SCHOOL OF
ECONOMICS AND
MANAGEMENT

Sustainable Development: Nordic Private Equity firms, sustainable investments and sustainable value creation

By

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Master's Program in

International Strategic Management

BUSN09- Degree Project

May 2024

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Abstract

Title	Sustainable Development: Nordic Private Equity firms, sustainable investments and sustainable value creation
Date	31st May 2024
Authors	Jessica Torres and Martin Lönnqvist
Supervisor	Merle Jacob
Course	BUSN09- Degree Project in International Strategic Management
Word Count	23,054
Purpose	The purpose of this study is to examine how sustainability trends have affected the operations and evaluation of investments made by Nordic private equity firms, how these trends have affected their investment strategies when using different sustainability measurement tools, and how their compliance process has been affected in the process of adjusting to the new EU regulations related to sustainable financing and reporting.
Theoretical Perspective	The theoretical perspective examines the background of concepts such as sustainability, corporate social responsibility, and value creation. It covers European Commission policies and regulations, such as the EU Green Deal and Taxonomy framework, and examine the financial background of private equity and the Nordic business model's compliance with sustainable development.
Methodology	The study adopts a qualitative research approach, presenting a cross-case analysis. The empirical data is collected through semi-structured interviews of five Nordic Private Equity firms.
Conclusion	Sustainable development trends impact the operations and investment strategies of Private Equity firms, with Nordic firms emphasizing value creation to address societal demands. Firms consider ESG performance and risks, highlighting the need for greater transparency and reporting guidelines. The EU's sustainability reporting regulations are seen as crucial for transparency and consistency.
Key Words	Sustainable Development, Finance, Private Equity, Sustainability, Sustainable investment, Value Creation, Sustainability Reporting

Acknowledgments

We would like to express our deepest gratitude to our supervisor, Merle Jacob, for her invaluable guidance, support, and encouragement throughout this research. Her expertise and insightful feedback have been instrumental in shaping this thesis.

Furthermore, we are also incredibly grateful to all the interview participants who kindly shared their time and knowledge, providing essential and valuable insights that enriched this study. Without your insights, this study would not have been possible.

Finally, we sincerely thank our family for their continuous support and understanding throughout this master's journey and completion of the thesis.

Regards,
Jessica Torres & Martin Lönnqvist
Lund, 31st May 2024

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List of Abbreviations

Abbreviation	Definition
CSR	Corporate Social Responsibility
ESG	Environmental, Social, Governance
EC	European Commission
EU	European Union
KPIs	Key Performance Indicators
M&A	Merger & Acquisition
PE	Private Equity
SDGs	Sustainable Development Goals
SFDR	Sustainable Finance Disclosure Regulation
SVC	Sustainable Value Creation

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1. Introduction

1.1. Background and problematization

According to the 2023 Global Climate Report from NOAA National Centers for Environmental Information, the year 2023 reached a ranking as the warmest year on record for land and ocean areas individually (Climate Change, n.d.). Additionally, it is stated that human activities, principally through the emission of greenhouse gasses, have unequivocally caused global warming, with the worldwide surface temperature reaching 1.1° above 1850-1900 in 2011-2020 (Calvin et al., 2023).

United Nations (UN) has long ago addressed climate change as a global emergency that goals beyond national borders, which requires international cooperation and coordinated solutions at all levels; therefore as a response to this climate crisis, in December 2015, the historic Paris Agreement was reached to provide a framework towards net-zero emissions worldwide and as essential achievement of the Sustainable Development Goals (United Nations, n.d.). In line with these global agreements, in December 2019, the 27 European Union (EU) Member States of the European Union committed to turning the EU into the first Climate neutral continent by 2050 by launching the set of policies known as the European Green Deal as a roadmap to achieve a reduction of net greenhouse gas emissions (European Commission, 2021).

The EU has even set itself an ambitious target of achieving net-zero greenhouse gas emissions by 2050 with significant environmental action. As preparation, the European Commission has recommended that the EU cut net emissions by 90% by 2040 and outlines the huge upfront increase in investments needed to get Europe on track. Recognizing this issue, the European Commission (n.d) has prepared an investment program to provide the EU with crucial long-term funding by leveraging public and private investments. For this investment program, the EC has also implemented sustainable finance measures such as the Taxonomy Regulation for classifying green investments that will contribute to the EU Green Deal boosting investment in green and sustainable projects. Considering that capital resources should be allocated adequately to investments initiatives aligned with the Paris Agreement and sustainable purposes such as clean

energy, sustainable industry, building and renovation, sustainable food system, eliminating pollution, sustainable mobility and biodiversity (Bongardt & Torres, 2022), it will be essential to consider financial measures and policies for private investment to comply with the targets.

According to researchers, a survey of portfolio managers revealed that even though climate change is regarded as a risk globally, it is primarily seen as an opportunity among European investors (Silvola & Landau, 2021). Public and private institutions, therefore, must adopt and develop sustainable finance, taking into consideration ESG matters in their decision-making process (European Commission, n.d.-a). Journalist Abnett (2024) has reported this year that EU public spending on the green transition would need to double to 690 billion euros per year, however, acknowledges that most of the investment required to reach net zero emission would need to come from the private sector. Moreover, the Centre for European Reform (n.d) remarks that despite the rise of Green public investment in Europe, at all levels, nationally and EU, there remains a sizable gap in what is needed. This underscores the relevance of private financing as an important support to cover the funding gap.

But what are the options for the private financial sector? The EU's green capital markets are already well-established, with the region serving as a primary destination for green bond issuance. The EU is the location of choice for green bond issuance, which has experienced exponential growth with more than half issued in euro. However, as William Frey's partners (2021) mentioned, debt is not the only option for green finance, there are also investment funds, whose assets under investment funds management have even tripled since 2015. They accord that equity markets are a key option for both goals, the EU to reach more green investments and reduce carbon emissions.

However, it is important to establish the reasons why private investors would shift operations and strategies to satisfy these social and climate goals. The European Commission has stated that CSR is the responsibility of enterprises for their impact on society; ‘companies can become socially responsible by integrating social, environmental, ethical, consumer and human rights concerns into their business strategy and operations, following the law’(Sládková et al., 2021). Moreover, it is understandable that public authorities must play their role through policy

measures creation for ensuring positive sustainable development, but individuals, and in this case investors, can also contribute and support the cause by strategically deciding on socially responsible investment.

In the current context, enterprise contribution to society and economic growth is measured by the Environmental, Social, and Governance framework. Within the financial industry, private equities are also turning into sustainable investments, not only assured by a strong financial performance but also because they believe that these investments should be used to contribute to advancements in ESG practices (Sládková et al., 2021). Scientific research is increasingly showing that sustainable investing is profitable and investors do not need to compromise on returns to promote sustainability (Silvola & Landau, 2021). Private equity is an ideal mechanism to boost sustainable investments because their business model, compared to public equities, gives them advantages for implementing a sustainability agenda, such as having virtual control of their portfolio from an ownership and governance perspective, access to financial and sustainable performance, and longer time horizon investment (Eccles et al., 2022)

According to Invest Europe, there are more than 1,750 private equity and venture capital firms in Europe (n.d.), which means the level of adoption and compliance for sustainability investment might not be in the same phase in all of the countries in the EU. Nonetheless, Hoff (2017) mentioned there seems to be a consensus about the idea that Nordic countries are frontrunners in environmental and climate policies, considering different factors that highlight their leadership position when referring to environmental concerns. Furthermore, Denmark, Finland, and Sweden have consistently secured the top three spots from 2015 to 2023, each rotating in and out of the top position. The broader Nordic region, including Iceland and Norway, consistently ranks high in the many associated nation-level sustainability assessments. These include the UN Human Development Index, Environmental Sustainability Index, World Happiness Index, and Global Green Economy Index (Strand, 2024).

Nonetheless, as the sustainability definition has wide interpretations and approaches, the ESG framework is the most commonly followed by different institutions and companies. Thus when referring to measurement frameworks and tools for evaluating sustainability performance,

Nordic investment funds apply diverse methods such as ESG ratings, climate assessments, and carbon footprint metrics, each with their own methodologies (Popescu et al., 2021). Therefore, an evaluation of the adoption process of this EU Taxonomy framework and measuring tools aiming to increase strategic decision investment for sustainable projects could be more noticeable in the Nordic financial market of private equity as they are considered to have a different approach to sustainability. On that account, expectations of EU sustainable standardized framework and sustainable reporting disclosures come into force, as legislation is supposed to unify sustainable and ESG business practices, reporting and redirecting funds to sustainable investments in their support and alignment to the Climate goals set by the European Commission and Green Deal.

Furthermore, this research is motivated by the gaps in the literature concerning the impacts of sustainable trends and regulations for private equity firms, especially as these EU sustainability regulations become mandatory for companies reporting the period of 2024. Despite the growing emphasis on sustainability, there is a lack of comprehensive studies on how private equity firms are adapting their operations and investment strategies to comply with upcoming regulatory requirements in financial reporting and disclosure of their portfolio to prove sustainable performance. Nordic private equity firms might face unique challenges in integrating sustainability metrics, such as ESG and the SDGs framework, into their evaluation processes. Finally, this research aims to address these gaps and provide insights into effective sustainable practices and compliance in the private equity sector.

1.2. Research Purpose

In response to the urgent climate crisis and the targets set by the EU for achieving net-zero greenhouse gas emissions, and with the still existing funding gap, private equity firms are increasingly expected to play a role in financing sustainable investments. Therefore, the purpose of this master thesis is to investigate the role of Nordic private equity firms in promoting sustainable investments, particularly in light of the evolving regulatory frameworks and market expectations, often set by the European Commission.

This research aims to analyze how closely Nordic private equity firms are aligning and adhering to EU sustainable regulations and frameworks, and what strategies and obstacles they encounter in their process of integrating sustainable investment practices. By examining the extent to which these firms conform to regulatory requirements and embrace sustainable frameworks, we can discern their commitment to environmental, social, and governance (ESG) principles. Additionally, analyzing the implementation strategies deployed by these firms sheds light on the practical measures taken to incorporate sustainability into their investment portfolios. However, challenges such as balancing financial returns with sustainability goals, navigating complex regulatory landscapes, and fostering a culture of sustainability across all levels of the organization may delay the progress. Understanding these dynamics is crucial for both investors and policymakers seeking to promote responsible investment practices within the Nordic private equity sector.

This research aims to review the effect and impact of sustainability trends on the operations and investment assessment of the Nordic private equity firms, identify if their investment strategies changed while using different sustainability measurement tools, and finally, review the impact of their compliance process and challenges to adapt to the EU regulations regarding sustainable financing and reporting. This led to the following research questions:

- How do sustainable development trends impact the operations of the Nordic private equity industry?
- How does sustainability measurement impact Nordic private equity firms' investment decision-making?
- How does sustainability reporting impact Nordic private equity operations and what are the challenges for compliance?

Through qualitative research methods, including semi-structured interviews and analysis of public information such as the company's websites and reports, this study aims to explore how Nordic private equity firms are aligned with new sustainable regulations and frameworks, set by the European Commission. Because of facts such as that the Nordic region consistently ranks high in many nation-level sustainability assessments, or that Nordic firms are frequently

mentioned as exemplars of effective stakeholder engagement or the cultural and structural factors that influence a Nordic business model, we consider properly to analyze the front-runner's approach to sustainability development within the financial market of private equity. Therefore, by examining five private equity firms in the Nordic countries, the research aims to identify the level of compliance, implementation strategies, and challenges faced by these firms in adhering to sustainable investment practices.

By exploring the relationship between Nordic private equity firms and sustainable investment in the light of regulations and frameworks, this research contributes both to academia and industry. Furthermore, it aims to provide insight into the current climate of the private equity sector while highlighting the importance of sustainable investment practices with environmental and social objectives. Finally, this research intends to uncover areas of improvement to inform future policy and industry initiatives.

1.3. Outline of the thesis

This thesis is structured in six sections, the first and current section explains the background, problematization, and the purpose of the thesis. Moving forward, the second section goes deeper into the literature on relevant and key concepts divided into two parts. The first part introduces frameworks for concepts such as sustainability, EU regulation for sustainable development, corporate social responsibility, value creation, and sustainable measurement. The second part presents a description of the Private Equity firm's operations, followed by a description of the Nordic Business model which is oriented to sustainable investments and its resemblance with the sustainable value creation theory. The third section explains in detail the methodology on which this thesis is built, the qualitative method approach, multi-case analysis, using semi-structured interviews and document analysis to explore Nordic private equity firms in the realms of sustainability. This section also includes the research design, data collection, sources, data analysis, and validity and reliability.

The fourth section, empirical, presents the empirical findings of the research about private equity increasingly integrating sustainability into their operations, driven by societal challenges, regulatory compliance, and stakeholder expectations; including results from data analysis and

interviews. In the fifth section, discussion, the findings are interpreted and contrasted with the research questions and relevant literature, discussing empirical findings on sustainability trends, sustainability measurement, and regulation compliance challenges. Lastly, the six section presents a summary of the main conclusions obtained for the research questions, enhancing the understanding of sustainability in Nordic private equity, and exploring impacts on their operations, compliance challenges, and investment decisions. Furthermore, the section finalize explaining limitations and possible further research from this study.

2. Literature Overview

The purpose of this literature review is to offer comprehensive information on previous research conducted in relevant theoretical aspects. Therefore, a specific review of literature has been conducted for topics of sustainability and sustainable development, corporate social responsibility, and value creation. Later on, due to this sustainable social and economic movement, we explain the created policies and regulations related to sustainable development by the European Commission, such as the EU Green Deal and Taxonomy framework. Lastly, the theory regarding the financial background for private equity definition and the innovative approach of the Nordic business model and compliance with sustainable development is referred to in the sections below. The literature review has been collected from different sources, such as articles, books; and opinions from industry experts regarding sustainability, investment, and regulation. To maintain the relevance of the literature, research has focused on recent publications and portrays the latest regulations and practices of sustainable development and sustainable investment in the financial sector of Nordic private equities.

2.1. Sustainability

In this section, we aim to give an overview of the literature regarding the definition of sustainability for sustainable development achievement. Concepts such as sustainability, sustainable development, and corporate social sustainability might be complicated to separate and are commonly referred to as similar terms, therefore we provide a more comprehensive understanding of each term to distinguish sustainability and sustainable development adequately from CSR. First, the concept of sustainability and sustainable development is explained, followed by a discussion regarding the shift from the short to long-term orientation of companies in corporate social sustainability (CSR). Finally, with this background the relevance of achieving sustainable finance and redirecting investment to sustainable investments while how companies apply tools and frameworks in measuring their sustainability performance will also be explained.

2.1.1. Sustainability and Sustainable Development

Etymologically, “sustainability” comes from the Latin root word of *sus tenere* which means to “hold up” or “maintain”, however, the most widely used definition comes from the World

Commission on Environment and Development (WCED), also known as the Brundtland Commission, where United Nations defined sustainability as development that "meets the needs" of the present without compromising the ability of future generations to meet their own needs" (Jacques, 2020). It is possible to define sustainability as "continuity through time", and a base for the conceptual framework of sustainable development, with arguments referring that progress in economic and social development should enhance rather than degrades the resource base and that interventions to achieve progress should not compromise the ability of future generations to meet their needs (Jacob, 1994). Some of the milestones over the last decades for sustainable development are The United Nations Conference on Human Development (1972), The Brundtland Report (1987), and the Rio Summit (1992) are but a few of the important landmarks before the Johannesburg Summit of 2002 (Khan, 2006).

Furthermore, Sustainability is commonly described as comprised of three overlapping, mutually dependent goals: a) live in a way that is environmentally sustainable or viable over the long term, b) live in a way that is economically sustainable, maintaining living standards over the long term; and c) live in a way that is socially sustainable, now and in the future (Dillard et al., 2008).

As for the beginning usage of the word sustainability, Jaques (2020), reflects that humans have caused large-scale changes to critical ecological life support systems while also experiencing profound social and demographic changes, especially in the last 200 years, this changes after World War II came with longer life spans, growth in the development of the world's economy due to industrialization, and an improved quality of life for many people. It is this uncontrolled growth that has caused severe contradictions in human sustainability. Benn (2021) agrees with this point about the harsher choices of how we all should live since World War II, even suggesting that the series of catastrophic events, including massive wildfires and the COVID-19 pandemic, are clear indications that the environmental change and societal instability have direct implications for the wellbeing in general.

It can be reassured that "sustainability" is, first and foremost, used as a corrective, a counterbalance, and directly tied to climate change (Caradonna, 2022). Moreover, the direct relationship between unsustainable economic activity and ecological destruction has been made

clear. (Benn et al., 2021). Sustainability as a social movement is a global environmental (ecosystem) movement which, depending on how one identifies it, finds its contemporary roots in books such as Meadow et al.'s The Limits to Growth, published in 1972, and Rachel Carson's earlier work, Silent Spring or as a subsequent UN ecology initiative. The issue of sustainability is a global matter, therefore, the term 'sustainability' remains focused on ecological concerns (Sheehy & Farneti, 2021).

