEs that excel in these areas can attract more investment from funds and investors focused on sustainable and responsible investing (United Nations Principles for Responsible Investment 2021). This influx of capital can provide SUs and SMEs with the necessary resources to further innovate, expand, and enhance their competitive positioning (OECD n.d.).

Furthermore, as larger companies seek to comply with their own due diligence obligations, they are likely to prioritize partnerships with suppliers and business associates who adhere to high sustainability standards (European Commission 2022). SUs and SMEs that have already implemented the directive's requirements can become preferred partners in these sustainable supply chains, securing more business opportunities and fostering long-term relationships with larger corporations. This integration into sustainable supply chains can provide SUs and SMEs with a steady stream of business and enhance their market resilience (World Economic Forum 2021).

While the initial costs associated with compliance may seem daunting, implementing sustainable practices can significantly enhance SUs' and SMEs' long-term profitability. Article 4 of the directive underscores the importance of integrating due diligence into corporate policies, which can lead to more systematic and strategic management of sustainability risks and opportunities (European Commission 2022). By embedding sustainability into their core business strategies, SUs and SMEs can drive innovation, improve operational efficiencies, and create value for all stakeholders (Porter and Kramer 2011).

Moreover, focusing on sustainability can lead to the development of new products and services that cater to the increasing demand for sustainable solutions. SUs and SMEs can capitalize on emerging market trends and consumer preferences by innovation in renewable energy, sustainable agriculture, and eco-friendly products (OECD n.d.). This diversification into sustainable markets can open new revenue streams and enhance the overall growth prospects of SUs and SMEs (International Monetary Fund 2024).

For instance, companies in the renewable energy sector have reported significant growth and profitability by developing innovative products and solutions that meet the rising demand for clean energy (International Energy Agency 2021). This trend highlights the potential for SUs and SMEs to thrive by aligning their business models with sustainability principles.

In summary, while the directive imposes significant initial implementation costs, the long-term benefits for SUs and SMEs are substantial. By fostering sustainable practices, enhancing market differentiation, and improving long-term profitability, the directive can help SUs and SMEs build more resilient and competitive businesses. As SUs and SMEs navigate compliance challenges, they can leverage these opportunities to drive innovation, attract investment, and secure a sustainable future in the evolving business landscape.

3.5.2. Opportunities for New Ventures

While the European Commission's Directive presents several challenges, it also opens significant opportunities for new ventures, particularly those specializing in sustainability solutions and compliance services. The directive's stringent requirements necessitate expertise and resources that many companies, especially SUs and SMEs, might lack. This gap creates fertile ground for businesses that can provide specialized services to help companies meet their compliance obligations (European Commission 2022).

Firstly, the demand for sustainability consulting is expected to rise sharply as companies seek to navigate the complex requirements of the directive (OECD n.d.). Firms specializing in sustainability consulting can assist businesses in developing and implementing due diligence policies, conducting impact assessments, and creating comprehensive documentation (International Monetary Fund 2024). Article 5 of the directive requires companies to combine due diligence into all their corporate policies and have a code of conduct in place, along with processes to ensure compliance. Sustainability consultants can play a crucial role in guiding companies through these processes, helping them to establish robust systems that meet the directive's requirements (European Commission 2022).

Moreover, there is a significant opportunity for new ventures in technology solutions tailored to compliance needs. The directive mandates continuous monitoring and reporting, which can be streamlined with advanced software and technological tools (European Commission 2022). Article 10 emphasizes the need for companies to conduct periodic assessments of their operations and those of their subsidiaries and business relationships. Startups developing software solutions for tracking, monitoring, and reporting sustainability metrics can find a growing market. These tools can help companies automate compliance tasks, decrease administrative burdens, and ensure timely and accurate reporting, thus simplifying the compliance process.

Additionally, the directive's requirement for stakeholder engagement and the establishment of complaints procedures (Article 9) opens opportunities for businesses providing stakeholder management and engagement platforms (European Commission 2022). These platforms can facilitate communication between companies and their stakeholders, ensuring that concerns are addressed promptly and transparently. Firms that can offer tools and services to manage these interactions effectively will be in high demand.

Furthermore, businesses offering training and educational services focused on sustainability and compliance can benefit significantly from the directive. As companies strive to educate their employees on new compliance requirements and integrate sustainability into their corporate culture, there will be a need for specialized training programs (European Commission 2022). Article 5 requires companies to update their due diligence policy annu-

ally, implying ongoing training and development needs. Educational ventures can create tailored training modules that help companies stay up to date with regulatory changes and best practices in sustainability (OECD 2023b).

