

ESG AND FINANCIAL PERFORMANCE OF FIRMS

Nordic Evidence

Habeeb Yahya



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ABSTRACT

This dissertation includes three essays that focus on the relationship between sustainability, measured in terms of the environmental, social, and governance (ESG) scores and the financial performance of firms. The first essay considers the bi-directional relationship between firms' ESG and financial performance. The study argues that ESG is a predictor as well as a consequence of corporate financial performance. In the second essay, the relevance of ESG performance in firms' resilience during crises is studied using the COVID-19 pandemic as a case study with the difference in containment strategies in the Nordic countries as a good setting for identification. The last essay focuses on the role of ownership horizon on the ESG performance of firms. The study argues that firms with long-term orientation have higher ESG performance. This is based on the expectation that achieving higher ESG performance itself is a long-term project that would require owners with such long-term interests to invest in it.

The practical implications of this dissertation's findings are significant for both companies and investors. By recognizing the bi-directional relationship between ESG practices and financial performance, companies can strategically prioritize sustainability initiatives to enhance their long-term viability and attractiveness to investors. The study's focus on the relevance of ESG performance during crises, such as the COVID-19 pandemic, highlights the importance of resilience and adaptability in navigating turbulent times. In addition, the insight into the influence of ownership horizon on ESG performance suggests that fostering a long-term orientation among owners can promote sustainable business practices. Overall, these implications highlight the need for companies to integrate ESG considerations into their decision-making processes and for investors to incorporate ESG factors into their investment strategies to promote sustainable value creation and resilience.

Keywords: ESG; firm performance; COVID-19; long-term ownership; Nordic countries

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TIIVISTELMÄ

Tämä väitöskirja sisältää kolme esseetä, joissa keskitytään ympäristön, sosiaalisen vastuun ja hallintotavan (ESG) sekä liiketoiminnan tuloksellisuuden väliseen suhteeseen. Ensimmäisessä tarkastellaan ESG:n ja liiketoiminnan tuloksellisuuden välistä kaksisuuntaista suhdetta. Tutkimuksessa väitetään, että ESG on sekä ennustaja että seuraus yritysten ja liiketoiminnan suorituskyvystä. Toisessa esseessä tarkastellaan ESG-suorituskyvyn merkitystä yritysten kriisinsietokyvyssä käyttäen tapaustutkimuksena COVID 19 -pandemiaa ja Pohjoismaiden lieventämisstrategioiden välisiä eroja. Viimeisessä esseessä keskitytään omistajahorisontin rooliin yritysten ESG-tuloksessa. Tutkimuksessa väitetään, että yrityksillä, joiden omistajat ovat pitkäjänteisesti suuntautuneita, on parempi ESG-suorituskyky. Tämä perustuu oletukseen, että paremman ESG-suorituskyvyn saavuttaminen on itsessään pitkäaikainen hanke, joka edellyttää investointeja omistajilta, joilla on pitkäaikaisia intressejä.

Tämän tutkielman tulosten käytännön vaikutukset ovat merkittäviä sekä yrityksille että sijoittajille. Tunnustamalla ESG-käytäntöjen ja taloudellisen suorituskyvyn välisen kaksisuuntaisen suhteen yritykset voivat strategisesti priorisoida kestävyysaloitteita parantaakseen pitkän aikavälin elinkelpoisuuttaan ja houkuttelevuuttaan sijoittajien silmissä. Tutkimuksen keskittyminen ESG-toiminnan merkityksellisyyteen kriisien, kuten COVID-19-pandemian, aikana korostaa joustavuuden ja sopeutumiskyvyn merkitystä myrskyisien aikojen navigoinnissa. Lisäksi näkemys siitä, miten omistajahorisontti vaikuttaa ESG-suorituskykyyn, viittaa siihen, että omistajien pitkän aikavälin suuntautumisen edistäminen voi edistää kestäviä liiketoimintakäytäntöjä. Kaiken kaikkiaan nämä vaikutukset korostavat, että yritysten on otettava ESG-näkökohdat huomioon päätöksentekoprosesseissaan ja sijoittajien on sisällytettävä ESG-tekijät sijoitusstrategioihinsa kestävän arvonluonnin ja joustavuuden edistämiseksi.