The second term, "Sustainable development" has become one of the most popular topics for both politicians and economists in recent years, and their analysis suggests that while there exist many chances to mitigate resource depletion and environmental harm by substitution of manufactured capital, economic production is still a work process that uses energy to transform materials into goods and services (Málovics et al., 2008). Due to subsequent environmental movements, ´sustainable development´ started as a movement that morphed into the sustainability movement, which began as an effort to raise global awareness of the problems and subsequently developed into a global policy agenda. That agenda was captured and consolidated in the UN's report "Our Common Future" (Sheehy & Farneti, 2021).

Considering social and environmental challenges, in 2015, all the United Nations Member States adopted the '2030 Agenda for Sustainable Development', which embraces 17 Sustainable Development Goals (SDGs) that call all countries to action as a global partnership to end poverty, improve health and education, reduce inequality, and spur economic growth, while mitigating climate change and preserving oceans and forests (United Nations, n.d.). These top-level policy instruments aim for the UN, organizations and states to work towards goals involved with development, furthermore, the SDGs have a global goal of changing how societies organize and operate, including business, to save the planet from human destruction and to allow the human species to survive (Sheehy & Farneti, 2021).

As stated before, companies use energy to transform materials into goods and services, therefore, it is logical to point to business corporations as the main actors in the economy of transformation of natural capital into man-made capital (Málovics et al., 2008). Furthermore, even Larry Fink, CEO of Blackrock and a renowned asset manager, remarked in the Financial Times, that

“sustainable investing will be a core component for how company and everyone invests” (Koenigsmarck & Geissdoerfer, 2023). Sustainable development is global or international in scope and comprehensive in terms of objective. It is a globally driven, top-down, public policy initiative—as noted, markedly different from Corporate Social Responsibility’s bottom-up, private, organisationally-driven origins (Sheehy & Farneti, 2021).

Lastly, the same European Commission has stated that CSR is the responsibility of enterprises for their impact on society; ‘companies can become socially responsible by integrating social, environmental, ethical, consumer and human rights concerns into their business strategy and operations, following the law’(Sládková et al., 2021). Therefore, it is relevant for companies to focus on the implementation of strategies and corporate values to solve and be aligned with sustainable development and stakeholders’ needs without compromising environmental and social standards.

2.1.2. Corporate Social Responsibility and Value Creation

Considering corporations to be the main actors in this economic and sustainable transformation, there are different theories explaining the rationalities for adopting environmental strategies in their management such as the neo-classical economic theory, which suggests a prospect of win-wins when firms implement saving from resource efficiency or increase profit due to higher sales by being a first-mover advantage in environmental technology innovation, or even when having the possibility to influence policy making for their own preference; second approach of institutional theory, were external social institutions including consumers, media, investors and public opinion affects the implementation of certain strategies while seeking legitimacy and not directly profit-related; and a third approach would be stakeholder theory, compromising the company to act ethically or morally towards stakeholders which are not only external to the firm (Sarasini & Jacob, 2007).

One critical difference between the terms CSR and sustainability that garners little attention is that, unlike the broad term sustainability which can be applied to nearly every actor, activity, or thing, CSR can only be applied to business organizations (Sheehy & Farneti, 2021). Other

expressions and concepts linked to the approach of mixing these labels can be corporate citizenship, business ethics, stakeholder engagement, stewardship, triple bottom line, and creating shared value (Strand et al., 2015). For differentiation, CSR is about how businesses align their values and behavior with the expectations and needs of stakeholders, e.g. customers, investors, employees, suppliers, communities, regulators, and any special group of interest. On top of that, CSR is the company’s commitment to be accountable for demands of economic, social, and environmental impacts of their operations to maximize benefits and minimize downsides, either for corporate philanthropy, Risk Management, or Value creation (Fontaine, 2013). This last approach to CSR is the perspective of Creating Shared Value (CSV), defined as policies and operating practices of the company to enhance the competitiveness of a company while simultaneously advancing the economic and social conditions in the communities in which the company operates (Portes & Kramer, 2011). Nonetheless, it is not sufficient to make businesses socially responsible, they also need to become ecologically responsible at a planetary level (Dillard et al., 2008). Suggestions for companies under CSR and sustainable concepts are narrow to be socially responsible, meaning that the company’s activities should benefit society, and environmentally sustainable, meaning that the company’s activities should not harm the environment (Fontaine, 2013).

A further theory that opposes the CSR focus on sustainability is the Sustainable Value Creation theory (SVC). This SVC theory focuses on sustainability as central to everything the firm does, as opposed to peripheral practices that can be marginalized in the CSR approach. The SVC theory redefines how companies approach their operational functions. The theory expects firms to create more value, incorporating commitments to meet the needs and demands of the company's diverse stakeholder group, optimizing that value over a longer period of time than those firms that either do not understand the strategic value of it, or ignore it altogether (Chandler, 2021). This is one approach to sustainability and sustainable development that will be reflected and have a resemblance with the current investment business model of the Nordic private equity firms.

As mentioned before, the shift of philosophy, values, and goals for an internal core business model intertwined with sustainable practices is what many companies and investors are looking

for. Therefore, an important source of sustainable competitive advantage and a key leverage to improve the sustainability performance of organizations is the capability to rapidly and successfully move into new business models (Geissdoerfer et al., 2018). According to academia, a business model is considered as the firm's conjecture about who their customers are, what those customers want, and how the firm can deliver value to these customers with a profit, in which value creation comes as the complex part considering there are different business models for different business contexts (Hakanen, 2021). Business models have to adapt to new trends, suppliers, customers, and in general different stakeholders' requirements, therefore, a conceptualization and implementation of sustainable business models are needed. Sustainable business model innovation can comprise the development of entirely new business models, the diversification into additional business models, the acquisition of new business models, or the transformation from one business model to another (Geissdoerfer et al., 2018). Geissdoerfer (2018) enumerates some of these sustainable business models as circular business models, social enterprises, bottom-of-the-pyramid solutions, and product-service systems.

The innovation of business models will be determinant in the assessment of private equity firms' investment assessment. As the SVC theory states value creation is important as a strategy advantage, and it also suggests three conscious shifts a management board must take: 1) shift value creation from the periphery to the core of business, 2) shift from externally oriented justification to an internally oriented justification, which seeks to have the main value within its operational practice and not as reputational benefit; and 3)shift from short-term to long-term decision-making, seeking trust-based relations with all stakeholders (Chandler, 2021). Moreover, scientific research is increasingly showing that sustainable investing is profitable and investors do not need to compromise on returns to promote sustainability. Thus, sustainable investing aims not only for good returns but also for a better world (Silvola & Landau, 2021).

As for stakeholders, it is important to remark that investors are also redirecting their investments towards more sustainable projects. The sustainable investing landscape is becoming more complex, but we believe that sustainable investing remains an important driver of industry change. We also see an increasingly diverse range of opportunities that investors with sustainability goals can seek to take advantage of (Wu, 2024). Furthermore, responsible investors

take ESG aspects into consideration in their investment decisions and assess the impacts of ESG on returns (Silvola & Landau, 2021).

Sustainable finance has been mentioned and received increased attention in recent years, nonetheless, there is still ambiguity in the understanding of this concept. Furthermore, the meaning of sustainable finance is contingent on the configuration of actors that talk about and practice it. However, the meaning of the concept of sustainable finance can be understood through some frames: i) Socially Responsible Investment (SRI), which emphasizes that the financial sector should reflect on investors' ethics, ii) risk and opportunities that highlight ESG issues affecting financial risks and returns, iii) climate finance frame (Dimmelmeier, 2023).

> *Being the richest man in the cemetery doesn't matter to me…Going to bed at night saying we've done something wonderful…that's what matters to me.*
>
> *Steve Jobs- in Wall Street Journal 25 May 1993*

Moreover, considering that sustainable finance reviews how finance interacts with economic, social, and environmental issues, there are three functions of the financial system relevant to sustainable finance such as the allocation of funding to its most productive use, assistance in corporate governance, and strategic decision-making on trade-offs and facilitating trading diversification and risk management (Schoenmaker, 2018).

There is no doubt that COVID-19 paralyzed the world economy, and a deep global recession was inevitable, however, there are positive observations after the crisis such as the importance and relevance of digital tools and a new mobility approach; the possibility of a government to provide corporate sector with aids but imposing green conditions; and the possibility of EU and member states to be providers of green or social funding taking advantage of the low-interest rate, borrowing cheaply on capital markets and transferring money to market parties as loan or equity (Busch et al., 2021).

Nonetheless, for transferring money to more 'green' markets, private equity firms must prepare due diligence to understand business models, ESG strategies, and goals, for instance, social and

environmental impacts, and also the ethics and values of the brand and companies they are funding. Therefore, sustainable measurement tools must be applied for this ESG and environmental development assessment. However, there exists a wide universe of measurement tools and frameworks that companies can implement in their sustainable development assessment.

2.1.3. Sustainability Measurement

It is now essential for businesses to assess, measure, report, and disclose the sustainable performance of their investments as part of their strategic management due to the growing relevance of sustainability, corporate social responsibility (CSR), and responsible investment approaches. Thus, the necessity of measurement and reporting of companies' performance regarding environmental, social, and governance concepts leads to the creation of even more complex tools to prove the company's impact in terms of sustainability (Tenuta & Cambrea, 2022). To evaluate sustainability and monitor impacts of the companies on social, natural resources, and functionalities it is important to have objective information for performing sustainability assessment methodologies (Koenigsmarck & Geissdoerfer, 2023).

Information for sustainability assessment can apply a tool framework that is categorized into three approaches: 1) indicators and indices, 2) product-related assessment tools, which focus on a life cycle perspective, and 3) integrated assessment, which tools focus on policy change and project implementation (Ness et al., 2007). Regarding different assessment tools, quantitative measurements, such as indicators, are supposed to be more effectively communicated (Koenigsmarck & Geissdoerfer, 2023). However, it happens that ESG ratings and indexes can obtain different results because each rating agency has its own methodology, therefore, the heterogeneity of measurement approaches is linked to a still excessively high degree of subjectivity (Serzante & Khudozhnyk, 2023).

Furthermore, it should be considered that companies' operations and processes differ from one industry to another, therefore, leading to the application of different methods. This application of diverse methodologies suggests the absence of a standardized and integrated approach to sustainability measurement, which may limit consistency and comparability (Serzante &

Khudozhnyk, 2023). Either quantitative or qualitative approach of a sustainable assessment tool, there is still the debate of what is considered sustainable versus unsustainable, or who gets to make these determinations, "to be sustainable" has become a too vague definition and thus susceptible to exploitation and "greenwashing" (Caradonna, 2022). A uniform framework for sustainability measurement should then be developed to ensure standardization.

Some universal tools applied for sustainable development performance are the materiality assessment matrix, measuring carbon footprint, SDG mapping, life cycle assessment (LCA) or circularity assessment. The materiality assessment framework can use established frameworks such as the Global Reporting Initiative (GRI) or even the Sustainable Development Goals (SDGs) as a base for the roadmap (Hoet, 2020).

As mentioned in the previous section, due to social and environmental challenges, in 2015, UN Member States adopted the '2030 Agenda for Sustainable Development', which embraces 17 Sustainable Development Goals (SDGs) that call all countries to action as a global partnership to end poverty, improve health and education, reduce inequality, and spur economic growth, while mitigating climate change and preserving oceans and forests (United Nations, n.d.). A recent report of more than 450 sustainability experts representing multiple countries, professions, and interests indicates that the goals related to climate change, sustainable consumption and production, life on land, and life below water are several, however, the assessment shows their performance indicators with the least amount of progress (Starik & Kanashiro, 2020). Firms can implement these goals, which ultimately serve as a guide for the long-term integration of environmental, social, and economic dimensions to contribute to sustainable practices, at different levels (Foroudi et al., 2023).

On the other hand, measuring carbon footprint can be performed using the Greenhouse Gas (GHG) Protocol, which sets guidance on carbon accounting with emissions categorized by Scope 1 direct emissions from facilities and owned assets, Scope 2 indirect emissions from utility consumption and energy purchases and Scope 3 other indirect emissions from customers, employees and suppliers (Brightest, n.d). Regarding the SDG mapping, this tool was produced

by the United Nations Environment Programme as part of a holistic impact analysis, which includes goal setting, SDG targets and indicators, and the impact radar.

Furthermore, another assessment tool is the life cycle assessment (LCA), which has a quantitative nature, meaning that it can be used to compare environmental impacts of different processes and product systems; their results are calculated by (1) mapping all emissions and resource uses and, if possible, the geographical locations of these, and (2) use factors derived from mathematical cause/effect models to calculate potential impacts on the environment from these emissions and resource uses (Bjørn et al., 2018). Finally, circularity assessment encompasses the environmental, economic as well as social dimensions and the three dimensions are interdependent at the systemic levels and its circularity indicators can be categorized into: quantitative indicators: represented by numerical values that can be used for mathematical calculations and statistical analysis; qualitative indicators: descriptive in nature without any quantification and semi-quantitative indicators: a qualitative scale that is based on quantitative data (Patil et al., 2023).

Once companies assess and measure their impacts on sustainable development, it should be compared to the policies and frameworks established by regulators and in this case the EU Commission or local regulator entities to benchmark and compare if their business practices fit under what is established to be ‘sustainable accepted'. Considering the active pace at which sustainable development is gaining importance, and the complexity of current business models, the regulations are becoming more strict regarding information disclosure and performance measurement related to the sustainable development goals the EU is aiming to achieve, furthermore, these regulations should be considered as a roadmap for which all companies should align their investments towards sustainable economic activities.

2.2. EU Climate Goals and EU Green Deal

To address the Brundtland Report, governments have responded by embracing sustainable development policy as a national policy framework and developed related goals (Sheehy & Farneti, 2021). In 2019, the European Commission stated climate strategies and targets for the

different phases to achieve net zero emissions and make the EU climate-neutral by 2050, such as policy objectives to cut greenhouse emissions by at least 55% by 2030, climate targets to reduce net emission by 90% by 2040 and long-term strategies for which the EU aims to be climate-neutral with net-zero greenhouse gas emissions by 2050 (*European Council*, n.d.). The EU Council (n.d.) defines climate neutrality as only emitting as much greenhouse gas into the atmosphere as can be absorbed by nature, forests, oceans, and soil. Therefore, EU countries have committed to achieving climate neutrality and delivering on the commitments under the Paris Agreement.

The set of initiatives that will allow EU policies to achieve those 2050 goals is adopted as the European Green Deal. This package of proposals covers interlinked topics such as climate, environment, energy, transport, industry, agriculture, and sustainable finance *(European Council, 2023)*. To translate the climate ambitions of the Green Deal into law, EU members establish the need to create and update EU legislation, therefore, the package of proposals to revise and amend existing EU legislation has been named the 'Fit for 55'(European Council, 2024). On this hand, European political ambitions for climate neutrality by 2050 are already legal obligations for the 27 member countries of the EU. Moreover, the European Commission's Sustainable Finance Action Plan considers that the financial sector must play a key role in this green transition by bringing together supply and demand for green capital (Busch et al., 2021).

Entering into new markets, or managing existing cross-border operations, can pose many challenges for businesses, therefore, we acknowledge the complexity of global business (TMF Group, n.d.) This globalization and business complexity have increased the need for the assessment of sustainability in all business operations and investing activities (Silvola & Landau, 2021). Some initiatives related to sustainable finance require the examination of sustainable considerations in financial policy: i) Disclosure frameworks for corporate sustainability reporting, benchmark methodologies more transparent when it comes to ESG and low-carbon, and better communication sustainability information to investors, setting the Corporate Sustainability Reporting Directive (CSRD) and the Sustainable finance Disclosure Regulation (SFDR), ii) Tools and standards such as EU taxonomy for sustainable activities, green bond standards and ESG rating activities standards, and iii) setting up an International platform on

sustainable finance with the aim of increasing the amount of private capital being invested in sustainable investments (European Commission, n.d).

2.2.1. EU Taxonomy, SFDR, and CSRD

One of the current EU's sustainable finance framework and important market transparency tools is the EU taxonomy classification, which aims to redirect investments to the economic activities that are most needed for the transition and alignment with European Green Deal objectives (European Commission, n.d.).

As mentioned previously, there is not yet a universal definition for 'sustainability' or 'sustainable', therefore the European Commission pursues the creation of a common classification system for sustainable economic activities. This EU taxonomy framework aims to achieve a common language and singular definition of 'the sustainable' category, which will help the EU scale up sustainable investment (European Commission, n.d.). This Taxonomy regulation entered into application in July 2020, establishing the four conditions an economic activity has to meet to qualify as 'environmentally sustainable'. For the European Commission (n.d.), environmentally sustainable economic activities are the ones that contribute to at least one of the six EU climate and environmental objectives, do not harm any of the objectives, meet minimum safeguards, and comply with technical screening criteria. The six environmental objectives of the Taxonomy are (1) climate change mitigation, (2) climate change adaptation, (3) sustainable use and protection of water and marine resources, (4) transition to a circular economy, (5) pollution prevention and control, and (6) protection and restoration of biodiversity and ecosystems (Doyle, 2021).