The directive also promotes collaborative efforts and industry initiatives to support compliance (Article 14). This promotion creates business opportunities that can facilitate industry collaborations and multi-stakeholder initiatives. These entities can help companies leverage collective resources, share best practices, and achieve compliance more efficiently (UN Global Compact n.d.). By fostering collaboration, these new ventures can contribute to creating more sustainable industry practices and enhancing overall compliance (World Economic Forum 2021).

For example, the EU Water Framework Directive exemplifies how improved environmental regulation can enhance sustainable economic growth and innovation within the EU (Fisher 2018). By incorporating social, environmental, and ethical concerns into business operations, companies are prompted to innovate and adopt sustainable practices that align with corporate social responsibility (Bohinc 2014). Similarly, initiatives like the SmartOpenData project aim to define mechanisms for acquiring and using open data for environmental protection in European protected areas, supporting decision makers and providing new opportunities through Linked Open Data principles (Archer et al. 2022).

3.6. Influence on Ecosystems

3.6.1. Supply Chain Management

The directive is set to profoundly impact supply chain management practices and relationships within European business ecosystems. The directive mandates comprehensive due diligence across entire value chains, compelling companies to scrutinize and manage their supply chains more rigorously than ever before (European Commission 2022). This shift towards greater accountability and transparency will redesign how firms operate and interact with their suppliers (OECD n.d.).

Firstly, the directive's emphasis on identifying, preventing, and mitigating adverse human rights and environmental impacts requires companies to thoroughly assess their supply chains. This comprehensive assessment means that companies need to map their supply chains in detail, identifying all direct and indirect business partners and the associated risks. This evaluation will likely result in increased demand for supply chain transparency and traceability solutions.

The necessity for such detailed mapping and risk assessment will lead companies to establish stronger and more collaborative relationships with their suppliers. Companies must work closely with their suppliers to comply with these requirements and ensure they adhere to the same standards. This approach might include providing training, sharing best practices, and possibly even investing in suppliers' capabilities to meet compliance requirements. Such collaborative efforts can enhance overall supply chain resilience and sustainability.

Moreover, the directive requires companies to seek contractual assurances from their business partners to ensure compliance with the company's code of conduct and prevention action plans. As stated in Article 7, companies must "*. . .seek contractual assurances from a business partner with whom it has a direct business relationship that it will ensure compliance with the company's code of conduct and, as necessary, a prevention action plan. . .*" (European Commission 2022, p. 57). This practice, known as contractual cascading, extends compliance obligations throughout the supply chain. It encourages companies to include specific clauses in their contracts with suppliers that mandate adherence to human rights and environmental standards. This encouragement ensures accountability and fosters a culture of sustainability across the supply chain.

The directive's ongoing monitoring and verification requirements further impact supply chain management. Article 10 stipulates that companies must "*. . .carry out periodic assessments of their own operations and measures, those of their subsidiaries and, where related to the value chains of the company, those of their established business relationships, to monitor the*

effectiveness of the identification, prevention, mitigation, bringing to an end and minimization of the extent of human rights and environmental adverse impacts. . ." (European Commission 2022, p. 60). This requirement implies a continuous engagement with suppliers and regular audits to verify compliance, adding an additional layer of oversight and potentially increasing operational costs.

Additionally, companies may need to re-evaluate their supplier base, prioritizing relationships with those who can demonstrate compliance with the directive's requirements (European Commission 2022). This reconfiguration of supply chains can lead to significant changes as businesses shift to suppliers capable and willing to meet the new standards. Such shifts might disrupt existing supplier relationships and supply chains in the short term (OECD 2023b). However, in the long term, these changes can foster more sustainable and ethically sound supply chains, promoting better environmental and social practices across industries (UN Global Compact n.d.).

A significant opportunity presented by the directive is promoting innovative supply chain practices. For example, adopting closed-loop supply chain management in the food sector has demonstrated how companies can reduce waste and improve efficiency, aligning with the directive's goals (Szmelter-Jarosz 2022). Additionally, the directive encourages collaborative efforts among various stakeholders, fostering a more integrated approach to sustainability (Prezioso and Coronato 2013).

An example of the directive's potential impact on new ventures can be observed in the renewable energy sector, where companies must now consider the environmental and human rights implications of their entire supply chain. This concern could drive more sustainable practices, such as sourcing materials from suppliers with robust environmental and labor standards, ultimately fostering a more sustainable industry (Giegerich 2022). Furthermore, the directive's focus on continuous improvement and accountability could lead to significant advancements in corporate sustainability reporting and transparency (Bueno et al. 2024).