ASIASANAT: ESG; yrityksen suorituskyky; COVID-19; pitkäaikainen omistajuus; Pohjoismaat

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Turku May, 2024 *Habeeb Yahya*

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Abbreviations

ESG Environmental, Social and Governance

CSR Corporate Social Responsibility
CFP Corporate Financial Performance

CEO Chief Executive Officer

EU European Union

NGO Non-Governmental Organisation SDG Sustainable Development Goals

SEC U.S. Security and Exchange Commission

SRI Socially Responsible Investing

List of Original Publications

This dissertation is based on the following original publications, which are referred to in the text by their Roman numerals:

- Vaihekoski, M. and Yahya, H. ESG and Firm Performance: Evidence from the Nordic Countries. Nordic Journal of Business, 2023, Vol. 72(3), 164-189.
- II Yahya, H. The role of ESG performance in firms' resilience during the COVID-19 pandemic: Evidence from Nordic firms. Global Finance Journal, 2023, Vol. 58, 100905.
- III Chowdhury, A., Vaihekoski, M. and Yahya, H. Blockholding, Ownership Horizon, and Firms' ESG Performance: Nordic Evidence. Unpublished essay.

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1 Introduction

1.1 Background

The urgent need to increase investments towards sustainability is paramount in addressing pressing global challenges such as climate change, environmental degradation, biodiversity loss, and social inequality. As the world struggles with the consequences of unsustainable practices, there is a growing recognition that a fundamental shift in investment patterns is crucial for building a resilient and equitable future. The role of Environmental, Social, and Governance (ESG) performance has become pivotal in guiding this shift. Increased investment in sustainability is essential for transitioning to a low-carbon economy, promoting renewable energy sources, and mitigating the adverse impacts of climate change. The need for sustainable investment is underscored by the realization that traditional economic models, heavily reliant on finite resources and environmentally harmful practices, are not viable in the long term. Hence, redirecting financial resources towards sustainable initiatives is not only a moral imperative but also a strategic imperative for businesses and investors.

The purpose of this doctoral dissertation is to examine the relationship between ESG and firm financial performance as well as the role of investors in it. The integration of ESG criteria into corporate practices serves as a scope for aligning investment decisions with sustainable goals and mitigating potential environmental and social risks. However, according to Branco and Rodrigues (2006), the relationship between ESG and firm financial performance is not necessarily a trade-off. This means the relationship between ESG and firms' financial performance can be bidirectional. There is evidence from earlier studies that high ESG performance is both a consequence and determinant of high financial performance (Orlitzky et al., 2003; Orlitzky, 2005; Waddock and Graves, 1997). This is because firms with higher financial performance have a better urge to engage in corporate social responsibility (CSR) activities (Vitezić et al., 2012) and the profitability of a firm is improved and sustained through ESG initiatives (Aguilera et al., 2007). Overall, companies embracing sustainable practices are often better positioned to weather environmental risks, attract conscientious consumers, and ensure long-term profitability.

This dissertation also considers the role of ESG in firms' resilience during the COVID-19 pandemic. According to Albuquerque et al. (2020), the customer preference theory explains higher financial performance for firms with high ESG performance.

mance during the COVID-19 pandemic. The customer preference theory is based on the opportunity offered to firms through customer loyalty i.e. lower price elasticity of demand e.g. during tightened economic situations. This is because ESG performance is a product differentiation strategy that sets apart firms' products and services from alternatives (Albuquerque et al., 2019). Similarly, socially responsible investing (SRI) is argued to explain ESG's link to firm financial performance (Renneboog et al., 2011). This is from the investor preference theory perspective that suggests less sensitivity for investors who prefer ESG stocks in SRI funds (Bollen, 2007). These compelling arguments and the global impact of the COVID-19 pandemic, alongside different countries' containment strategies, provide a good setting to test the influence of firms' ESG performance in sustaining firms' financial performance.

Finally, the overarching role of investors in corporate success or failure cannot be overemphasized. These investors especially those with large equity in the firm have a significant influence on efforts to impact corporate actions such as ESG performance (Dimson et al., 2021). The cash flow and voting rights are two channels through which investors affect corporate decisions. Thus, the direction in which they steer the firm has been said to be a characterization of their horizon. Studies have documented evidence of short-termism and myopia in firms (Brunzell et al., 2015). The short or long-term orientation of owners is essential for firms' performance in issues like ESG which is by definition long-term focused.