According to the European Council, the EU taxonomy is supposed to help investors by creating a framework of reference, guiding funding towards sustainable solutions, mitigating greenwashing practices, and accelerating financing of sustainable projects needed for the transition to a zero-carbon future (Appendix 1). Furthermore, such harmonization is expected to facilitate economic operators in their practice of raising funding across borders for their environmentally sustainable activities, as they could be compared against uniform criteria in order to be selected as underlying assets for investments within the EU(Gortsos, 2021). Additionally, companies

obliged to report annual reports according to the Corporate Sustainability Reporting Directive (CSRD) should also report to what extent their operations are covered by the EU Taxonomy; companies not obligated can decide to disclose on a voluntary basis. This disclosure framework intends to alleviate the burden on investors' own due diligence with regard to ‘sustainable’ products and address concerns of “greenwashing”(Gortsos, 2021).

As suggested (Dusík & Bond, 2022), the basic criteria for determining whether the activity substantially contributes to the above environmental policy objectives are defined in Articles 10–15 of the Taxonomy, and Article 17 stipulates that an activity cannot be treated as sustainable if it would impede the other environmental objectives from being achieved. Nonetheless, considerations taken upon the EU Taxonomy, are related to i) its specific technical detail which assesses the environmental impact of economic activity and the fast-changing nature of science and technology which should be regularly adapted; ii) its capacity to contribute across sectors, ensuring that relevant economic activities are treated equally if they can also contribute to one or more environmental objectives; and iii) regulation must provide sufficient legal clarity and practicability; and iv) it should prioritize the establishment of technical screening criteria for economic activities (Gortsos, 2021).

Furthermore, following and aligning into using the EU Taxonomy classification system for sustainable investments, companies, and therefore, private equity firms are also obliged to disclose information about those activities and investments, through the transparency framework of the Sustainable Finance Disclosure Regulation (SFDR). The disclosure of financial markets to disclose sustainability information helps investors who are seeking to fund companies and projects supporting sustainability objectives to be informed of their investment choice. Also, the SFDR allows those investors to assess properly how sustainability risks are integrated with the investment. The SFDR aims to contribute to one of the EU’s big political objectives: attracting private funding to help Europe make the shift to a net-zero economy (European Commission, n.d.).

The SFDR challenge for companies and private equity firms supposed asset managers to classify their funds as either in articles 6, 8, or 9, referred to as non-sustainable, light green, and dark

green funds, depending on their features and level of sustainability, considering that each of them has a different environmental or social coverage of sustainable investments.
Finally, the EU Commission is also requiring, from the financial year 2024, all large companies and all listed companies to disclose information on what they see as the risks and opportunities arising from social and environmental issues, and on the impact of their activities on people and the environment. This regulation is issued aiming to help investors, civil society organizations, consumers, and other stakeholders to evaluate the sustainability performance of companies, as part of the European Green Deal (European Commission, n.d).

2.3. Private Equity

In this section, we aim to provide an overview of private equity practices in the Nordic region. The research covers its historical development, operational aspects, and the growing emphasis on sustainability by the private equity industry. First, we will explore the history and defining characteristics of private equity. Then we will examine the Nordic model, focusing on the cultural values and behaviors common in the Nordic region. Finally, we will connect these elements to explain why Nordic private equity firms are contributing to social value creation and transitioning towards sustainable investment.

2.3.1. The Rise Of Private Equity

The international financial market can distinguished two types of markets, a public and a private one. Companies within the public markets sell shares to the general population, who can then buy, sell, or trade them on a stock exchange, whereas companies within the private markets give professional investors equity in exchange for funding (Malinova, 2024). Private equity (PE) and venture capital (VC) are two major subsets of this financial landscape of private markets, however, for this research, we have focused on the evolution and features of private equity firms. The start of private equity dates back to the early days of capitalism, in the 18th and 19th centuries, large businesses in the United States began to raise capital by selling shares to wealthy individuals (Fastercapital, 2024). Until the 1980s the private equity market was rather a

phenomenon from Canadian, American, and British players. Later on, Nordic countries saw the rise of private equity firms in the late 1980s and early 1990s, initially focusing on domestic investments. Between 1996 and 2000, foreign firms entered the Nordic market attracted by high-tech industry prospects, leading to both success and failure. The mid-2000s triggered changes in investor protection and tax policies, particularly in Denmark, due to concerns over high leverage and interest expenses. Despite challenges and regulatory adjustments, private equity continued to evolve in the Nordic countries, with firms gradually expanding their focus beyond domestic borders in the Nordic to explore international investment opportunities, uniting with the global market of private equity (Spliid, 2013).

Private Equity is a collective term for a fund that invests in both private and listed companies and operates on behalf of accredited investors and institutions (Formue, 2023). Some features that characterize private equity firms in comparison with venture capital ones in the private market include: i) types of companies they invest in, ii) levels of capital invested, iii) amount of equity they obtain through their investments and iv) level of involvement in the invested company's lifecycle.

A private equity fund is normally managed by a general partner who makes all management decisions and holds around 1-3% of the fund's capital. Additionally, the general partner also earns a management fee often set to %, typically around 2% of fund assets, and is often entitled to 20% of the profits from the fund (Chen, 2022). Private equity firms may acquire the whole company or invest in buyouts as a part of a consortium, however, the norm for private equity companies is that typically private equity firms do not own stakes in companies that remain listed on a stock exchange. The private equity firms mainly focus on mature and stable companies where they see the potential to increase the value alternatively to extract value before exiting the investment, for which they usually own and manage within 5 or 6 years (Chen, 2022). Furthermore, private equity firms, are decentralized, lean financials that raise capital primarily from institutional investors (pension funds, insurance corporations, and endowments), aggregate it in funds with a fixed lifespan, use those funds to buy companies, and try to increase the value of the acquired companies during the holding period (Krysta et al., 2022).

Regarding investment strategies of private equity firms, they can apply either growth, buyouts or carve-outs strategies. Growth equity is when private equity firms invest in companies that have just left the startup phase. Distressed investing means locating companies with financial problems and thus difficulties in operating the business to its full potential. Secondary buyouts are when a private equity company sells to another private equity company. Another popular strategy is Carve-outs which involves the purchase of corporate subsidiaries or units. Even if private equity firms have different specialties and strategies, they all have a plan on how to maximize the value of the investment before they acquire the company. This can, for example, mean restructuring and cost cutting, or that the private equity firm sees improvement opportunities in areas that previous leadership lacked, such as strategy, new technology, or expanding into additional markets. It also varies whether the private equity firms choose to use their own managers to implement operational changes or whether they choose to retain prior managers to execute the new plan (Chen, 2022).

Regarding the benefits of private equity investments, some of them can be mentioned as access to capital, expertise and strategic guidance, long-term focus, network and access to resources, alignment of interests and exit opportunities (FasterCapital, 2024). Now that specific features of private equity firms have been stated, it is relevant to mention that these features are the ones that will give them strategic advantages for implementing a sustainability agenda on their invested companies, because their business model aims to create value by focusing on promising companies with high impact that are perhaps poorly managed at the time of acquisition. Kaplan and Strömberg agree that private equity firms realized early that they can no longer rely solely on financial wizardry to prevail, therefore, to produce actual value in their investments and the above-market returns their investors expect the firms must engage deeply in creating operational value in their portfolio companies (Krysta et al., 2022).

As to how private equity firms create value, specific strategies are not publicly revealed or stated in any research, nonetheless, different approaches for value creation can be found from other research. Four distinctive strategies for approaching value creation are presented as “Infiltrator,” “Consultant,” “Organizer” and “Investor”. The infiltrator approach looks to maximize power over the portfolio company by placing its own employees in top leadership positions within the

portfolio company; the Consultant approach limits its involvement to offering advice and drawing from its own experience to support crucial projects; the Organizer approach coordinates value creation on a fund level by sharing knowledge across portfolio firms but integrates little with value creation professionals in any single portfolio firm; and Investor approach does not have specific value creation teams and performs portfolio firm monitoring or value creation activities out of the investment team (Krysta et al., 2022).

Although corporate governance has played an important role in the private equity industry from the beginning, traditionally, environmental and societal issues have been overshadowed previously, as the industry has prioritized returns without much consideration for the long-term sustainability of portfolio companies or their societal impact. The industry has been slow to recognize the importance of ESG for its future relevance and profitability; nonetheless, the private equity industry is well-positioned to take the lead in sustainable investments, and the industry can accelerate the implementation of ESG principles (Eccles et al., 2022).

Despite this initial traditional practice, there are three key forces that are pushing the implementation of ESG in the industry: relevance of ESG for limited partners (LPs), an increase of financial returns with ESG strategies and relevance in focusing attention to solving ESG needs from society. As sustainability and ESG are becoming increasingly important for limited partners, the largest asset owners, which include pension funds and sovereign wealth funds, have recently become increasingly concerned about the effects of climate change and inequality. A recent survey of private equity partners found that 90 percent of them consider ESG in their investment decisions and 77 percent use it as a criterion when selecting general partners. The second force driving ESG in the industry comes from the belief of LPs that having a focus on ESG will lead to outperformance and a continuance into delivering historically high returns. The third force is that portfolio companies increasingly see the importance of managing and focusing on ESG issues due to an increased awareness of the importance of climate change, and social expectations regarding diversity, justice, and inclusion for their stakeholders, but also increased regulations regarding sustainability focus (Eccles et al., 2022).

Regarding how private equity business models handle ESG issues and sustainable development, their special qualities provide a number of benefits for investing in sustainability initiatives. Private equity firms are able to support sustainable projects and businesses that require time to develop and mature before yielding returns. Additionally, investors actively monitor the development of improvement strategies, which include the performance of environmental, social, and governance matters. Second, strong alignment between owners and managers is made possible by private equity's long-term focus and control over the investment. This helps to drive the intended impact, such as sustainable and financial impacts, while also providing and securing funding and offering expertise and talent. Thirdly, when it comes to creating and resolving complex social and environmental concerns, private equity businesses have a record of innovation and problem-solving.

According to PwC's first survey related to private equity firms, on their approach to environmental, social and governance (ESG) topics, the risk management factor was their foremost concern. The survey shows that ESG management can help create value. Around 70% of the surveyed firms placed value creation among the top three drivers for their organization's ESG activities. The survey findings indicate that it is standard practice for private equity firms to consider ESG factors when sourcing opportunities, carrying out due diligence, forming post-acquisition plans and deciding on deal terms (PricewaterhouseCoopers, 2023).

Private equity firms are showing that profit and purpose can go hand in hand when embedded into the business (Jais & Albert, 2022). Nordic private equity firms are also influenced by cultural and behavioral business practices from their particular Nordic region, which some researchers called the " Nordic Model". Therefore, to understand the particular business practices and approach to sustainability from Nordic private equity firms we explain in further detail the Nordic business model.

2.3.2. The Nordic Model and Sustainable Investments

Although the Nordic region only consists of about 3% of the European population, it is known for its macroeconomic success. Often referred to as the "Nordic model" it focuses on economic

and social policies that have led to transparency, economic stability, innovation, entrepreneurship, equality, and general happiness (Stepstone Group, 2024). In addition to the Nordic market showing success in innovation and entrepreneurship in several sectors, the Nordics are also highlighted as sustainability's Silicon Valley, where the focus on ESG has intensified sharply in recent years (Allvue Systems, 2023)

The Nordic countries are often regarded as forerunners who potentially lead the way in terms of environment and climate in the region, and have strong unity among themselves. The Nordic countries also rank consistently high in international sustainability indices and rankings. A previous study also shows a strong connection between citizens' willingness to make financial sacrifices to promote the environment in the Nordic countries (Reyes, 2021). It should not surprise that Denmark, Finland, and Sweden have consistently secured the top three spots from 2015 to 2023, each rotating in and out of the top position within those years. Furthermore, the broader Nordic region, including Iceland and Norway, consistently ranks high in the many associated nation-level sustainability assessments (Strand, 2024).

When it comes to sustainability, the willingness in the Nordic countries to focus on sustainability differs compared to other countries, creating incentives for private equity firms to invest in a business portfolio that is considered sustainable (Reyes, 2021). Even if the private equity industry in the Nordic countries and other parts of the world, e.g. America, which is a major player in the industry, has similar models and approaches, there are differences, both when it comes to the industry and when it comes to sustainability focus (Spliid, 2013; Reyes, 2021). Besides, the Nordic “cooperative advantage” is described as the “general tendency for companies in a Nordic context to implement a value creation strategy based on cooperating with their stakeholders, that results in robust value creation for the companies and their stakeholders”. Thus, a core reason for Nordic companies’ strong sustainability performances is that they show the willingness and ability to cooperate with their stakeholders (Strand, 2024).

Considering that there is a noticeable concept of the ‘Nordic approach to sustainability’ in business, the research focuses on the Nordic practices within the private equity industry of Nordic countries. For instance, the comparatively strong sustainability performances of

Nordic-based firms are rooted in strong stakeholder engagement and effective cooperation (Strand, 2024).

The Nordic private equity industry holds a position that is globally recognized thanks to the positive development and attractiveness that has existed within the industry for some time. Despite macroeconomic challenges such as the pandemic and geopolitical tensions in the region in the past years, the region has remained attractive in the PE industry (Stepstone Group, 2024). Conditions regarding investor protection and investment laws are similar in the US and the Nordic countries regarding laws and investor protection, it's as safe for PE firms to operate in the Nordic countries as it is in the United States, and there is also just as much focus on the PE industry in the Nordic countries as in the United States. However, regarding other parameters, industry differences exist between the Nordic countries and the United States. Nordic managers of private equity firms value loyalty and equality to a higher degree than financial rewards and personal success, while the private equity industry in the US values financial rewards more than in the Nordic countries. Furthermore, the M&A potential in the Nordics is also smaller than in the market in the United States. Sweden is, however, an exception where the country is directly comparable to the US. The other Nordic countries are far behind the United States when it comes to M&A. Raising funds is also more complex in the Nordic region compared to the United States. This is because there is greater access to domestic capital in the US, making it easier to gather funds through local channels with lower risks. However, Nordic PE funds require international investors for growth, which adds complexity to the process, factors such as prevailing tax regulations, and other political risks (Spliid, 2013).

A survey collecting investment performance from 12,000 investments over the past 20 years shows that Nordic buyouts consistently outperform European and North American counterparts in terms of total return. This was not solely due to increased selectivity and risk appetite but was a common outcome in various market segments, including large, medium, and small markets within the region. The Nordic market also stands out for its local network and the opportunities it creates through accelerated acquisition strategies and the availability to take part in exclusive business strategies that the strong local network offers.

But today, the world is facing economic challenges in the form of inflation, and higher interest rates have put pressure on the private equity industry around the world and thus also on the Nordic market. This has led to a lower volume of investment, where challenges have occurred due to the interest rate situation but also the difficulties in valuing the objects correctly as a result of the economic situation. The information from central banks that the interest rates will be at a higher level than usual for a longer period of time is creating an economic slowdown, but despite the absence of clear signs that a major improvement is approaching, there is clear optimism within the market. With that, a short-term decline in activity should not mean a long-term decline, over time the private equity market should continue to grow once investors regain the investment appetite they had before the economic uncertainty (Fagerlund, et.al. 2023).

Nordic private equity firms, despite having a different sustainability approach, are business after all. Their business purpose and strategy to obtain growth and high rates of return is achieved by the standard practice of buying businesses and then, after steering them through a transition of rapid performance improvement, selling them (Barber & Goold, 2007). For performance improvement, the company's operation monitoring can be done and measured differently. There exists a mixture of financial and non-financial indicators embraced by business leaders who regard them both as a valuable tool to measure and control their businesses (Simon et al., 2015). For private equity investments, to successfully unlock growth and generate returns requires careful analysis and monitoring of key performance indicators (KPIs), which are essential for tracking progress, making informed decisions, and ultimately driving success (Grindler, 2024). In the case of private equity firms, they are renowned for excellent financial controls and for a relentless focus on enhancing the performance basics: revenue, operating margins, and cash flow (Barber & Goold, 2007). Therefore, it can be stated that financial performance measurement is fundamental for decision-making and that KPIs such as revenue growth, EBITDA margin, cash flow, etc, are used to make better-informed decisions and to maximize returns.

Nonetheless, as private equity firms are beginning to develop operating skills of their own and thus are now more likely to take an active role in the management (Barber & Goold, 2007), non-financial indicators are also now relevant for their monitoring of investment performance improvement. Some of these non-financial indicators that can be considered on their corporate,

governance management, and ESG performance assessment are related to employee satisfaction, customer and client satisfaction and retention, teamwork, and product and service quality. High levels of these non-financial indicators can be considered as important as the financial ones and are even crucial for the sustainability of the business (Simon et al., 2015).

As this Nordic model for business is oriented towards sustainable investing, Thus, in addition to conventional financial data, their investment selections are predicated on ESG (environmental, social, and governance) data that is critical for each company. Moreover, other researchers state that sustainability aspects provide more comprehensive information about companies than traditional financial statement analysis—particularly in terms of risks and opportunities and companies' impacts on the environment and society (Silvola & Landau, 2021).

Finally, we encountered that some authors have also proposed the integration of environmental management, green supply chain, and corporate social responsibility practices throughout the organizations' performance-measurement systems, therefore it is relevant for the research to identify if Nordic private equity firms agree with considering financial and nonfinancial indicators and KPIs as part of the performance management of their portfolios.