Another example of the directive's impact is the innovative project of the Fashion Passport. This project leverages blockchain technology to enhance transparency and sustainability in the fashion industry by validating the genuineness and origin of apparel throughout the supply chain (Manfrino 2024). This initiative highlights the directive's potential to drive substantial improvements in corporate sustainability practices across various industries.

3.6.2. Collaboration and Network Effects

The directive has the potential to significantly influence collaboration and network effects among businesses, NGOs, and other stakeholders within European business ecosystems. By mandating comprehensive due diligence measures, the directive encourages various entities to work together to achieve compliance and foster sustainable practices (European Commission 2022).

One of the primary ways the directive fosters collaboration is by emphasizing the importance of stakeholder engagement in the due diligence process. Article 5 of the directive mandates that firms incorporate due diligence into all their corporate policies and implement a code of conduct that includes stakeholder input. This requirement ensures that businesses must engage with an extensive range of stakeholders, including suppliers, customers, employees, and NGOs, to identify and address likely negative effects on human rights and the environment (European Commission 2022). This cooperative strategy helps create a more inclusive and comprehensive strategy for sustainability, as businesses are encouraged to consider diverse perspectives and expertise (OECD 2023b).

Moreover, the directive explicitly supports industry cooperation and multi-stakeholder initiatives. Article 7 encourages companies to collaborate with other entities to effectively prevent and mitigate adverse impacts (European Commission 2022). This provision recognizes that addressing complex sustainability challenges requires collective action and shared resources. By fostering partnerships within and across industries, the directive aims

to leverage the strengths and capabilities of various organizations to drive meaningful change (UN Global Compact n.d.).

The directive also promotes using industry schemes and multi-stakeholder initiatives as tools to support compliance. Article 14 allows companies to rely on such initiatives to fulfill their due diligence obligations, provided these schemes are appropriate and effective (European Commission 2022). This provision not only incentivizes businesses to participate in existing collaborative efforts but also encourages the development of new initiatives tailored to specific sectors or challenges. By endorsing these collaborative frameworks, the directive helps create a network effect where the collective efforts of multiple entities can amplify the impact of sustainability initiatives (OECD 2023b).

3.6.3. Regional Variations

The impact of the directive is likely to vary significantly across different regions within the EU, influenced by local business environments and regulatory contexts. These regional variations can affect how companies implement the directive and the resulting outcomes on sustainability practices (European Commission 2022).

One major factor contributing to regional variations is the differing economic development and industrial composition levels across EU member states (World Bank 2021a). Regions with more advanced economies and well-developed regulatory frameworks may find it easier to comply with the directive's requirements (OECD 2023b). For instance, countries like Germany and France, with established infrastructures for environmental and human rights due diligence, may have a smoother transition and lower incremental costs for compliance (European Commission 2022). In contrast, less developed regions or those with a higher concentration of SUs and SMEs, such as some Eastern European countries, might face more significant challenges (UN Global Compact n.d.). These regions may lack the necessary resources and expertise to implement the directive effectively, potentially leading to higher compliance costs and greater administrative burdens. For example, a report by the World Bank highlighted that SUs and SMEs in Eastern Europe often struggle with regulatory compliance due to limited financial and administrative capacities (World Bank 2021b). This disparity underscores the need for targeted support measures to ensure that the directive does not burden less developed regions and SUs and SMEs disproportionately.

Additionally, local business cultures and regulatory traditions play a critical role in modeling the implementation of the directive. Countries with a strong tradition of regulatory compliance and corporate governance, such as the Nordic countries, might adopt the directive's requirements more seamlessly (OECD 2023b). These nations typically have a high level of environmental awareness and robust legal frameworks supporting sustainability, which can facilitate compliance efforts (European Commission 2022). In contrast, regions with less stringent regulatory environments or different business practices might need more substantial adjustments to meet the directive's standards.

Moreover, the varying levels of public and private sector collaboration in different regions can influence the effectiveness of the directive's implementation. Regions where governments, businesses, and civil society organizations work closely together tend to develop more comprehensive and effective sustainability strategies (UN Global Compact n.d.). This collaborative approach can help overcome resource and knowledge gaps, particularly in regions where businesses might lack the internal capacity to independently address the directive's complex requirements.

The directive acknowledges these disparities and attempts to provide some flexibility to account for them. For example, Article 6 of the directive offers a derogation for smaller companies, allowing them to focus on identifying severe adverse impacts relevant to their sectors (European Commission 2022). This provision aims to reduce the burden on SUs and SMEs in regions where they constitute a large part of the economy. Despite this, the need for extensive documentation and stakeholder engagement, as outlined in Articles 6 and 7,

could still be disproportionately challenging for smaller firms in less developed regions, potentially exacerbating regional inequalities.

Additionally, the local regulatory context is crucial in implementing and enforcing the directive. Member states have the discretion to adapt the directive to their national legal frameworks, which can lead to variations in enforcement and compliance practices (OECD 2023b). Article 17 of the directive mandates the designation of national supervisory authorities to oversee compliance but the effectiveness and approach of these authorities can differ widely. Regions with robust regulatory bodies may ensure stricter enforcement and higher compliance rates while those with weaker oversight might struggle with enforcement, leading to inconsistencies in the directive's impact (UN Global Compact n.d.).

Moreover, regional variations in business culture and stakeholder engagement practices can influence how companies approach due diligence. In regions with a strong culture of corporate social responsibility (CSR) and stakeholder engagement, businesses may be more proactive in complying with the directive (Matten and Moon 2008). Conversely, in areas where such practices are less entrenched, companies might need to invest more in building the necessary frameworks and relationships, potentially delaying compliance and increasing costs (Jamali and Karam 2018).

For instance, Scandinavian countries, known for their robust CSR frameworks and proactive stakeholder engagement, may find aligning with the directive's requirements easier. These countries often have well-established practices that integrate stakeholder feedback into business operations, which can facilitate a smoother transition to the new regulations (Gjølberg 2009). In contrast, regions with less developed CSR practices might face significant challenges, requiring substantial investments to build the necessary infrastructure and cultivate stakeholder relationships (Ioannou and Serafeim 2012).

Finally, the availability of support and resources from both national governments and the EU can mitigate some of the regional disparities. Article 14 of the directive encourages member states to provide information and support to companies, particularly SUs and SMEs, to help them comply with the directive (European Commission 2022). This support can take the form of financial assistance, dedicated platforms for sharing best practices, and facilitation of joint stakeholder initiatives (OECD 2023b). Regions that effectively leverage these support mechanisms may experience a smoother transition and better compliance outcomes while those that do not might lag.

Table 3 summarizes the entrepreneurial effects of the European Directive on Corporate Sustainability Due Diligence identified above.

Table 3. Identified entrepreneurial effects of the EU Commission's Directive on Corporate Sustainability Due Diligence.

Aspect	Description	Impact on SUs and SMEs
Initial Implementation Costs	Substantial investments in IT systems, due diligence frameworks, and training to comply with new mandates.	High upfront costs in IT and employee training; necessary to implement due diligence frameworks.
Ongoing Compliance Costs	Continuous monitoring, reporting, audits, and certifications for compliance.	Recurring costs for audits, certifications, compliance teams, and external consultants.
Administrative Burdens	Significant documentation, record keeping, and stakeholder engagement requirements.	Increased resource allocation for administrative tasks and maintaining comprehensive records.
Financial Strain on SUs and SMEs	Cash flow challenges and potential difficulties in securing financing.	Higher financial strain due to limited resources and risk of non-compliance penalties.
Competitive Disadvantage	Smaller businesses struggle to compete with larger firms that benefit from economies of scale.	Challenges in meeting compliance requirements, limiting competitive positioning and market access.

Table 3. *Cont.*

Aspect	Description	Impact on SUs and SMEs
Long-Term Benefits	Potential long-term benefits through sustainable practices and improved resource efficiency.	Enhanced reputation, access to new markets, and lower long-term operational costs.
Opportunities for New Ventures	Growth opportunities in sustainability consulting, compliance software, and training services.	New business prospects in offering solutions for compliance and sustainability.
Influence on Ecosystems	Supply chain management and stakeholder engagement changes due to higher transparency requirements.	Need for stronger supplier relationships and enhanced transparency throughout the supply chain.

3.7. Comparative Analysis with Other Regulations

3.7.1. Global Standards

The directive can be compared with other international sustainability standards and regulations to highlight its unique aspects and the commonalities it shares with global practices. This comparative analysis helps us understand how the directive aligns with or diverges from established international frameworks and the implications for European companies operating globally.