3. Methodology

This section presents the methodological approach considered for this research, providing an outlook on the data collection and analysis process. This section presents the research design which is carried with a qualitative approach, as the research looks to emphasize an inductive approach to the relationship between theory and research (Bell et al., 2022). This research conducts a multiple case study so that a deeper understanding of the Nordic private equity firms' adaptation process and compliance to new sustainable frameworks impact related to the practice of sustainable investments. The research considers that the results of several cases, supported by actual data obtained from interviews, are regarded as more solid and trustworthy. Furthermore, the research cross-case analysis is explained in detail, as well as the research methods applied for data collection through the interviews and the data analysis techniques. Finally, an explanation of the validity and reliability of the thesis is discussed.

3.1. Research design

The objective of this research is to explore how Nordic private equity firms are implementing and aligning with the new sustainable regulations and frameworks set by the European Commission as part of their Action Plan to redirect investment and boost sustainable investments within the EU. To achieve this objective we have decided on qualitative research, as we consider that collecting and analyzing non-numerical data would bring major advantages to our research. Qualitative research can be defined as a kind of inquiry that is naturalistic and deals with non-numerical data, seeking to understand and explore rather than to explain and manipulate variables (Nassaji, 2020).

Thus, the research aims to interpret the adoption process of EU Green Deal new frameworks and regulations for Nordic private equities firms in order to determine the impact of the shift to more sustainable investments and gather their insights. The interpretivism approach in research holds that reality is constituted by human action and meaning-making, as it is concerned with understanding human behavior and with the 'how' and why' of social action (Bell et al., 2022). We acknowledge that in this research the assessment to qualify an investment as sustainable investment is influenced by each private equity firm's interpretation of regulation and adoption

of frameworks and tools, therefore we adopt the interpretivism approach to understand the different compliance levels.

Furthermore, in qualitative research, data is collected through qualitative data collection tools such as interviews, field notes, diaries, observations, etc (Nassaji, 2020). Therefore, to understand how Nordic private equity firms have been adapting and complying with sustainability frameworks and regulations to foster sustainable investments we have conducted interviews and observations of the company's assessment tools and perspectives. The purpose of this qualitative research is to understand the particular situation of Nordic private equity firms applying the new EU regulations and frameworks for sustainable reporting and disclosure. By understanding better the complexity of the situation, we should contribute to setting policy and professional practice (Stake, 2010), which will facilitate later future updates and improvements in regulations frameworks and possible further research.

The theoretical perspective of implementing new frameworks and regulations to achieve an increase of investments for sustainable investment and what is understood as sustainable involves complex interpretations as there are many assessment tools to measure sustainability. Thus, good qualitative research greatly involves the thinking of others as data and interpretation and relies partly on the experience of others, so qualitative researchers look for ways of gathering the experiences of others (Stake, 2010). The literature review presents opportunities to research interpretations of Nordic private equities regarding sustainability, their adoption of mandatory regulations, and frameworks to disclose their investment features.

As the research focuses on different private equities firms, the study applies a cross-sectional research design which aims to collect data on more than one case, and at a single point in time (Bell et al., 2022). Choosing more than one case study will enhance the analysis of variations between private equity firms to understand the level of adoption and difficulties encountered in their process of compliance with new regulations and frameworks. Studies shows that a significant advantage of multiple case research is that researchers can compare their findings, also because asystematic comparison using a cross-case analysis reveals similarities and

differences and how they affect conclusions; therefore, the results are more convincing, trustworthy, and robust (Hunziker & Blankenagel, 2024).

3.2. Data Collection

As mentioned previously, this research analyzes the application of sustainability frameworks, regulations, and measurement tools of Nordic private equity firms; therefore, we are not restricted to only one case, but on the contrary, gathering data from a wider sample. For this reason, a cross-case analysis is suitable for comparing and contrasting multiple firms allowing us to explore deeply into specific applications of each firm and obtain more insights as well. Cross-case design enhances general applicability and facilitates us to identify the best practices of sustainability compliance while comparing and contrasting identified patterns. For the research, we were able to perform interviews with five private equity firms from the Nordic region.

Regarding the sampling of this qualitative research, we chose a purposive sampling method, a non-probability sampling which does not seek to sample research participants on a random basis (Bell et al., 2022). We have consciously directed our sample to participants that meet our criteria and objective research, such as partners, sustainable managers or investment directors or managers of private equity firms from Nordic countries which are considered to be a frontrunner and obtained high ranking regarding focus on sustainability policies and practices. In this study, the sample was limited to the selection of private equity firms of the Nordic countries: Sweden, Denmark, Norway, and Finland, due to their broader firm availability to be reached. Thus, the sample considers private equity firms that hold their headquarters offices in the above-mentioned Nordic countries and have within their funding operations more than 80% of their portfolio companies focused on sustainable-driven development. The selection regarding their adaptation to the EU's sustainability regulations and framework for sustainable investments is carried out carefully to obtain a representative and informative view of the sector's development and challenges in the industry and region.

Our process for selecting suitable companies involved several steps where we established several criteria. In addition to having a good mix of companies operating in the selected countries, we

also prioritized companies based on their size and experience in the sector. We identified companies that clearly demonstrated that they integrated sustainability investments as part of their operations, as well as those that actively chose not to communicate their integration of sustainability investments in their strategy. Furthermore, we also identified potential companies through industry reports, databases, and available literature on the internet to map which companies were most relevant to the topic.

After potential companies were identified, we initiated contact through email conversations to explore their interest in participating in an interview. At this stage it was important to ensure that we had an even distribution between the countries, but also that there was a variation in size and experience in the industry. We strove not only to interview well-established companies with long experience in the industry but also to avoid only interviewing companies that had a clearly stated public sustainability strategy with the aim of obtaining a wider collection of information within the sector. The selection aims to offer a relatively diverse and informative picture of how different companies in the sector are adapting to the EU's sustainability regulations and frameworks, as well as being able to showcase detailed and comprehensive information about the sector's strategies, progress, and challenges.

3.2.1.Primary source: Semi-structured interviews

The primary source in this work is semi-structured interviews because the subject matter lends itself to a deeper exploration of the interviewee’s perspective. Qualitative interviews are open to ambiguities are based on human interaction, and offer a diverse picture of the world of experiences (Rennstam & Wästerfors, 2018). This approach allows for flexibility in structuring the interview, departing significantly from any predetermined schedule or guide. It enables the opportunity to ask follow-up questions and explore new topics that become relevant during the interview. As a result, semi-structured interviews tend to be responsive and flexible in the direction they take, allowing interviewers to adjust based on significant issues that arise during the interview. Also, since this work started with a clear focus on investigating several private equity firms, it was advantageous to use semi-structured interviews, so that the specific topic could be treated with a great focus (Bell et al., 2022).

Regarding the creation of the interview guide, it should be less specific compared to a structured interview, which lays the foundation for a guide that contains a brief list of areas and memory prompts to be covered in the interview (Bell et al., 2022). With the help of communication with colleagues and friends as well as a review of literature and asking internal questions such as "What do we need to know to answer each research question we are interested in?" helped us form a solid interview guide. It was important for us to design the interview guide in a way that enables the interview to flow reasonably well, ask questions that can provide answers to research questions, use language that is relevant to the people being interviewed but also avoid asking leading questions.

Furthermore, before the interviews, we made sure that we had the majority of practical details with the aim of creating a comfortable environment and situation, both for us as interviewers and for those who were interviewed. We made sure that the companies were anonymous, given that some information can be sensitive, but also that the interview took place in a familiar situation such as in their office, alternatively over a video call (Microsoft Teams). In addition, we used a good digital audio recorder with the aim of transcribing our interviews, and primarily focusing on the interview content. Thus having the interview recorded gave us the opportunity to go back and analyze the interview afterward. This procedure is an important part of the analysis, where you can ensure that the answers from the interview are accurately captured (Bell et al., 2022). Prior to the interview, we also made sure to be well prepared, where we had, among other things, read the companies' annual reports, sustainability reports, company website information, and other external sources, with the aim of creating a solid foundation and avoiding questions that might otherwise be considered be superficial and easily accessible via various reports. During the interview there are several different types of questions that can be used in a qualitative interview, Bell et al. (2022) suggest 9 different kinds of questions, such as introduction questions, probing questions, follow-up questions, specifying questions, direct questions, indirect questions, structuring questions, interpreting questions and silence.

For the semi-structured interview, we had a list of questions and specific topics that were intended to be used as an interview guide, however, for the interviewees there was a large leeway

in how these could be answered. As a consequence of this, there is the possibility that the questions do not follow the exact line in the interview guide (Bell et al., 2022). Questions that were not previously included in the interview guide but that were asked during the course of the interview occurred when we picked up relevant information that was assigned during the interview. However, in general, the interviews followed the interview guide, where the same questions were asked and in similar wording between the different interviews (See Appendix 2). For example, general questions were aimed at understanding their start and journey on sustainable investment, whether they started recently or long ago and shifted their business model. Furthermore, questions regarding their internal corporate structure to understand the hierarchy and integration of sustainability trends in their team base aim to understand its relevance within the operations and strategy of the firm. Moreover, questions related to how they were affected by new sustainable regulations and reporting matters were also conducted. Thus, last questions aimed to understand if improvements or changes to these regulations should be made.

To ensure the quality of insights required and their suitability to address information for the research questions, the interviewees were selected based on their job position and description of their office location and approached by their institutional e-mail. The interviews were conducted with a single representative of the private equity firm, who was mainly in positions such as Partner, Investment Manager, or Sustainable Manager, with knowledge of the operation and current sustainable regulations. The average range of interview length was approximately 45-90 minutes conducting the basic guide of questions but also extending to related questions that arose at the outgoing of the interview which gave a further understanding of their perspectives.

Lastly, the interviews were carried out both on-site at the companies but also via video call (Microsoft Teams), depending on availability and requests from the companies, as well as considering the geographical distance to the firms. Furthermore, there are several advantages to conducting the interview over video, as it tends to be more flexible and opens up the possibility of last-minute changes, the convenience of being interviewed on video may also encourage more to participate due to the simple nature of going online and joining online meetings. There are also significant benefits of video interviewing in terms of time efficiency and financial savings

that arise from removing face-to-face interviews (Bell et al., 2022). Information obtained from the interviews will be presented in the empirical analysis section with the coding of Company_number_Interview, e.g. *C1I*.

Table 1: List of Interviewees, Position and Location

No.	Interviewee Position	Location	Type of Interview
1	Partner	Sweden/ Finland	On-site Interview
2	Sustainability Manager	Sweden	Online Interview
3	Partner	Denmark	Online Interview
4	Head of ESG	Denmark	Online Interview
5	ESG and Impact Manager	Norway	Online Interview

3.2.2. Primary source: Additional data

In our research, document analysis played an important role as a primary source of information, enhancing data obtained from interviews. This approach aligns with the concept of triangulation, as described by Bowen (2009) in his paper "Document Analysis as a Qualitative Research Method", where multiple sources of evidence are used to enhance credibility and reduce biases. By incorporating document analysis alongside interviews, we aimed to cross-validate findings and capture different views of our research subject. Additionally, our reliance on document analysis resonates with the insights from Bowen (2009), emphasizing how documents can uncover meaning and enrich understanding within the research context.

In addition to the interviews we mainly gathered information from the companies' websites and public reports. This helped us supplement our primary data from interviews, but it also helped us with the design of our questions for the interview, where we wanted to avoid asking questions whose information was easily available online and thus ensure interviews with a high quality of preparation.

By reviewing the companies' own information channels, we were able to gain access to valuable insights into their official stance and strategies, but also their stated goals and initiatives to integrate sustainability aspects into their operations. This includes information regarding ESG, SDGS, and similar. In addition to the companies' websites, we also reviewed their public reports such as quarterly and annual reports, sustainability reports, and published newsletters. This gave us a deeper understanding of the companies as they contain more detailed information compared to the websites and gave us a more informative insight into their performance and results within their stated goals regarding their sustainability investments and projects. The collected information is also used as confirmatory or completed data from the interview. When we used those sources, it was important for us to remember that information from company websites and reports are the companies' own presentations of themselves and therefore may tend to show a positive image. Despite this, we considered the sources to be a valuable information channel to prepare for the interview and to be able to confirm information that was said during the interview. Information obtained from the other resources, such as websites and reports will be presented in the empirical analysis section with the coding of Company_number_Website, e.g. *C1W*.

3.3. Data Analysis

Bells (2022) states that the richness associated with qualitative data is valued, but it can also be very difficult to find analytic pathways through this richness. As we managed an extensive amount of empirical data resulting from conducting five semi-structured interviews, a grounded theory framework was applied for the analysis of this qualitative data. We then proceeded to transcribe all the interview recordings in text using AI tools. Information from company websites and reports was also summarized using AI tools to be collected in document files for later sorting.

Analyzing qualitative data for the research can be approached as the categorization of data into themes by using the sorting-reducing-arguing framework (Rennstam and Wästerfor 2018). There are different ways of sorting qualitative data such as identifying, highlighting, differentiating, and listing which allows order and an overview (Rennstam & Wästerfors, 2018). In order to

generate an index of terms to help us interpret data, we started *sorting* the qualitative obtained data from the semi-structured interview transcripts using Nvivo software in which we highlighted common concepts or nodes. We first created our thesis project in the Nvivo software and uploaded all our interview transcripts as cases. Next step, we create codes for main words, which were repeated along all interviews, such as "sustainability", "development", "investment", "measurement", "EU regulation", "reporting", "taxonomy", "business model", "value creation", "assessment", "greenwashing" and "future". The final step was to create hierarchical codes for the labeling of concepts and grouping of references toward our research questions and further research.

Nodes are the route by which coding is undertaken, a collection of references about a specific theme or area of interest (Bell et al., 2022). A preliminary reading of the transcripts allowed us to break down the data into categories and later with a second read through the categories can be reviewed and subcategories created. Coding tools were used to review transcripts and give labels to parts that have potential theoretical significance (Bell et al., 2022). Coding is how you define what the data you are analyzing is about, which involves identifying and recording one or more passages of text that, in some sense, exemplify the same theoretical or descriptive idea. Usually, several passages are identified and they are then linked with a name for that idea – the code (Gibbs, 2018).

While sorting the data we encounter that is not possible to present all the elements and aspects among and within categories, and it is only possible to refer to a small part of the collected material when writing our research, therefore, we must carry out the process of reduction, a categorical reduction, specifically (Rennstam & Wästerfors, 2018). *Reduction* of previously obtained categories when sorting and coding were manually processed as our subjective perspective linked them with research questions. The software Nvivo can assist in organizing hierarchical and non-hierarchical nodes for a better look at the categories. After coding the interviews, we had five categories or "codes" related to research questions, however, as we can not use and present "everything", we have decided to zoom in on some codes more and let others remain at a granular level (Rennstam & Wästerfors, 2018). Finally, we reduced our categories to three themes that were directly linked to our three research questions: R1) Private equity and

sustainability trends, R2) Private equity and compliance with EU sustainability regulations and frameworks, and R3) Private equity and sustainability strategies and measurement. The revision of the references obtained for each main code in the Nvivo software helps us to sort and define more coherent information for us to later formulate our research findings for each of our research questions.

Nonetheless, creating order and deciding what to use and not use is not enough, because we also need to contribute to the ongoing research (Rennstam & Wästerfors, 2018). For *arguing*, data was reflected and processed to refine and interpret the relation between empirical findings and the literature. Evidence was synthesized to support or identify alternative explanations to research questions presenting different interpretations and approaches from different firms.

3.4. Validity and Reliability

For this research we recognize that qualitative research is also systematic, involving a careful process of identifying the problem, collecting, analyzing, explaining, evaluating, and interpreting the data. Thus, when doing qualitative research, it is essential to ensure its rigor and quality (Nassaji, 2020). As suggested, assessing qualitative research, compared to a quantitative one, requires different criteria of assessment such as credibility, transferability, dependability, and confirmability (Bell et al., 2022).

To ensure the credibility and validity of this qualitative research, we apply triangulation methodology for our cross-case analysis, using two data collection methods as sources, as previously mentioned, such as semi-structured interviews and the review of the company websites and reports to accomplish a more accurate understanding of their level of compliance and implementation of EU sustainable frameworks. Nonetheless, regarding transferability, the findings and interpretations of this research cannot be generalized as if it were a quantitative research, but sufficient detail is provided to the research process.

Additionally, for dependability and reliability, we made efforts to document in detail all our research processes, activities, or changes that occurred during the research. To ensure

confirmability, the data coding and analysis have been described step by step as well as the decisions made during the process.

Furthermore, regarding data collection, it is important to mention that confidentiality and anonymity have been considered as measures for the interviews as the research aims to enhance credibility and reduce anchoring biases for guide results. Also, it is crucial to adhere to ethical considerations and prove that on one hand, the research meets the standard of ensuring reliability and validity of findings, but also that anonymity ensures protection and privacy to interviewees allowing them to provide key information for the research (Nii & Ogbewe, 2023).

3.5. Limitations

Our choice of research design does not come without limitations that should be taken into account when reading this study. The research design is structured in a way where we have limited the number of companies we have chosen to interview and thus the results in this study do not represent all private equity companies in the Nordics. Furthermore, it can be argued that the choice to conduct semi-structured interviews creates challenges to replicability since these allow different interpretations and are also subjective (Bryman & Bell, 2011). Despite efforts to ensure validity and reliability through triangulation, there may still be limitations to the accuracy and consistency of the findings.