One of the prominent international standards is the UNGPs, which serve as a foundational framework for businesses to respect human rights. The directive aligns closely with the UNGPs, particularly in its emphasis on due diligence and the responsibility of companies to prevent, mitigate, and account for human rights impacts. The directive states, "*. . .The United Nations Guiding Principles on Business and Human Rights recognize the responsibility of companies to exercise human rights due diligence by identifying, preventing, and mitigating the adverse impacts of their operations on human rights. . .*" (European Commission 2022, p. 30). This alignment ensures that European companies' practices are consistent with globally recognized human rights standards, facilitating easier compliance for multinational corporations.

The Organization for Economic Co-operation and Development Guidelines for Multinational Enterprises (OECD-GME) also significantly shape corporate conduct. These guidelines extend due diligence to environmental and governance topics, advocating for responsible business conduct. The directive adopts a similar approach, covering human rights and environmental impacts within companies' operations and supply chains. It explicitly mentions, "*. . .The concept of human rights due diligence was specified and further developed in the OECD Guidelines for Multinational Enterprises which extended the application of due diligence to environmental and governance topics. . .*" (European Commission 2022, p. 30). This comprehensive approach ensures that companies address a broad spectrum of sustainability issues, reinforcing their commitment to responsible business practices.

Comparing the directive with the United States Dodd-Frank Act, particularly Section 1502, which focuses on conflict minerals, reveals similarities and differences. While both regulations aim to address human rights issues within supply chains, the Dodd-Frank Act is more narrowly focused on sourcing specific minerals from conflict-affected regions (US Congress 2010). In contrast, the EU Directive adopts a broader scope, encompassing various human rights and environmental impacts across different sectors (European Commission 2022). This broader approach reflects the EU's commitment to addressing sustainability comprehensively, beyond specific commodities or regions.

The Modern Slavery Act 2015 in the United Kingdom is another pertinent regulation for comparison. This act requires businesses to report on measures taken to prevent modern slavery within their operations and supply chains. Like the directive, it emphasizes transparency and accountability. However, the directive goes further by mandating reporting and proactive due diligence measures to prevent and mitigate adverse impacts. This

obligation underscores a more robust approach to sustainability, requiring companies to mitigate risks rather than disclose them actively.

The Paris Agreement, a worldwide accord on climate change, sets forth commitments by countries to limit global warming. While it primarily targets governments, its implications for corporate sustainability are significant. The directive complements these international efforts by integrating climate considerations into corporate strategies. Article 15 of the directive mandates that companies "*. . .adopt a plan to ensure that the business model and strategy of the company are compatible with the transition to a sustainable economy and with the limiting of global warming to 1.5 °C in line with the Paris Agreement. . .*" (European Commission 2022, p. 62). This requirement ensures that corporate actions are aligned with global climate goals, reinforcing the interconnectedness of corporate and governmental efforts in addressing climate change.

3.7.2. Lessons from Non-EU Countries

Examining the lessons from non-EU countries that have implemented similar regulations provides valuable insights into the potential impacts of the directive on business innovation and entrepreneurship. By understanding the experiences of other nations, policymakers and businesses can better anticipate challenges and leverage opportunities that arise from these regulations.

One notable example is the United Kingdom's Modern Slavery Act 2015, which mandates businesses to report on efforts to prevent modern slavery in their operations and supply chains (UK Government 2015). This legislation has had a profound impact on business practices in the UK. Companies have had to invest in more robust supply chain monitoring and transparency measures, fostering a culture of corporate responsibility (New 2015). However, this has also increased administrative burdens and costs, particularly for SUs and SMEs (LeBaron and Lister 2021). The emphasis on transparency and ethical sourcing has sometimes spurred innovation as companies seek to develop more valuable ways to supervise and manage their supply chains. For instance, some businesses have adopted blockchain technology to enhance supply chain transparency and traceability, highlighting how regulatory pressure can drive technological advancements (Saberi et al. 2018).

The US Dodd-Frank Wall Street Reform and Consumer Protection Act, particularly Section 1502 on conflict minerals, requires companies to disclose the consumption of war minerals acquired from the Democratic Republic of the Congo and adjoining countries. This regulation has driven companies to improve their supply chain due diligence processes (US Congress 2010). Initially, the implementation posed significant challenges due to the complexities of tracing minerals in conflict zones. However, companies have increasingly adopted innovative solutions, such as data analytics and supply chain mapping tools to enhance compliance capabilities. These technologies have allowed companies to better understand and manage their sourcing practices, ensuring more transparent and responsible supply chains. Nevertheless, the regulation has also resulted in substantial compliance costs, impacting smaller businesses. This situation highlights the importance of providing adequate support to SUs and SMEs facing similar regulations in the EU (Bafilemba et al. 2014).

Australia's Modern Slavery Act 2018 is another pertinent example. The legislation mandates entities to report on the risks of contemporary slavery in their businesses and supply chains and the actions taken to eliminate those risks (Australian Government 2018). The Australian experience illustrates how regulatory requirements can stimulate cross-sector collaboration and innovation. Businesses, NGOs, and government agencies have worked together to develop best practices and tools for compliance, such as risk assessment frameworks and reporting templates (Nolan and Bott 2018). This collaborative approach has facilitated compliance while promoting knowledge sharing and resources, benefiting the broader business ecosystem. For example, the development of the Modern Slavery Toolkit by the Australian Human Rights Commission provides companies with practical guidance and resources to meet their obligations under the act, demonstrating how regulatory frameworks can foster cooperative efforts and resource sharing (Dodd et al. 2022).

Canada's Extractive Sector Transparency Measures Act mandates extractive companies to report government payments to combat corruption and promote transparency (Natural Resources Canada 2023). This regulation has pushed companies to enhance their record keeping and reporting systems. In response, many companies have adopted advanced accounting software and data management systems, illustrating how regulatory requirements can drive technological upgrades and process improvements (OECD 2013). While the primary goal of the ESTMA is to enhance transparency, the secondary benefits include improved internal data management and governance practices, which can lead to greater operational efficiency (Natural Resources Canada 2023).

Japan's Act on the Promotion of Female Participation and Career Advancement in the Workplace, although focused on gender equality, offers relevant lessons for sustainability regulations. The act requires companies to set targets and report on their progress in promoting female participation in the workforce (Japanese Ministry of Health, Labour and Welfare 2017). This regulation has encouraged companies to innovate in their human resource practices, such as implementing flexible working arrangements and providing career development programs for women. These innovations help companies comply with the regulations and enhance their competitiveness by attracting and retaining top talent (World Economic Forum 2020).

These examples from non-EU countries highlight several key insights. First, while compliance with sustainability regulations can be challenging, it also creates opportunities for innovation, particularly in supply chain management, data analytics, and corporate governance (International Monetary Fund 2024). Second, the initial costs and administrative burdens can be significant, especially for SUs and SMEs, underscoring the need for supportive measures, such as grants, subsidies, and collaborative platforms (OECD 2023a). Third, regulations can foster collaboration among businesses, NGOs, and government agencies, developing best practices and shared resources that benefit the entire business ecosystem (UN Global Compact n.d.).

3.8. Policy Recommendations

3.8.1. Support Mechanisms

Implementing the directive requires significant resources, especially for SUs and SMEs. Therefore, robust support mechanisms are essential to mitigate the financial and administrative burdens and ensure compliance does not stifle innovation or competitiveness (OECD 2023a). Several support mechanisms can be considered to aid businesses, particularly SUs and SMEs, in complying with the directive.

One of the most effective support mechanisms is providing financial assistance through grants, subsidies, and low-interest loans. This financial aid can help cover the initial implementation costs, such as setting up due diligence frameworks, training employees, and upgrading systems (European Commission 2022). The directive acknowledges the financial strain on SUs and SMEs, suggesting that member states may financially support SUs and SMEs to comply with due diligence measures (Bueno et al. 2024). Implementing such financial support at the national and EU levels can significantly alleviate the burden on SUs and SMEs, enabling them to invest in sustainable practices without compromising their financial stability (OECD 2023a).

SUs and SMEs often need more in-house expertise to navigate complex compliance requirements. Therefore, providing access to expert advice and comprehensive training programs is crucial. Governments and industry associations can establish advisory bodies and training centers focused on sustainability due diligence. These bodies can offer tailored guidance, best practice examples, and hands-on training to help SUs and SMEs effectively understand and implement the directive's requirements. As noted in the directive, ensuring that companies integrate due diligence into their policies and management systems involves a comprehensive understanding of the processes and standards involved (Bueno et al. 2024).

Creating and disseminating standardized tools, templates, and guidelines can streamline the compliance process for SUs and SMEs. The directive emphasizes the need for

companies to establish comprehensive due diligence policies and maintain detailed records (European Commission 2022). Regulatory bodies can simplify these tasks by providing standardized documentation templates, reporting guidelines, and checklists, reducing the administrative burden on SUs and SMEs (OECD 2023b). Additionally, digital platforms offering automated compliance tools can help SUs and SMEs monitor their supply chains, assess risks, and maintain compliance with minimal manual intervention.