4. Empirical Analysis

In this chapter, we present the empirical analysis from interviews and literature reflection. First, we explain at which level private equity firms agree with considering sustainability as part of their core business and sustainable investment practices as each firm has internalized sustainability in different periods and motives; but also interpreted sustainable investment with different comparison frameworks. Findings suggest business models have shifted to investments considering social and environmental challenges as a key feature for being considered in their portfolio. Secondly, we aim to identify the private equity firms' interpretations of sustainable investment through the application of measurement tools. Finally, we present how companies have transitioned to compliance with new EU frameworks and regulations regarding sustainable finances and investment transparency. For instance, the findings point out that complying with sustainable regulations and standards on business investment classifications benefits transparency and decision-making for the firm and even more for stakeholders.

It is relevant to mention that interpretations and compliance of sustainability and sustainability measurement are unique per firm and influenced by the background and knowledge of their firm members. The analysis interprets interviews conducted with five different private equity firms.

4.1. Private equity firms and sustainable trends

This subchapter presents interpretations of private equity firms related to sustainability trends and their inclusion in their core business operations. The private equity firms showed a different timing for adopting sustainable internal policies and sustainable investment approaches. Interview questions related to this subchapter were such as "How is sustainability integrated into their overall business strategy and investment decisions", "What impacts has sustainability had on private equity" or "How do they manage greenwashing and stakeholders expectations".

During the analysis of our empirical material, we identified that the shift of the last few years towards a sustainable trend is also present in the operations of private equity firms, as they interpret this trend as the start of their firms or a shift in the operations strategies. Firms agree that societal and environmental challenges have set the shift to sustainable investments: *"(...) the starting point was that there's these big challenges in society. They can be environmental, they*

can be social, things like, of course, climate change is an obvious one, so there is this philosophy to invest in businesses that have a positive contribution to society" (C1I). Also accepting their participation in portfolio assessment: *"We have mainly been able to finance these kind of companies who do some really positive environmental impacts. (C4I).* Sustainable finance comes as an option to fund businesses with a positive impact on society, and the mission of private equity firms is influenced by this new philosophy and caring for society: *"What is the purpose of capital, actually? Why are we here? What should you use capital for? (C1I).*

So it can be noticed that the idea, philosophy, or perspectives that sustainability has indeed influenced operations: *"But I think that the movement towards a more holistic perspective of what we're doing with our nature, I think is really good." (C2I).* The private equity firms confirmed that new ways of doing business have been created with the sustainability approach: *"It aligns with an overall responsible way of conducting business alliance." (C3I).* Business models have also changed with the inclusion of sustainability in their core operations, which are the ones private equity firms are now more interested in: *"Maybe also more confined, you know, the business models that can create the return that, you know, professional investments are requiring." (C4I)*

Private equity firms consider that financial development is important, however, their impact on society should be relevant for their portfolio investments: *"working with a lot of companies and who as he thought had great potential to both do good as a financial company but also do good from an environmental perspective" (C2I).* As mentioned before, sustainability should be considered within the core business operations and not as an extensive consideration: *"It has changed. It has changed our look at companies. We are evaluating the diligence phase. We're evaluating where they are, what are they doing, how much do they understand and how much do they want to affect and work with ESG as part of their business, not as a satellite alongside their business, but as building it into the company. And also evaluating their readiness to actually do more." (C3I).* There is also the insight that ESG should no longer be considered just compliance with regulation but a real strategic advantage for companies and for value creation: *"I would say some companies, they think about ESG as something they have to do because of regulation. And that is, of course, in the background of it all because CSRD is coming also to them. But the*

companies we are part of that succeed or see with specific ESG lifts in the company, they view it as an advantage, a competitive advantage for them against their competitors." (C3I)

As for the continuance and boost of private equity firms funding sustainable investments, they agree all stakeholders are shifting towards sustainable trends, new entrepreneurs, new innovators, markets, suppliers, and customers: *"We're going to do this and actually create very high return because this is the stuff society needs. And we think the trends will be behind these businesses, it will not be hard to find a lot of businesses out there that are actually aligned with these agendas." (C1I)* They also consider investors are more interested in funding sustainable investments that contribute to the society needs: *"if your business actually makes a positive contribution to one or several of these challenges, then as a starting point, we're interested as an investor (C1I);* furthermore, even the LPs investors which request more information and disclosure of sustainability performance: *"The interest from investors on this kind of funds is enormous, which is so positive, I think, as well. So there are a lot of positive things happening around us. And I'm really hoping that we will be able to kind of change the mindset in the world". (C2I)*

So private equity firms are a perfect option for institutional investors when seeking for-purpose funding*: "And a lot of investors, maybe as in our investors, again, the LPs are very interested in having some kind of allocated funds into sustainability. So they're looking for private equity firms that have this as a focus so that they can place their money in something that works for this purpose." (C5I).* On the other hand, private equity firms considered their operations to contribute highly to the transition of sustainable development compared to other finance markets because of their organizational features: *"Yes, compared to the banks, definitely. Definitely. The banks are not the owners and don't sit on the board and don't affect directly into things." (C3I).*

Furthermore, the firms agree positively with the awareness and assimilation of sustainability trends in the business market and that EU regulators require the shift to the sustainable development of companies: *"It is part of what the politicians have agreed the way that the world is going to develop. So I think it's an opportunity also to use it diligently and carefully to also make better companies." (C4I).* For this reason, their operations towards sustainability have

changed internal structure, corporate governance, and process assessment: *"So we have an ESG due diligence framework, so that means I'm a part of the investment committee(...), we kind of do our ESG assessment in parallel with the financial due diligence, commercial due diligence, and so on". (C4I). Positions of responsibility have been created internally in the private equity firms in charge of sustainability: "During the last period, and after I've also started here, I'm the first one who actually has the ESG and impact as my role title, right? So now it's definitely targeted." (C5I)*

Finally, their concern towards the boost of sustainability trends and green business models and brands is also related to the management of greenwashing risks: *"We definitely have to manage greenwashing. And we have to guide our companies in this and make sure they don't step too far in what they can do. They should rather do content than talk about it" (C3I).* The private equity firms considered that there are loopholes and complexity in the way how companies report and disclose their sustainability performance, exposing business operations not necessarily sustainable for real, which is a challenge in their own portfolio assessment: *"But the industry is so immature, or this whole theme is so immature, that there's a lack of information, there's a lack of transparency, there's a lack of good reporting. And we see some companies that maybe over-market themselves in terms of what they do." (C1I)*

In this subchapter, it is presented with clarity that there have been positive effects of sustainability trends within the finance sector, specifically, for private equity firms. Not only do they inspire a new philosophy of engaging with social expectations and requirements towards social and environmental challenges, but also of how they do business and create business models with social purpose. On the other hand, firms realize that all stakeholders, investors included, are also demanding business with social purposes and at the same time transparency.

4.2. Private equity firms and sustainability strategy & measurement

This subchapter presents interpretations of private equity firms related to their understanding of the application of sustainability measurement tools for assessing due diligence, and performance development of their investments regarding ESG frameworks. As there are different

measurement tools, private equity firms have implemented individual assessment criteria to evaluate and determine the level of sustainability of their portfolio. For this subchapter, questions related to “What is a sustainable investment”, “How to better measure sustainability impacts and performance”, “what standards for measurement do they apply” or “Whether in-house or external assessment is practice” intends to explain how measurement is applied by each firm. Furthermore, due to compliance with sustainability reporting, and stakeholders' expectations, this subchapter aims to explore the landscape of strategy and sustainability measurement in the sector, identifying and analyzing our findings from interviews and company documents focusing on strategy and sustainability measurement in investments.

During our analysis of our empirical material, the interpretation emerged that private equity's sustainability strategy and measurement are not only superficial or temporary but integrated throughout the entire investment process in several of the companies we have chosen to interview. We identify a pattern that this integration of sustainability strategy and measurement can be divided into 3 different phases, Entry, Ownership, and Exit, where processes in regards to strategy and measurement are the same with slight variations depending on which investment phase the companies are in.

Entry:

Integrating sustainability aspects within the investment processes seems to be a fundamental part of the companies' strategy. where a comprehensive evaluation of risks and opportunities related to sustainability starts with the identification of potential investments. Our collected data shows that the companies use both external and internal frameworks, guidelines, and tools, such as the external frameworks SDGS, EU-taxonomy, SFDR Article 9, and Principle for Responsible Investment.

When it came to internal tools, obtaining detailed information on their structure proved to be challenging across all the companies we interviewed, however, we were given access to overall information regarding the internal tools, for example, company C2W used the environmental impact assessment tool and due diligence guidelines tool, which measures and explores risks and opportunities throughout the value chain, from raw material procurement to the end customer.

Furthermore, several companies we interviewed also used external expertise during the due diligence, for example, C5W used consultants during the due diligence process: "*We use consultants as well. So in the due diligence process, we have external consultants that do the pre-work and then together with me, set the guidelines, and then we use that to develop a separate ESG and impact strategy for each of the companies to invest in so that they have that from the start." (C5I).* The use and combination of internal and external expertise together with frameworks and measurement is common practice among the majority of the companies we interviewed. These measurement tools helped to identify current practices and the necessary actions needed but also to confirm that companies have a positive environmental impact or a potential to achieve one.

In addition, data from C1W shows that the initial phase of screening potential investments is one of the most important phases where the potential investment needs to undergo a very thorough evaluation where they want to evaluate whether the environmental benefits are consistent with their investment criteria, similar to company C2W, C1W uses external frameworks such as the EU taxonomy and SDGS as well as internal tools to measure and evaluate the criteria. As articulated by C1I: *"A way to define that a bit more concisely from the beginning was we took the UN SDGs, the Sustainable Development Goals, and said that, well, each investment we do needs to actually contribute to one or several of these, you know, and we need to be able to articulate how and ultimately measure how that happens."*

However, not all companies followed the same approach to integrating sustainability strategy and measurements into the entry phase of the investment process. While sustainability is an important factor for the companies we interviewed, our research reveals variations in the methods that are employed in regard to sustainability strategies and measurement in the entry phase of the investment. This could be due to it being very costly and not applicable in the industry the company invests in, for instance, C5W has chosen not to measure CO2 as it has little to no impact on the potential investments' environmental footprint. Instead, the focus was on the aspects with the greatest environmental impact: *"So, but for a longer term, focusing more on emissions is obviously what I would like us to do because it's one of the most important topics,*

but it's a difficult one to measure. But the scope for an avoided emissions perspective is kind of our next step." (C5I)

Ownership

The data indicates that initially, the strategy and sustainability measurement primarily concentrate on assessing and analyzing the potential of investments and how closely they align with the values of private equity firms. However, once the investment process progresses, a new phase emerges, marked by a slight adjustment in both strategy and the purpose of sustainability measurement.

The companies we have chosen to interview are active owners who are engaged and looking after their portfolio companies. This commitment shows itself through investments of time, resources, and expertise. The private equity companies implement strict sustainability requirements during acquisitions with the aim of ensuring that the portfolio companies follow the private equity companies' values. For example, C2W implements a handbook at an early stage of the investment that is used as a guide after C2W's ownership guidelines are established along with the strategic direction and vision developed together with the investor's board and management. More specifically, this handbook contains key tools, frameworks, and responsibilities for measuring sustainability progress. Not every company we interviewed used handbooks as a part of the early stage of the ownership strategy, for example, C3I, focused on setting goals: " *After we've come aboard the company, we do a double materiality assessment and setting goals and having them set goals for themselves".* Other companies chose during the initial phase to focus on establishing a robust infrastructure, through, for example, ESG parameters and measurement tools, but also a lot of focus on communicating and securing sustainability assumptions to management and employees.

Based on our available data, it was also clear that throughout the ownership, the portfolio companies receive practical guidance and support to maximize positive impact and to create value while the portfolio companies contribute to the environment. In practice, this includes a holistic strategy across the entire value chain where one assesses and addresses risks in accordance with the SDGs but also implements performance monitoring and measurements.

Where the performance monitoring measures central goals related to the impact of the environment and other important goals for the business and the progress is followed up continuously depending on the agreement, ranging from quarterly, monthly, or every two months *(C1W, C2W, C3W, C4W, C5W)*.

Exit

During the analysis of empirical material, we could see that the purpose of implementing sustainability strategies and measurements early in the process was to lay a foundation for an exit. By prioritizing the improvement of the value base of the portfolio companies using sustainable methods and establishing sustainable infrastructure in accordance with frameworks and regulations, they strove to create a more attractive position in their respective industries and thus optimize the potential return upon exit. The collected data shows that the sustainability strategy and measurement is also a central part of the exit phase, where, among other things, the portfolio company's successes are evaluated through the ownership period and a sustainability evaluation of potential buyers *(C1W, C2W, C3W, C4W, C5W).*

Before divestment, the private equity firms carry out a comprehensive evaluation of each portfolio company's sustainability initiatives and progress. In practice, the comprehensive evaluation could, for example, include tracking key figures related to sustainability development with the aim of obtaining all progress during the ownership period. One of the companies we interviewed highlighted that they integrated the results of the evaluation into the sales process in the form of marketing material with the aim of highlighting the value of sustainable practices to potential buyers (C2W). Furthermore, several of the companies evaluated the potential buyers from a sustainability perspective to reduce any risks that could negatively affect stakeholders or long-term returns for the companies' investors. This is to ensure that the portfolio companies that are transferred to new owners continue to adhere to sustainability where they strive to drive positive environmental and social effects.

4.3. Private equity firms and compliance with EU Sustainability Reporting and Disclosure

This subchapter will present interpretations and understanding of the compliance process of private equity firms related to reporting and disclosure frameworks. As part of the EU's Green Deal, the purpose of sustainability reporting- with frameworks such as Corporate Sustainability Reporting Directive (CSRD), EU Taxonomy, Sustainable Finance Disclosure Regulation (SFDR), etc- is to raise the standard of companies sustainability information to the same relevance as financial reporting, therefore, private equity sustainable reporting might encounter difficulties, challenges of implementation and, possible inconsistencies of compliance to their specific investments operations. Therefore, interview questions related to this subchapter focus on "what compliance challenges in reporting and disclosure", and "what opinion about EU Taxonomy and SFDR application".

As for reasons and support for new EU regulations regarding sustainability and reporting, private equity firms agree that data quality and transparency are important for stakeholders review and validation of their firms: *"And it's anything from the strategy side of this stuff to the reporting side. The reporting side is what people talk about quite a lot because it's just more concrete. It's more tangible. It's easier to put a finger on kind of the concrete stuff. And it's also if you want to report on this stuff, it's also very tangible." (C1I)* On the other hand, the private equity firms stated that reporting compliance is also relevant for their strategy decision-making process and performance assessment: *"Without reporting, there won't be transparency. Without transparency, you can't make good decisions." (C2I)*

Nonetheless, when private equity firms mentioned the diverse templates, reports, and frameworks they must follow, some considered that a broad range of definitions and interpretations of firms' ESG are multiple, and there is no best framework yet: *"ESG is very broad. It's many things. And I don't think there's any perfect framework out there for defining what ESG is, right?" (C1I)*

When private equity firms are consulted on which frameworks are the most accurate for assessing and measuring their sustainability performance to be reported in their sustainability

reports, they consider they cannot rely on just one, and that it is difficult to report everything under the existing reporting frameworks: *“Like what framework do you use? None of that is perfect, if you start with the reporting frameworks, they're not perfect” (C1I).*

Despite the existence of different frameworks for sustainability assessment and reporting, the firms state that having EU regulation aiming to standardized reporting allows them to achieve comparability within the industry: *“But I think that the reporting is good from the sense that things are comparable.” (C2I)* Additionally, EU reporting gives consistency in benchmarking and decision-making for investors too: *“And then that will drive some level of consistency, right?” (C1I)*

Regarding the relevance of compliance with EU regulation and sustainability reporting and disclosure framework, private equity firms also consider their investor’s approach, as it is relevant for their strategies to obtain further funding. On one hand, reporting facilitates decision-making and analysis of risk for investors and managing partners to decide in which companies to allocate investments: *“Back to this fundamental question about where should capital go? Should we fund third industries and that kind of stuff? Yeah, well, maybe we should fund the transition, right?”(C1I).* On the other hand, private equity firms not only must comply with EU regulations but also their own inventors reporting: *“And also the investors demand, a lot of the investors demand reporting to them and in their own templates.” (C2I).* Furthermore, private equity firms assure in their annual reports and websites that EU regulation and Taxonomy are also relevant to their investment criteria assessment when deciding their investment portfolio: “*Early on in our evaluation process, we assess the contribution to emission reduction and circular business models, using the EU Taxonomy and the Sustainable Development Goals (SDGs). This is our way of ensuring that every investment is in line with our commitment to a sustainable future.” (C2W)*