Encouraging industry collaboration and knowledge sharing can significantly enhance SUs' and SMEs' ability to comply with the directive. Creating forums and networks where businesses can share experiences, challenges, and solutions can foster a collaborative environment that benefits all participants (OECD 2023b). As the directive highlights the importance of stakeholder engagement and cooperation, these forums can also include stakeholders, such as NGOs, trade unions, and civil society organizations, providing diverse perspectives and innovative solutions (European Commission 2022).

Establishing government-backed certification programs can provide SUs and SMEs a clear pathway to demonstrate compliance with the directive. These programs can offer certification upon successful implementation of due diligence measures, which can be an asset for SUs and SMEs in building trust with customers, investors, and partners. Certification can also provide a competitive advantage as companies with verified sustainable practices will likely be more welcome to environmentally aware clients and investors.

Governments can integrate sustainability due diligence into broader business incentive programs to encourage compliance. For instance, tax breaks, preferential loan terms, or access to exclusive markets can be offered to companies that meet or exceed the directive's requirements. By aligning financial incentives with compliance, SUs and SMEs will have a compelling reason to invest in sustainable practices, thereby driving widespread adoption of the directive's standards (OECD 2023b).

Establishing continuous monitoring and feedback mechanisms is vital to ensure ongoing compliance and identify areas where additional support may be needed. Regulatory bodies can conduct regular audits and provide feedback to businesses, highlighting strengths and areas for improvement. This preemptive strategy ensures that firms remain compliant over the long term and can adapt to evolving standards and expectations (European Commission 2022).

Cost-effective technology solutions, such as compliance management software, can automate various aspects of the due diligence process, from data collection and analysis to reporting and monitoring. These tools can substantially improve the effectiveness and precision of compliance activities, allowing SUs and SMEs to meet regulatory requirements with less manual effort and lower costs (UN Global Compact n.d.). Technology solutions can also provide real-time insights into supply chain operations, helping companies proactively identify and address potential risks. By investing in such technologies, SUs and SMEs can simplify their compliance processes and gain a competitive edge by leveraging advanced tools to drive sustainability and operational efficiency (International Monetary Fund 2024).

3.8.2. Policy Enhancements

Policymakers must consider several enhancements to ensure the directive achieves its objectives without stifling entrepreneurship and innovation. These enhancements should balance the directive's goals with the practical realities businesses face, especially SUs and SMEs.

One of the primary concerns for businesses, particularly SUs and SMEs, is the ability to adapt to new regulations without disrupting their operations. Policymakers should consider a phased implementation approach that allows businesses to meet the directive's requirements gradually. This phased approach could include extended deadlines for SUs and SMEs and smaller enterprises, giving them adequate time to adjust their processes and practices (OECD 2023b). Additionally, flexibility in compliance timelines can help accommodate businesses facing unique challenges, ensuring they are not disproportionately affected (European Commission 2022).

Given SUs' and SMEs' significant role in the European economy, tailored support measures are crucial. Policymakers should develop specific guidelines and support programs that cater to SUs and SMEs' unique needs. This strategy includes offering technical assistance, subsidized access to compliance tools, and simplified reporting requirements (European Commission 2022). The directive recognizes the importance of such support, stating that member states should consider financial assistance and capacity-building programs to help SUs and SMEs comply with due diligence obligations (European Commission 2022).

Policymakers should promote the use of technology to facilitate compliance with the directive. Encouraging the adoption of digital tools, like blockchain for supply chain guarantees and artificial intelligence for risk assessment, can make it easier for companies to monitor and report on their sustainability practices (OECD n.d.). Blockchain technology, for instance, has been effectively used in the diamond industry to track the origin and journey of diamonds, ensuring ethical sourcing and preventing conflict diamonds from entering the market. Providing subsidies or tax incentives for adopting such technologies can further support businesses' compliance efforts (European Commission 2022). The directive acknowledges the role of technology in enhancing compliance, suggesting that member states support the development and use of technological solutions (UN Global Compact n.d.).

Policymakers should establish ongoing monitoring and evaluation mechanisms to ensure the directive remains adequate and relevant. Regular reviews of the directive's impact on businesses and the environment can help identify areas for improvement and ensure the regulations evolve with changing economic and environmental conditions (OECD 2023b). Establishing feedback loops where businesses report challenges and successes can provide valuable insights for policymakers to refine the directive (European Commission 2022).

4. Discussion and Conclusions

This article has delved into the multifaceted impacts of the directive on European entrepreneurial activity, ecosystems, and innovation. Firstly, it highlighted the directive's core objectives and key provisions to mitigate adverse human rights and environmental impacts across company operations and supply chains (European Commission 2022). The analysis of compliance costs revealed significant financial and administrative burdens, particularly for SUs and SMEs, which face challenges such as increased documentation requirements, stakeholder engagement, and training needs (OECD 2023b).

Furthermore, the directive's influence on entrepreneurial activity was examined, showing that while it raises barriers to entry for new firms due to high compliance costs, it also opens new opportunities for businesses specializing in sustainability solutions (International Monetary Fund 2024). For instance, companies providing sustainability consulting and compliance software have experienced increased demand, showcasing how regulatory requirements can stimulate market growth in niche sectors (European Commission 2022).

Regarding innovation, the directive was assessed for its potential to incentivize sustainable practices and technologies. While it poses challenges by diverting resources from growth initiatives, it also encourages innovation through compliance-driven R&D (OECD n.d.). For example, adopting blockchain technology for supply chain transparency has directly responded to compliance needs, illustrating how regulatory pressure can drive technological advancements.

The directive represents a significant step towards embedding sustainability into the core operations of European businesses. Its comprehensive scope and rigorous requirements underscore the EU's commitment to addressing human rights and environmental issues globally (European Commission 2022). However, the balance between sustainability and business growth remains a critical concern. The directive's stringent compliance measures can strain SUs and SMEs, potentially stifling innovation and economic growth if not managed carefully (OECD 2023b). Therefore, this directive's success hinges on policymakers' ability to implement supportive measures that mitigate its financial and administrative burdens, particularly for smaller enterprises (OECD n.d.).

While the directive imposes new challenges, it also presents opportunities for businesses to differentiate themselves as leaders in sustainability. Companies that proactively address human rights and environmental impacts will likely stand out as industry leaders in sustainability. This proactive approach to risk management and sustainability can set SUs and SMEs apart from competitors who may be slower to adopt similar practices. Additionally, as larger companies seek to comply with their due diligence obligations, they will likely prioritize partnerships with suppliers and business associates who adhere to high sustainability standards. By fostering these partnerships, SUs and SMEs that excel in compliance can secure more business opportunities and enhance their market resilience.

Furthermore, this article contributes to a growing understanding of how the directive can spur innovation, particularly in sustainability-focused markets. The directive's requirement for companies to adopt new compliance systems and strategies creates a demand for technological solutions, such as ESG reporting tools and supply chain management platforms. These new ventures are well-placed to meet emerging needs, fostering innovation in compliance management and sustainability solutions. Sustainable practices' enhanced reputation and long-term profitability represent significant potential gains for companies willing to invest in them.

In summary, while the directive imposes substantial initial compliance costs, it provides long-term benefits for businesses by fostering sustainable practices and reducing operational risks. Companies that align their operations with the directive's sustainability goals stand to gain competitive advantages, attract investment, and secure market opportunities in a rapidly changing global landscape. Additionally, the directive encourages innovation in compliance technologies, offering new ventures the chance to develop solutions that support companies in meeting regulatory requirements.

Policymakers should continuously engage with stakeholders to refine the directive and address emerging challenges. By advancing an environment of collaboration and innovation, the EU can ensure that the directive achieves its sustainability goals and supports the thriving of its entrepreneurial ecosystem (UN Global Compact n.d.). This collaborative approach will be key to balancing regulatory compliance with economic vitality, ultimately ensuring that the directive contributes positively to environmental and business outcomes (OECD 2023b).

Author Contributions: Conceptualization, J.D., E.U. and P.M.; methodology, J.D., E.U. and P.M.; software, J.D., E.U. and P.M.; validation, J.D., E.U. and P.M.; formal analysis, J.D., E.U. and P.M.; investigation, J.D., E.U. and P.M.; resources, J.D., E.U. and P.M.; data curation, J.D., E.U. and P.M.; writing—original draft preparation, J.D., E.U. and P.M.; writing—review and editing, J.D., E.U. and P.M.; visualization, J.D., E.U. and P.M.; supervision, J.D., E.U. and P.M.; project administration, J.D., E.U. and P.M.; funding acquisition, J.D., E.U., and P.M. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Informed Consent Statement: Not applicable.

Data Availability Statement: All data supporting our study's outcomes are openly available in the sources adequately cited in the article's body, with the relevant hyperlinks in the reference list.

Conflicts of Interest: The authors declare no conflicts of interest.

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