When questioning about difficulties and challenges toward applying sustainability reporting and disclosure, it is not clear for the firms which framework defines better the level of sustainability of the private equity operations, as there are some investment topics or industries not covered: *“So even a framework like the SDGs, which is the one that is the most famous, probably is only*

partially useful and partially covers the topics, right? (C1I). If the EU taxonomy framework is considered when reporting the type of funds the private equity is engaged with, firms constantly struggle with the classification of their fund's investments and, therefore, are obliged to use other international frameworks to classify and define their funding operations: *"So looking at the taxonomy, it covers those kind of main first big areas, but it doesn't really come down to these kind of small companies that we look at and smart solutions. So we are, we have decided that we need to develop, based on the taxonomy thinking, and we will continue to, we will not limit ourselves to the taxonomy. We will, based on the same kind of idea of looking at both the impact, they do no significant harm and follow regulations and international law, we will do that, but we will broaden it from the taxonomy." (C2I)* Considering that the definition of sustainable investment is also wide, private firms are following SFDR disclosures to define their investments: *"For funds investing under Article 9, it is important to understand what qualifies as a "sustainable investment". Firms navigate questions related to this assessment through a succinct impact strategy and decision-relevant framework for evaluating impact throughout the investment process." (C1W).*

It is important to mention that private equity understands the purpose of sustainability reporting, as transparency allows to prove business models and cultural behavior of the firms: "*So the taxonomy and the whole green investment are more focused on the business model. The taxonomy part will make it more clear which companies are actually having a green product. And the disclosure regulation will make it clearer who is behaving well, as the disclosure regulation is much broader and more about how you conduct your business when you make something. So how do you treat your workers and all that."(C4I)*

Nonetheless, compliance with sustainability regulations is also linked to resources and financial costs for private equity firms. The amount of information to disclose will require company resources and cost allocation to comply with formal regulation, and this can be a challenge depending on the size of the private equity firms: *"I think many of our companies could fit under the Article 9, but it requires a lot more documentation. So I guess that is one of the challenges with the whole reporting focus and how the regulations are moving now that requires so much documentation that it can be difficult to actually achieve this status." (C5I)*

Additionally, as expectations for being the first year of mandatory submission of financial reporting under CSRD private equity consider there is space for improvement in the upcoming years: *"My expectation, though, is that the first version of this from companies won't be great. But it will improve over time." (C1I).* Moreover, currently, the charge of reporting compliance is considered to be overloading private equity responsibilities as there is not yet a standardized reporting, but on the contrary more disclosures: *"Obviously, it would have made our life easier if there was one standardized form that could be like, this is what you report on for your ESG and sustainability metrics. But now you have like the SFDR and now we're committed to the PRI and the principles for responsible investing. And then we have some of our companies when they reach a certain size, we will have to comply with the EU taxonomy and the CSRD reporting. And there's so many different levels of this. Though, I guess it can be a bit, it requires a bit of time to navigate in the landscape." (C5I)*

Finally, private equity considers that sustainability responsibility should not be enclosed in just reporting, but actually doing good: *"When I've been talking to similar colleagues in the same role as I have in other companies, they focus a lot on the data and the reporting. And I think there is a risk that you focus more on the reporting and data than actually doing things. I think that's the big risk. Because I think if you don't do anything, then there will be no change. You just kind of measure, measure, measure. (C2I)*

4.4. Summary of Findings

The analysis of our empirical data collected from semi-structured and a comparison of private equity firms's websites examined their interpretation of the trend of sustainable investment and the compliance of sustainability reporting and disclosure mandatory for the industry in the approach of Nordic countries.

Private equity businesses are progressively incorporating sustainability into their operations, perceiving sustainable investments as chances to generate financial rewards and positive societal consequences. Even though they have trouble navigating many reporting formats, they understand the value of openness and compliance with EU laws, such as the EU Taxonomy and

the Corporate Sustainability Reporting Directive (CSRD). For decision-making to be transparent and beneficial to both the companies and their investors, compliance is deemed necessary.

Private equity firms integrate sustainability into their investment processes through a multi-phase approach. When new investments are considered, they carry out in-depth analyses utilizing both internal and external frameworks to see whether they meet sustainability standards. As part of ownership, portfolio firms are actively engaged in implementing sustainability plans and metrics, frequently through goal-setting exercises or guides. In order to demonstrate the value of portfolio companies to prospective buyers, organizations assess their sustainability activities during the exit.

Overall, private equity firms are adapting their strategies, measurement tools, and reporting practices to meet evolving societal expectations and regulatory requirements. Through their investments, they aim to retain financial viability while achieving positive social and environmental consequences.

5. Discussion

In this chapter, we reflect on the empirical findings, obtained from the interview process and comparison of company annual reports and websites, and their link with the existing theory that we referred to in our literature review chapter. First, we present a discussion of the interpretations of the sustainability trends and their impact on the funding decision of sustainable investments and the relevance of sustainable value creation and positive social impact on Nordic private equity firms. The evaluation of an investment manager's portfolio must take into account both ESG performance and risks. Second, we present the discussion of how private equity firms deal with the lack of sustainability measurement standardization and their definition of what they each refer to as sustainable investment. Nordic private equity firms assess sustainability performance and portfolio investment decisions using a combination of financial and non-financial metrics, with the SDGs performance indexes being the most commonly used. Finally, we will discuss the challenges of sustainability reporting compliance with the new EU regulations. Sustainability reporting and disclosures are seen as crucial guidelines in order to attain consistency, transparency, and a useful strategic management tool for drawing capital to their sustainable portfolio.

5.1. Private equity firm's interpretation of sustainability, sustainable development, and sustainable investment

As Sheehy and Farneti (2021) state, the terms "sustainability" and "sustainable development" have become buzzwords and many consider both terms as synonyms, yet the two terms have distinct meanings. While the term 'sustainability' is focused on ecological matters, the term 'sustainable development' is related to the sustainability movement which raises global awareness of global problems set into a global policy agenda. The research proves that these two terms are still being used as synonyms in the private equity sector. In our findings, private equity firms interpreted the term sustainability as a replacement for sustainable development, when trends, strategies, and goals are mentioned for their operations. Additionally, private equity firms address sustainability as a big concept that includes and refers to development, ESG, impact, reporting, and performance.

On the other hand, Dillard (2008) suggested the common description of sustainability overlapping goals 1) living environmentally sustainable or viable, 2) living economically sustainable and 3) living socially sustainable, all of them considering the long-term approach. Our research contributes to Dillard’s (2008) literature by proving that Nordic private equity firms consider these sustainability goals as part of their definition of sustainable investment goals and description of their business model focusing on environmental and social but at the same time on the economic viability and purpose of their business. Ethics and corporate values of the firms are also distinctive features of the Nordic private equity firms.

Additionally, Sheehy and Farneti (2021) also mentioned the differences between sustainable development and corporate social responsibility (CSR), identifying ‘sustainable development’ with a global or worldwide scope, and its goals are all-encompassing. As mentioned, it is a top-down, internationally-driven public policy program that differs significantly from the bottom-up, private, organization-driven beginnings of corporate social responsibility. Our findings align with Sheehy and Farneti (2021), where private equity firms interpret that CSR is an organization-driven focus and that it is particular for each of the firms depending on their own foundation of ideologies, values, and motivation. Moreover, private firms' interpretation of CSR is aligned with European Commission statements that appoint enterprises to be responsible for their own impact on society, considering environmental, ethical, consumer, and human rights concerns in their business strategy and operations. Our findings demonstrate private equity firms have adapted their own business models and strategic management decisions to attend and engage in the social and environmental impact of their portfolio investments, and are more selective when evaluating them.

According to Chandler’s (2021) Sustainable Value Creation theory, businesses should generate more value by committing to satisfy the needs and demands of their wide range of stakeholders and maximize that value over a long period of time. This is in contrast to businesses that either completely ignore or fail to recognize the strategic importance of this value. The findings of the research aligned and agreed with the concept of private equity firms’ long-term investment management strategy and their business purpose, which are now focused on investing in leading solutions to global challenges and committed to creating only positive impact in ESG matters

towards society. Furthermore, the firms are focusing more intently on the investment impact of sustainability rather than only considering it from a risk and return perspective, as investment managers' assessment questions what the to-be acquired company's goal is and what other outcomes or impacts they are producing besides financial returns. Thus, findings show that Nordic private equity firms consider themselves “impact investors”.

As for what reasons or motivations will private equity firms shift their strategies and focus toward sustainable investment, the debate was whether sustainable investment is indeed profitable or just a philanthropic purpose. Silvola and Landau (2021) presented that there was reasonable scientific research that proves sustainable investment to be profitable and that it aims for good financial returns but also for a better world. Our findings aligned with this statements, as private equity firms agreed that by choosing sustainable portfolios they will, in the long term, obtain higher financial returns in different ways as managing and monitoring ESG performance can reduce operational risks, loyalty towards partnerships with suppliers also with sustainable development mindset, loyalty from customers for being responsible companies, and a high value for exit strategies. On the other hand, private equity firms do not consider there is a paradigm in their investment decisions, what to choose impact rather than return? They do not consider this a problem and can assure their investors that they are investing in businesses that drive solutions to existing problems with an existing market. Furthermore, private equities portfolio managers suggest that the Nordic industry has enough innovation and technology to provide new business prospects looking up to achieve sustainable development goals and impact positively, for example, climate change initiatives.

Nonetheless, as Cardonna (2022) stated, the debate of what is considered “sustainable”, or who gets to make these determinations is still open; and the concept "be sustainable" has come to be overly ambiguous, making it open to abuse and "greenwashing”. Our findings align with this preoccupation of private equity firms, as there is not a worldwide consensus and accepted definition of what is “sustainable”, then many companies over-market themselves regarding their operations. Furthermore, the industry can also be opportunistic and state large amounts of investment into “ESG funds”, which rarely can be proven as there is no information of support for these investments. Moreover, this greenwashing context can be compared to just marketing,

considering that information disclosed to investments can be very simplistic, or companies just stating their agendas but not doing so much for real. Finally, private equity firms agree that the industry is yet immature regarding sustainable development information, as there is a lack of transparency and lack of good reporting.

In conclusion, private equity firms' internal operations, business models, and investment strategies have been influenced by sustainable development trends in the financial market. Nonetheless, private equity firms consider the concept 'sustainability', indistinctly, as a broader one containing concepts such as sustainable development, ESG, and CSR. Society's requirements towards corporations and business markets to be responsible and active participants in achieving sustainable development, in the light of climate change and societal inequalities, has changed the mindset of Nordic private equity firms, whose business model focuses on value creation to solve those society problems and needs. Consideration of ESG risks and ESG performance are key features for an investment manager's portfolio assessment. Furthermore, considering the big impact sustainable development has had on the industry, private equity firms agreed on its complexity and the need for more transparency and reporting guidance for a better industry operation.

5.2. Private equity firms deal with a lack of sustainability measurement standardization for strategic management

As mentioned before, there is a huge development of more sophisticated instruments to demonstrate the sustainability impact of the business. Thus, Koenigsmarck and Geissdoerfer (2023) agree on the relevance of objective information for applying sustainability assessment methodologies. Our empirical analysis shows that private equity firms in the Nordic region actively demand and ensure transparent information to measure and evaluate the sustainability performance of their investments through a complex combination of financial and non-financial indicators that focus on sustainability aspects *(C1W, C2W, C3W, C4W, C5W)*.

Simon et al. (2015) stated that these non-financial metrics hold equal significance to financial metrics, and in fact, are essential for the long-term viability of the enterprise. Furthermore, Silvola and Landau (2021) also concur that compared to typical financial statement analysis,

sustainability aspects offer more thorough information about businesses, especially when it comes to risks and possibilities as well as the effects that the organizations have on the environment and society. Our findings prove that Nordic private equities also consider the integration of both financial and non-financial metrics to reflect a broader understanding of the value of sustainability and a quest for long-term sustainability within their investments. Thus, firms acknowledge that there has been a shift from the previous imminent focus on financial performance to a more holistic view of performance with a greater focus on sustainability aspects. This was particularly clear when several of the private equity companies we interviewed stated that their investments focus only on companies that have a proven sustainable performance and impact, despite investment companies having positive financial prospects but lacking the sustainable feature and possible future ability to meet sustainability requirements were not be considered for their portfolio investment *(C1W, C2W)*.

As for how to measure sustainable performance and impact, previous research may have identified shortcomings in the measurement of sustainability performance within the sector (Eccles et al., 2022), however, our research shows indications that private-equity companies in the Nordics actively combine financial and non-financial indicators to assess sustainability performance *(C1W, C2W, C3W, C4W, C5W)*. Private equity firms agree the integration of both financial and non-financial metrics provides a more complete picture of the value of sustainability and helps the firm identify both opportunities and risks for their investment. Nonetheless, as to which relevance or priority is given to each assessment methodology when evaluating investment this has not been disclosed in interviews nor on their websites. However, tools such as ESG indexes, SDG's KPI performance, matrix assessment, carbon footprint, and circularity are some of the frameworks they consider are the most used currently when assessing sustainable performance *(C1W, C2W, C3W, C4W, C5W)*.

Moreover, the theoretical basis regarding sustainability performance measurement together with our empirical findings, provides an understanding of the companies' strategic priorities and actions for decision-making investment, but it also shows several aspects that can be questioned and need a more critical examination. It is worth reflecting on private equity firms' stated commitment to sustainability. Although the theory and our empirical findings highlight the

importance of creating societal value and the importance of implementing sustainable KPIs, there can be a potential tension between these goals and the company's main goal, to maximize returns for its investors. In practice, it could be possible that certain sustainability measures are only implemented when it is in line with achieving maximum profit, for example, only choosing to implement sustainability KPIs that give the company a positive image, which can ultimately lead to selective use of sustainability measures and measurements. Furthermore, while the theory and our findings emphasize the importance of integrating sustainability throughout the investment process, the reality may be more complex than what has been highlighted in the theory and during our interviews. There is a possibility that companies may take actions to maintain a positive image, while their actual business decisions are not aligned with sustainability goals, which leads to a potential risk of "greenwashing". While some companies may appear to be leading the sector in sustainability investment, there are also signs of a certain lack of transparency within the sector regarding sustainability measurements and strategies.

Finally, the SDGs have proven to be a central framework for addressing global challenges and promoting sustainable development (C1W, C2W, C3W, C4W, C5W). Our empirical findings provided us with insight into how SDGs are implemented and integrated within the sector but also raised questions about the effectiveness and sufficiency of SDGs within the private equity sector. Firstly, private equity operates with specific business models, strategies, and incentives that differ from other sectors, therefore a general framework such as the SDGs may be deficient in providing specific guidelines that are sufficiently effective for private equity firms. Secondly, the environmental challenges are a complex problem with several dimensions where the SDGs offer a broad set of goals but lack the detail and industry-specific context required to address specific ESG factors within the sector, which highlights a need to complement the SDG's with tailored solutions that are relevant and useful within investment processes for private-equity companies.

In conclusion, our findings suggest that Nordic private equity companies implement both financial and non-financial measures to evaluate sustainability performance and decisions of investment in the portfolio. Several of the companies interviewed prioritize sustainability to the extent that in several cases they decline financially promising investments that lack the

sustainability criteria. Furthermore, while the SDGs offer a guiding framework, they may lack the specific guidance that would have been beneficial for the sector to continue to focus on sustainability investments. Lastly, even though the sector's commitment to sustainability is great, a certain transparency problem also remains, where it becomes difficult to make a nuanced assessment of different parts within the sector, for example, detailed information on measurement and strategy.

5.3. Private equity firms' sustainability reporting and disclosures compliance challenges

As mentioned before, the complexity of business models and the inclusion of sustainable development features into the business and financial market came across the need for more information, more transparency, and more consensus so that sustainable investments can be compared within the industry. Stake (2010) considers that by gaining a deeper comprehension of the situation's complexity, we should be able to influence professional practice and policy. Our finding aligns with this mindset as private equity firms stated that a consensus in the private equity industry should be considered within firms to reduce greenwashing and really create value for society. They mentioned that just reporting simple information about “green” or “sustainable” investments is not enough for the industry if they really want to contribute to the major goal of sustainable development.

In this context in which investment takes an important role in achieving sustainable goals, Wu (2024) believes that despite the sustainable investing landscape becoming even more complex, it remains an important driver of industry change. This statement connects with Busch et al (2021) point of view in which the European Commission’s Sustainable Finance Action Plan aims for the financial sector to play a key role in the green transition by providing capital. Our findings suggest that private equity firms acknowledge their advantageous position toward creating value and shifting investments to the most sustainable solutions, nonetheless, they argue that policies need to be introduced by the EU so that there is more consistency in the industry and fairness in the attraction of funding. Suggestions point to the EU as the most indicated institution for standardized framework across the EU, considering that each country currently

does not have an individual agenda related to sustainable investment and regulations, but is just adhering to and following the EU. Also because private equity firms in these scopes operate within Nordic countries and are expanding to other European countries, the complexity and globalization of business should aim for a more wider approach instead of just national operations.

Considering statements of Tenuta and Cambrea (2022), regarding the need to monitor and report on how well businesses perform in relation to environmental, social, and governance principles leading to the development of even more sophisticated instruments to demonstrate the sustainability impact of the business, the finding indicates that private equity firms also considered that there are different frameworks and measurements for the industry to follow and determine level of "sustainability", therefore more complex assessment criteria are develop internally to measure level of sustainability of their investments. However, private equities remarked this is not a suitable scenario if transparency and consistency are what is expected.

Following this point, the EU has established new frameworks in their pursuit of creating a road map to identify sustainable investments and the considerations for reporting and disclosing related information. The European Commission (n.d.) has set the EU taxonomy framework as a common classification system for labeling sustainable economic activities with the purpose of achieving a singular definition of "sustainable" investment. As for the debate whether this EU Taxonomy has harmonized and facilitated private equity operations to fund more "sustainable investments", our findings indicate that private equity firms consider their role as impact investors and therefore there is relevant information they need to prove to stakeholders. For this reason, private equity firms align with the decision of the EU Commission to introduce EU Taxonomy and SFDR frameworks to standardize and allow precision and transparency in supporting information that allows private equity firms to be labeled as 'sustainable' and 'positive impact' investors, in a more tangible way.

According to the European Council (n.d.), the EU taxonomy as a reference framework is supposed to help investors guide funding towards sustainable solutions, mitigating greenwashing practices, and accelerating financing of sustainable projects needed for the transition to a

zero-carbon future. Nonetheless, private equity firms consider that this classification system might not be enough for understanding sustainable investments and positive impact investments, as it is in their initial launch they found the EU Taxonomy to not be covering as much as they would like regarding types of economic activities and the six environmental objectives. Private equity firms consider they are investing in companies that don't fit or are not included in the EU Taxonomy classification, but they consider them as sustainable investments with positive impacts on the environment. Therefore, considerations of further development of EU Taxonomy are expected so that investors do not miss funding great business opportunities. Furthermore, our findings assure Nordic private equity firms' investment decisions will continue to be based on EU Taxonomy environmental objectives and mindset, but will not be limited to it. On the contrary, they will broaden their taxonomy, stick with the mindset of not doing significant harm, but also follow regulations and international law.

Finally, our findings regarding acceptance and compliance of EU regulation regarding sustainable investments, private equity firms consider that current regulations related to sustainability reporting, such as EU Taxonomy, SFDR, and CSRD, are indeed needed for more transparency, enabling stakeholders and their own management to best decision-making and achieving the redirection of investment attractiveness to sustainable investment. Nonetheless, they don't consider any of these frameworks to be perfect and are still far from harmonizing the reporting workload. Private equity firms also consider reporting costs and resource allocation for the not yet harmonized information that is required for CSRD as one of the big challenges of their operations, as the size of the acquired companies differs, reporting and disclosure or sustainability issues are also different. Excess of documentation is counterproductive if private equity firms aim to report and classify investments under a high-level fund, e.g. Article 9; thus, causing difficulty in the reporting compliance and achievement of the best EU Taxonomy category.

Finally, Tenuta and Cambrea (2022) stated that the need to monitor and report on how well businesses perform in relation to environmental, social, and governance principles has led to the development of ever more sophisticated instruments to demonstrate the sustainability impact of the business. Our findings align with this statement, as private equity firms consider that for an

accurate reporting measurement of their positive impact since the beginning of their investment, there exist multiple complex measurement tools, that are not yet standardized or covered by the EU regulations.

In conclusion, our findings reveal that there is a great acceptance of EU regulations towards sustainability reporting and disclosures, considering them important frameworks that the industry must follow to achieve transparency, consistency, and a relevant strategic management tool for attracting investments to their sustainable portfolio. Nonetheless, the compliance has brought difficulties to private equity operations, due to the early phase of development of the EU Taxonomy, which does not necessarily cover all the types of investments they have in their portfolio, but that are consistent with the mindset of not harming the environment and having a positive impact while contributing with one of the six environmental objectives. Furthermore, reporting cost is a struggle for private equity firms with investments in small companies trying to comply with the high workload of documentation to be presented.

6. Conclusion

For this qualitative research, we intended to understand the linkages of sustainability with financial markets, specifically, private equity firms in Nordic countries the effect of sustainability performance within the industry business models and operations, and the possible shift towards sustainable investments. The knowledge and perspectives shared by our attendees are highly appreciated. To demonstrate that we accomplished our objectives and addressed our research questions, we address our research questions and discuss our theoretical and practical implications. Lastly, we point out the limitations of our research, followed by a discussion of prospects for additional research.

6.1. Research conclusion

The purpose of this study was to enhance the understanding of sustainable development trends' impact on the business operations and strategies of Nordic Private Equity firms, furthermore, as the compliance difficulties and challenges towards the new EU regulations regarding sustainable reporting and disclosure, while finally exploring the effects of sustainable strategies within performance measurement and investment decision of private equities. To achieve this, we formulate and answer the following research questions:

- How do sustainable development trends impact the operations of the Nordic private equity industry?
- How does sustainability measurement impact Nordic private equity firms' investment decision-making?
- How does sustainability reporting impact Nordic private equity operations and what are the challenges for compliance?

To answer the mentioned research questions, the research was conducted on a cross-case analysis study, within five Nordic private equity firms with headquarters located in Sweden, Denmark, Norway, and Finland. The information analysis and findings discussed in the previous sections of this research led to other main findings resulting in the following conclusions regarding the sustainable investment business model of the Nordic private equity firms.

First, financial market trends related to sustainable development have an impact on the internal operations, business structures, and investment strategies of private equity firms. However, private equity firms view the term "sustainability" generally as a broader one that encompasses terms like CSR, ESG, and sustainable development. In light of social inequalities and climate change, society's demands for companies and business markets to act responsibly to achieve sustainable development have influenced the perspectives of Nordic private equity firms, whose business strategy focuses on creating value in order to address societal issues and demands. The evaluation of an investment manager's portfolio must take into account both ESG performance and risks. Likewise, private equity firms acknowledged that, given the significant impact that sustainable development has had on the industry, greater transparency and reporting guidelines are necessary to improve industry operations.

Secondly, findings indicate that Nordic private equity firms assess sustainability performance using a combination of financial and non-financial metrics, placing a high priority on sustainability performance as a key feature for considering financial sustainability. Nonetheless, despite the industry's strong commitment to sustainability, there is still a problem with transparency in reporting which methodology or framework the firms apply for sustainability measurement in their strategy operation. Finally, the SDGs sustainable framework seems to be the most used KPI performance index for referring to the sustainability level of a company, however, other methodologies are also used by private equity firms, which shows that there is not yet a measurement standard index for benchmarking or for them to consider a portfolio investment more sustainable than other.

Thirdly, this research suggests that the EU's sustainability reporting and disclosure regulations are widely accepted positively. These regulations are regarded as crucial frameworks that the industry must adhere to in order to achieve transparency, consistency, and a useful strategic management tool for luring investments into their sustainable portfolio. However, because the EU Taxonomy is still in its early stages of development and may not cover all of the investments in private equity firms' portfolios, compliance has proven challenging for their operations even though these investments align with one of the six environmental objectives and have a positive impact on the environment. Additionally, private equity firms that invest in small businesses find

it difficult to comply with the heavy burden of documentation that needs to be submitted when it comes to reporting costs.

6.2. Theoretical Implications

Throughout a cross-case analysis, this research supports the understanding of sustainable development trends towards the business model and operations of Nordic Private Equity firms through a theoretical framework, discussion of the understanding of sustainability, sustainable value creation, and the corresponding sustainability reporting required by EU regulations.
For this research, we present three theoretical implications. First, this thesis supports extended research with qualitative or quantitative research to increase the understanding of how sustainability factors influenced the performance of private equity firms' shift of business model to sustainable investment portfolio. Second, this research found the expectations of stakeholders and investors to access more transparent information regarding sustainable investments and their performance for better investment decisions. Third, as this research was conducted and received perspectives from different countries in the EU, the research reveals a consensus on the need for standardization within the field of reporting and measurement performance framework and regulation to allow international comparison of the sustainable impact on portfolio investments.

6.3. Practical Implications

Supplementing the previous theoretical implications, our findings in this research indicate that investment decisions on the presented business model for sustainable investment of Nordic firms are giving much relevance for non-financial performance as ESG impact and performance metrics. Secondly, firms consider it necessary for transparency and good practices for investors to manage comparable results towards the definition of sustainability performance within the different private equity firms reporting, to reduce greenwashing risks within the industry.

Furthermore, the study remarks that there have been challenges in the compliance of sustainability reporting and disclosure, and also for sustainable performance management as allocation of resources to comply with sustainable practices and measurements can be difficult and costly for some portfolio companies. Finally, the research delves into the understanding of the firms towards new frameworks and regulations introduced for reporting and disclosure and

considers adjustments and updates to be implemented in the ongoing practice and compliance in the upcoming years.

6.4. Limitations and further research

There are restrictions on this thesis's research that present possibilities for further investigation. One of several limitations is the choice to carry out a qualitative approach and its focus on the Nordic private equity companies, which can limit the generalizability of the results and make replicability difficult. By limiting the scope of the interviews to the Nordics, there may be a risk of ignoring potential variations in, for example, sustainability, strategy and measurements, and other challenges among private equity companies operating in other EU countries obliged to EU regulations. The Nordic region is also considered to be at the forefront of sustainability, which can create a misleading image of how well-integrated sustainability is in the sector, as there is a risk that other parts of the world have not progressed as far in development as the companies we interviewed. Furthermore, it is important to mention our selection of the number of companies we interviewed, this can also create a misleading picture, and it would have been beneficial to interview more companies. However, given the circumstances such as availability and time constraints, there was no room to include more companies in this thesis. Having said that, it should not be considered that our results in this thesis can be applied to all private equity companies in the Nordics. Another significant limitation in this thesis is the lack of detailed information about the internal tools and strategy. This lack of transparency regarding concrete tools and strategies applied during the investments can hinder a thorough understanding of their sustainability strategy and measurement practices. This also makes it difficult for stakeholders to assess the effectiveness and reliability but also contributes to preventing the possibility of comparing strategy and measurement practices between different private equity companies. Furthermore, our choice of questions and the length of the interview can also be seen as a limitation, had we used more questions and longer interviews, the result would possibly have been more detailed and informative and thus given us more material to analyze.

In regards to further research, there exist several areas that would be interesting for further research. This thesis mainly focuses on a qualitative approach based on interviews and available information through annual reports, sustainability reports, and similar sources. It would have

been interesting to continue this with a quantitative data analysis that could possibly have offered a more robust understanding of the subject where one can get a more comprehensive picture of the relationship between, for example, sustainability efforts and financial performance. Another area for further research could be to research methodologies to assess the real impact of private-equity companies' sustainability initiatives, both within financial and non-financial measures. This means including the development and application of tools and frameworks to quantify and analyze the effect of sustainability investments, where one should hopefully be able to gain a deeper understanding of the long-term effects of the sector's sustainability initiatives. Nonetheless, during this thesis, it became clear that the companies we interviewed lacked a universal sustainability framework where today's regulations and frameworks could be considered complicated and confusing. Thus, it would have been interesting to examine the possibility but also the pros and cons of a universal sustainability framework to promote sustainability development in the world.

Reference List

4 Trends Driving Growth in Nordic Private Equity | Allvue. (2023). *Allvue Systems*, https://www.allvuesystems.com/resources/4-trends-driving-growth-in-the-nordic-private-equity-market/[Accessed 22 April 2024]

Abnett, K. (2024) *EU needs trillions of investment for 2050 climate target - research | Reuters*. https://www.reuters.com/business/environment/eu-needs-trillions-investment-2050-climate-target-research-2024-01-29/ [Accessed: 25 March 2024].

Abnett, K. and Abnett, K. (2024) 'EU needs trillions of investment for 2050 climate target - research', *Reuters*, 29 January. https://www.reuters.com/business/environment/eu-needs-trillions-investment-2050-climate-target-research-2024-01-29/ [Accessed: 25 March 2024].

Annual activity statistics | Invest Europe (no date). https://investeurope.wrcdn.nethttps://www.investeurope.eu/research/activity-data/ [Accessed: 1 April 2024].

Barber, F. and Goold, M. (2007) 'The Strategic Secret of Private Equity', *Harvard Business Review*, 1 September. https://hbr.org/2007/09/the-strategic-secret-of-private-equity [Accessed: 10 May 2024].

Bell, E., Bryman, A. and Harley, B. (2022) *Business Research Methods*. Oxford University Press.

Bell, E., Bryman, A. & Harley, B. (2019). Business Research Methods, 5th edn, Oxford: Oxford University Press

Benn, S., Edwards, M. and Williams, T. (2021) *Sustainability: A Key Idea for Business and Society*. London: Routledge. https://doi.org/10.4324/9780429022173.

Bjørn, A. *et al.* (2018) 'Main Characteristics of LCA', in M.Z. Hauschild, R.K. Rosenbaum, and S.I. Olsen (eds) *Life Cycle Assessment: Theory and Practice*. Cham: Springer International Publishing, pp. 9–16. https://doi.org/10.1007/978-3-319-56475-3_2.

Bongardt, A. and Torres, F. (2022) 'The European Green Deal: More than an Exit Strategy to the Pandemic Crisis, a Building Block of a Sustainable European Economic Model*', *JCMS: Journal of Common Market Studies*, 60(1), pp. 170–185. https://doi.org/10.1111/jcms.13264.

Bowen, G. (2009). Document Analysis as a Qualitative Research Method, *ResearchGate*, https://www.researchgate.net/publication/240807798_Document_Analysis_as_a_Qualitative_Research_Method [Accessed 22 April 2024]

Brightest (n.d) *Sustainability Measurement - How to Measure Environmental Performance*, *Brightest*. https://www.brightest.io/sustainability-measurement [Accessed: 19 April 2024].

Bryman, A. & Bell, E. (2011). Business Research Methods, 3rd edn, Oxford: Oxford University Press

Busch, D., Ferrarini, G. and Grünewald, S. (2021) 'Sustainable Finance in Europe: Setting the Scene', in D. Busch, G. Ferrarini, and S. Grünewald (eds) *Sustainable Finance in Europe: Corporate Governance, Financial Stability and Financial Markets*. Cham: Springer International Publishing, pp. 3–17. https://doi.org/10.1007/978-3-030-71834-3_1.

Calvin, K. *et al.* (2023) *IPCC, 2023: Climate Change 2023: Synthesis Report. Contribution of Working Groups I, II and III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [Core Writing Team, H. Lee and J. Romero (eds.)]. IPCC, Geneva, Switzerland.* First. Intergovernmental Panel on Climate Change (IPCC). https://doi.org/10.59327/IPCC/AR6-9789291691647.

Caradonna, J.L. (2022) *Sustainability: A History, Revised and Updated Edition*. Oxford University Press. https://doi.org/10.1093/oso/9780197625026.001.0001.

Chandler, D. (2021) *Sustainable value creation: Taylor & Francis eBooks (Complete Collection)*. Second edition. Routledge, Taylor & Francis Group (Taylor & Francis eBooks (Complete Collection)).

Chen, J. (2022). Private Equity Definition, *Investopedia*, https://www.investopedia.com/terms/p/privateequity.asp [Accessed 4 April 2024]

Climate Change: Global Temperature | NOAA Climate.gov (no date). http://www.climate.gov/news-features/understanding-climate/climate-change-global-temperature [Accessed: 26 March 2024].

CW1 Company Website https://www.C1.com [Accessed: 14 March 2024].

CW2 Company Website https://www.C2.com [Accessed: 28 March 2024].

CW3 Company Website https://www.C3.com [Accessed: 25 March 2024].

CW4 Company Website https://www.C4.com [Accessed: 25 March 2024].

CW5 Company Website https://www.C5.com [Accessed: 12 April 2024].

Dillard, J., Dujon, V. and King, M.C. (eds) (2008) 'Understanding the Social Dimension of Sustainability', in. Routledge. https://doi.org/10.4324/9780203892978.

Dimmelmeier, A. (2023) 'Sustainable finance as a contested concept: tracing the evolution of five frames between 1998 and 2018', *Journal of Sustainable Finance & Investment*, 13(4), pp. 1600–1623. https://doi.org/10.1080/20430795.2021.1937916.

Doyle, D.H. (2021) *A Short Guide to the EU's Taxonomy Regulation*, *S&P GLOBAL*. https://www.spglobal.com/esg/insights/a-short-guide-to-the-eu-s-taxonomy-regulation [Accessed: 15 May 2024].

DP12603 A Framework for Sustainable Finance (2018) *CEPR*.https://cepr.org/publications/dp12603 [Accessed: 5 April 2024].

Dusík, J. and Bond, A. (2022a) 'Environmental assessments and sustainable finance frameworks: will the EU Taxonomy change the mindset over the contribution of EIA to sustainable development?', *Impact Assessment and Project Appraisal*, 40(2), pp. 90–98. https://doi.org/10.1080/14615517.2022.2027609.

Dusík, J. and Bond, A. (2022b) 'Environmental assessments and sustainable finance frameworks: will the EU Taxonomy change the mindset over the contribution of EIA to sustainable development?', *Impact Assessment and Project Appraisal*, 40(2), pp. 90–98. https://doi.org/10.1080/14615517.2022.2027609.

Eccles, R.G. *et al.* (2022) 'Private Equity Should Take the Lead in Sustainability', *Harvard Business Review*, 1 July. https://hbr.org/2022/07/private-equity-should-take-the-lead-in-sustainability [Accessed: 26 March 2024].

European Commission (n.d.) *EU taxonomy for sustainable activities - European Commission*, *EU taxonomy for sustainable activities*. https://finance.ec.europa.eu/sustainable-finance/tools-and-standards/eu-taxonomy-sustainable-activities_en [Accessed: 25 March 2024].

European Commission (n.d.) *Sustainable finance - European Commission*. https://finance.ec.europa.eu/sustainable-finance_en [Accessed: 2 April 2024].

European Commission (2021) *Delivering the European Green Deal - European Commission*. https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal/delivering-european-green-deal_en [Accessed: 25 March 2024].

European Commission (n.d.) *Overview of sustainable finance - European Commission*. https://finance.ec.europa.eu/sustainable-finance/overview-sustainable-finance_en [Accessed: 26 March 2024].

European Commission (n.d.) *Sustainability-related disclosure in the financial services sector - European Commission*. https://finance.ec.europa.eu/sustainable-finance/disclosures/sustainability-related-disclosure-financial-services-sector_en [Accessed: 6 May 2024].

European Commission (n.d.) *Corporate sustainability reporting - European Commission*. https://finance.ec.europa.eu/capital-markets-union-and-financial-markets/company-reporting-and-auditing/company-reporting/corporate-sustainability-reporting_en [Accessed: 15 May 2024].

European Council (2024) *Fit for 55 - The EU's plan for a green transition*. https://www.consilium.europa.eu/en/policies/green-deal/fit-for-55/ [Accessed: 2 April 2024].

European Council (n.d.) *Climate change: what the EU is doing*. https://www.consilium.europa.eu/en/policies/climate-change/ [Accessed: 2 April 2024].

European Green Deal (n.d.). https://www.consilium.europa.eu/en/policies/green-deal/ [Accessed: 2 April 2024].

Fagerlund, J., Picq, G. & Krantz, J. (2023). The Insight: State of the European Private Equity Industry | Arthur D. Little, *Www.adlittle.com*, https://www.adlittle.com/en/insights/report/insight-state-european-private-equity-industry [Accessed 22 April 2024]

FasterCapital (2024) *The History of Private Equity*. https://fastercapital.com/content/The-History-of-Private-Equity.html#The-Origins-of-Private-Equity [Accessed 5 April 2024]

FasterCapital (2024) *Ultimate FAQ:private equity investment, What, How, Why, When*, *FasterCapital*. https://fastercapital.com/content/Ultimate-FAQ-private-equity-investment--What--How--Why--When.html [Accessed: 8 May 2024].

Flick, U., Kardoff, E. von and Steinke, I. (2004b) *A Companion to Qualitative Research*. SAGE.

Fontaine, M. (2013) 'Corporate Social Responsibility and Sustainability: The New Bottom Line', 4(4).

Foroudi, P. *et al.* (2023) 'Consumer Perceptions of Sustainable Development Goals: Conceptualization, Measurement and Contingent Effects', *British Journal of Management*, 34(3), pp. 1157–1183.https://doi.org/10.1111/1467-8551.12637.

Formue (2023). Vad Är Private Equity?, *Formue*, https://formue.se/insikt/vad-ar-private-equity/ [Accessed 4 April 2024]

Geissdoerfer, M., Vladimirova, D. and Evans, S. (2018) 'Sustainable business model innovation: A review', *Journal of Cleaner Production*, 198, pp. 401–416.https://doi.org/10.1016/j.jclepro.2018.06.240.

Gibbs, G.R. (2018) *Analyzing Qualitative Data*. SAGE Publications Ltd. https://doi.org/10.4135/9781526441867.

Gortsos, C.V. (2021) 'The Taxonomy Regulation: More Important Than Just as an Element of the Capital Markets Union', in D. Busch, G. Ferrarini, and S. Grünewald (eds) *Sustainable Finance in Europe: Corporate Governance, Financial Stability and Financial Markets*. Cham: Springer International Publishing, pp. 351–395. https://doi.org/10.1007/978-3-030-71834-3_11.

Grindler, L. (2024) 'Unlocking Growth: How Key Performance Indicators Drive Success in Private Equity Investments', *Medium*, 28 February. https://medium.com/@laurentgrindler/unlocking-growth-how-key-performance-indicators-drive-success-in-private-equity-investments-66384f6307f5 [Accessed: 10 May 2024].

Hakanen, E. (2021) 'What Is a Business Model -- For Products, Platforms, or Ecosystems?: Journal of Business Models', *Journal of Business Models*, 9(4), pp. 1–12. https://doi.org/10.5278/jbm.v9i4.6475.

Heinberg, R. and Lerch, D. (2010) *What is sustainability. The post carbon reader*.

Hoellermann, J. (2020) *ESG in private equity and other alternative asset classes: What the industry has accomplished so far regarding environmental, social and governance matters*. Research Report 39. EIKV-Schriftenreihe zum Wissens- und Wertemanagement. https://www.econstor.eu/handle/10419/224988 [Accessed: 27 March 2024].

Hoet, E. (2020) '7 tools for sustainability, ranked', *Medium*, 27 July. https://emilien-hoet.medium.com/7-tools-for-sustainability-ranked-e0019fd6025b [Accessed: 19 April 2024].

Hoff, J. (2017) *The green ´heavyweights´ The climate policies of the Nordic countries, in P.Nedergaard & A.Wivel (eds),The Routledge Handbook of Scandinavian Politics, pp. 49-65*. Routledge.

How to make EU fiscal rules compatible with net zero (no date) *Centre for European Reform*. https://www.cer.eu/publications/archive/policy-brief/2022/eu-fiscal-rules-net-zero [Accessed: 25 March 2024].

Hunziker, S. and Blankenagel, M. (2024) 'Multiple Case Research Design', in S. Hunziker and M. Blankenagel (eds) Research Design in Business and Management: A Practical Guide for Students and Researchers. Wiesbaden: Springer Fachmedien, pp. 171–186. Available at: https://doi.org/10.1007/978-3-658-42739-9_9.

ikokostadinov (2022) *Private Sector's Role in Financing the EU Green Deal*, *WILLIAM FRY*. https://www.williamfry.com/knowledge/private-sectors-role-in-financing-the-eu-green-deal/ [Accessed: 25 March 2024].

Jacob, M. (1994) 'Toward a Methodological Critique of Sustainable Development', *The Journal of Developing Areas*, 28(2), pp. 237–252.

Jacques, P. (2020) *Sustainability: The Basics*. 2nd edn. London: Routledge. https://doi.org/10.4324/9780429346613.

Jais, N. and Albert, G. (2022) 'Investing for impact: ESG in private equity | Accenture'. https://www.accenture.com/content/dam/accenture/final/accenture-com/document-2/Accenture-Investing-For-Impact-ESG-in-Private-Equity-New.pdf [Accessed: 23 May 2024].

Jendrośka, J., Reese, M. and Squintani, L. (no date) 'Towards a new legal framework for sustainability under the European Green Deal'.

Khan, D.H.A. (ed.) (no date) 'Road to Sustainable Development', *COMSATS' Series of Publications on Science and Technology*, 7-B.

Koenigsmarck, M. and Geissdoerfer, M. (2023) 'Shifting the Focus to Measurement: A Review of Socially Responsible Investing and Sustainability Indicators', *Sustainability*, 15(2), p. 984. https://doi.org/10.3390/su15020984.

Krysta, P.M., Jauch-Degenkolb, J. and Kanbach, D.K. (2022) 'Barbarians inside the gates: how private equity firms create value', *Journal of Business Strategy*, 44(6), pp. 344–353. https://doi.org/10.1108/JBS-04-2022-0064.

Kruse, W. (2022) *From short-term profits to long-term value: Incorporating ESG in private equity : A qualitative analysis of ESG implementation into the investment process of Nordic private equity firms*.https://urn.kb.se/resolve?urn=urn:nbn:se:kth:diva-318256 [Accessed: 26 March 2024].

Málovics, G., Csigéné, N.N. and Kraus, S. (2008) 'The role of corporate social responsibility in strong sustainability', *The Journal of Socio-Economics*, 37(3), pp. 907–918. https://doi.org/10.1016/j.socec.2006.12.061.

Nassaji, H. (2020) 'Good qualitative research', *Language Teaching Research*, 24(4), pp. 427–431. https://doi.org/10.1177/1362168820941288.

Ness, B. *et al.* (2007a) 'Categorising tools for sustainability assessment', *Ecological Economics*, 60(3), pp. 498–508. https://doi.org/10.1016/j.ecolecon.2006.07.023.

Ness, B. *et al.* (2007b) ‘Categorising tools for sustainability assessment’, *Ecological Economics*, 60(3), pp. 498–508. https://doi.org/10.1016/j.ecolecon.2006.07.023.

Nii, L.M. and Ogbewe, O.C. (2023) ‘Ethical consideration dilemma: systematic review of ethics in qualitative data collection through interviews’, *Journal of Ethics in Entrepreneurship and Technology*, 3(2), pp. 94–110. https://doi.org/10.1108/JEET-09-2022-0014.

Patil, R.A., van Langen, S.K. and Ramakrishna, S. (2023) ‘Circularity Assessment: Developing a Comprehensive Yardstick’, in R.A. Patil and S. Ramakrishna (eds) *Circularity Assessment: Macro to Nano: Accountability Towards Sustainability*. Singapore: Springer Nature, pp. 3–14. https://doi.org/10.1007/978-981-19-9700-6_1.

Popescu, I.-S., Hitaj, C. and Benetto, E. (2021) ‘Measuring the sustainability of investment funds: A critical review of methods and frameworks in sustainable finance’, *Journal of Cleaner Production*, 314, p. 128016. https://doi.org/10.1016/j.jclepro.2021.128016.

Portes, M.E. and Kramer, M.R. (2011) ‘Creating Shared Value’, *Harvard Business Review* [Preprint].https://hbr.org/2011/01/the-big-idea-creating-shared-value [Accessed: 3 April 2024].

van der Pot, N. and Vos, M. (2023) ‘Inside ESG Consulting’s Black Box’.http://lup.lub.lu.se/student-papers/record/9123198 [Accessed: 25 March 2024].

PricewaterhouseCoopers (2023) Generating upside from ESG: Opportunities for private equity, PwC.
https://www.pwc.com/gx/en/services/sustainability/publications/private-equity-and-the-responsible-investment-survey.html [Accessed: 23 May 2024].

ProQuest Ebook Central - Reader (no date).https://ebookcentral.proquest.com/lib/lund/reader.action?docID=479606 [Accessed: 8 April 2024].

Reyes, J.A.L. (2021) ‘How Different Are the Nordics? Unravelling the Willingness to Make Economic Sacrifices for the Environment’, *Sustainability*, 13(3), p. 1294. https://doi.org/10.3390/su13031294.

Rundell, S. (2022). Why Private Equity Can Lead on Sustainability - Top1000funds.com, *Top1000funds*,

https://www.top1000funds.com/2022/06/why-private-equity-can-lead-on-sustainability/
[Accessed 6 April 2024]

Sarasini, S. and Jacob, M. (2007) 'CLIMATE, COMPANIES AND CONTEXT: THE PROSPECTS FOR POLICY TO INSPIRE SUSTAINABLE BUSINESS STRATEGIES'.

Schoenmaker, D. (2018) 'A Framework for Sustainable Finance', *SSRN Electronic Journal* [Preprint].https://doi.org/10.2139/ssrn.3125351.

'SDG Mapping' (no date). https://www.unepfi.org/impact/impact-radar-mappings/sdg-mappings/ [Accessed: 19 April 2024].

Serzante, M. and Khudozhnyk, A. (2023) 'Reviewing Sustainability Measurement Methods for Enterprises', *Sustainability*, 15(21), p. 15514.https://doi.org/10.3390/su152115514.

Sheehy, B. and Farneti, F. (2021) 'Corporate Social Responsibility, Sustainability, Sustainable Development and Corporate Sustainability: What Is the Difference, and Does It Matter?', *Sustainability*, 13(11), p. 5965. https://doi.org/10.3390/su13115965.

Shrivastava, P. and Zsolnai, L. (2020) 'Business and Society in the Anthropocene', in D. M. Wasieleski and J. Weber (eds) *Sustainability*. Emerald Publishing Limited (Business and Society 360), pp. 3–15. https://doi.org/10.1108/S2514-175920200000004002.

Silvola, H. and Landau, T. (2021) 'Motivation for Sustainable Investing: What Is the Purpose?', in H. Silvola and T. Landau (eds) *Sustainable Investing: Beating the Market with ESG*. Cham: Springer International Publishing, pp. 3–14. https://doi.org/10.1007/978-3-030-71489-5_1.

Simon, A. *et al.* (2015) 'Business leaders' views on the importance of strategic and dynamic capabilities for successful financial and non-financial business performance', *International Journal of Productivity and Performance Management*, 64(7), pp. 908–931.https://doi.org/10.1108/IJPPM-05-2014-0078.

Singh, A. (2021) 'Understanding ESG in the Private Equity Landscape', *Indian Journal of Law and Legal Research*, 3(1), pp. 1–6.

Singh, R.K. *et al.* (2012) 'An overview of sustainability assessment methodologies', *Ecological Indicators*, 15(1), pp. 281–299. https://doi.org/10.1016/j.ecolind.2011.01.007.

Sládková, J. *et al.* (2021) 'Sustainable and responsible investment funds in Europe', *Measuring Business Excellence*, 26(3), pp. 229–244. https://doi.org/10.1108/MBE-07-2019-0072.

Spliid, R. (2013). Is Nordic Private Equity Different?, *JSTOR*, https://www-jstor-org.ludwig.lub.lu.se/stable/43503743?seq=4 [Accessed 5 April 2024]

Stake, R.E. (2010) *Qualitative Research: Studying How Things Work*. New York, UNITED STATES: Guilford Publications. http://ebookcentral.proquest.com/lib/lund/detail.action?docID=479606 [Accessed: 8 April 2024].

Starik, M. and Kanashiro, P. (2020) 'Advancing a Multi-Level Sustainability Management Theory', in D. M. Wasieleski and J. Weber (eds) *Sustainability*. Emerald Publishing Limited (Business and Society 360), pp. 17–42. https://doi.org/10.1108/S2514-175920200000004003.

Strand, R., Freeman, R.E. and Hockerts, K. (2015) 'Corporate Social Responsibility and Sustainability in Scandinavia: An Overview', *Journal of Business Ethics*, 127(1), pp. 1–15. https://doi.org/10.1007/s10551-014-2224-6.

Telander, E. and Ullbors, W. (2021) 'Private Equity Firms and ESG - Friends or Foes?' http://lup.lub.lu.se/student-papers/record/9048973

Tenuta, P. and Cambrea, D.R. (2022a) 'Conclusions', in P. Tenuta and D.R. Cambrea (eds) *Corporate Sustainability: Measurement, Reporting and Effects on Firm Performance*. Cham: Springer International Publishing, pp. 83–86, https://doi.org/10.1007/978-3-031-11491-5_6.

The climate forecast for 2024 (no date) *World Wildlife Fund*. https://www.worldwildlife.org/stories/the-climate-forecast-for-2024 [Accessed: 25 March 2024].

The Nordic Model: Outperformance in Private Equity. (2024). *Stepstonegroup.com*, https://www.stepstonegroup.com/news-insights/the-nordic-mode-outperformance-in-private-equity/ [Accessed 5 April 2024]

TMF Group (n.d.) *Global Business Complexity Hub | TMF Group*, https://www.tmf-group.com/en/news-insights/publications/global-business-complexity-hub/ [Accessed: 14 May 2024].

Wu, J. (2024) *Sustainable investing in 2024: Pulling back or pushing forward?*, https://am.jpmorgan.com/se/en/asset-management/adv/investment-themes/sustainable-investing/sustainable-investing-trends-and-insights-2024/ [Accessed: 6 May 2024].

United Nations (n.d.) *THE 17 GOALS | Sustainable Development*, https://sdgs.un.org/goals# [Accessed: 3 April 2024].

United Nations (n.d) *The Paris Agreement*, *United Nations*. United Nations. https://www.un.org/en/climatechange/paris-agreement [Accessed: 26 March 2024].

Appendix

Appendix 1: Features of EU Taxonomy

What the EU Taxonomy is	What the EU Taxonomy is not
A classification system to establish clear definitions of what is an environmentally sustainable economic activity	Is not a mandatory list to invest in
Tool to help investors and companies to make informed investment decision on environmentally sustainable activities for the purpose of determining the degree of sustainability of an investment	It's not a rating of the "greenness" of companies
Reflecting technological and policy developments: The Taxonomy will be updated regularly	It does not male any judgment on the financial performance of an investment
Facilitating transition of polluting sectors	What's not green is not necessarily brown. Activities that are not on the list, are not necessarily polluting activities. The focus is simply on activities that contribute substantially to environmental objectives.
Technology neutral	
Fostering Transparency by disclosures for financial market participants and large companies related to the Taxonomy	

Appendix 2: Questions Guide for Interviews

- What is your organization's view on sustainability within the realms of private equity?
- Did applying sustainability change the company's operation? Since when?
- How is sustainability integrated into your overall business strategy and investment decisions?
- What are your views on future trends in sustainability and their impact on private equity? Will there be changes in directing investments?
- What changes do you expect regarding sustainability-focused investments within your industry?
- Financial and Non-financial indexes or KPIs are relevant for your decision on investing in portfolio companies?
- Which tools, frameworks criteria do you use when selecting an investment portfolio? Carbon emission protocol, SDG's , SBTi?
- ESG consultant or in-house?
- What obstacles or challenges have you encountered when implementing sustainability regulation into the investment process?
- What is your opinion about new frameworks and regulations from the EU regarding EU taxonomy, SFDR and CSRD?
- You believe PE to be a financial solution to reduce the investment gap on green projects towards 2050 net zero goals?