Overall, the three essays in this dissertation are connected in the way they establish the relationship between ESG and firm performance. The first essay shows that high ESG performance can explain a corresponding high financial performance. It suggests that firms with high financial performance have the resources to achieve high ESG performance in return. This two-way relationship underlines the economic importance of considering and integrating ESG factors into a company's overall performance metrics. The second essay considers the role of ESG in firms' navigation through economic downturns as witnessed during the COVID-19 pandemic. The paper documents evidence of resilience from firms with high ESG performance during the pandemic. This study does add to existing knowledge on the competitive advantage strong ESG performance affords firms, especially in turbulent times. As such, the evidence that firms with high ESG performance showcased resilience during the pandemic, suggesting that prioritizing ESG practices can act as a protective factor for businesses facing economic hardships is encouraging. Thus contributing to our understanding of the competitive landscape, highlighting that strong ESG performance provides firms with a significant advantage, particularly in times of turbulence and uncertainty.

The third essay shows the relevance of the different classes of large equity holding and the influence of owners' horizons. The study aligns with the documented shareholder engagement literature that shows the influence of large shareholders on corporate actions and decisions (Dimson et al., 2015) and evidenced a positive relationship between the voting share percentage of large equity owners and the ESG performance of firms. This is also the conclusion of Silvola and Landau (2021), suggesting that investors' alliance could increase the weight of their engagement and efficient use of resources. This finding has implications for corporate governance and shareholder dynamics. It suggests that companies with significant ownership by engaged shareholders may be more inclined to prioritize ESG activities. From an economic perspective, this alignment signifies that businesses with strong shareholder engagement in ESG matters could potentially benefit from enhanced long-term sustainability and positive economic outcomes. This contributes to our understanding of the economic implications of ownership structures and shareholder engagement in the context of ESG performance.

1.2 Sustainable Finance

Sustainable finance refers to a financial framework that incorporates environmental, social, and governance (ESG) criteria into investment decisions and financial practices. The primary goal is to promote economic activities that contribute to long-term environmental sustainability, social responsibility, and robust corporate governance. Sustainable finance encompasses a broad range of strategies, including investments in environmentally friendly projects, consideration of social impact, and the integration of strong governance principles. By aligning financial activities with sustainability objectives, sustainable finance aims to foster resilient, environmentally conscious, and socially responsible economic practices, addressing global challenges such as climate change and social inequality.

The evolution of sustainable finance in Europe has been significantly driven by the European Union (EU) Sustainable Finance regulation. Central to this regulation is the establishment of a taxonomy for sustainable activities, providing a standardized framework for classifying investments based on their environmental sustainability (Alessi et al., 2019). This regulatory framework aims to harmonize financial activities with environmental activities in the low-carbon transition efforts of the EU. In addition, the regulation mandates transparency and disclosure of ESG information by financial market participants, facilitating informed investment decisions and fostering accountability (Schütze et al., 2020). The EU Corporate Sustainability Reporting Directive (CSRD) which came into force in 2023 is a closely related regulation that strengthens the rules concerning large companies as well as listed small and medium enterprises (SMEs) disclosure on environmental and social activities. Generally, the regulation encourages sustainable finance by highlighting incentives in green bonds and sustainability-linked financial products, to mobilize private capital towards sustainable investments.

Sustainable finance has emerged as a critical component in shaping the economic

landscape, with a focus on fostering environmentally responsible practices and promoting long-term financial resilience (Fatemi and Fooladi, 2013). One key aspect is the investment in renewable energy projects. Sustainable finance actively encourages and supports investments in renewable energy sources, such as solar, wind, and hydroelectric power. This shift aims to reduce dependence on traditional fossil fuels, mitigating the environmental impact of energy production and contributing to the global transition towards cleaner and more sustainable energy alternatives. For example, climate change issues have become integral to the discourse of sustainable finance (Giglio et al., 2021), hence the coined topic titled climate finance. Financial institutions and investors are increasingly recognizing the risks associated with climate change and the need to incorporate climate issues into their decision-making processes. This involves evaluating the environmental impact of investments and assessing how companies are addressing climate-related risks and opportunities. Climate finance and practices, therefore, aim to align financial strategies with climate resilience, promoting investments that contribute to a low-carbon economy and, ultimately, addressing the challenges posed by climate change. This is in addition to the need to ensure energy security as the recent energy crisis of 2022 in the wake of Russia's invasion of Ukraine has shown. Renewable sources offer a cleaner alternative, with the potential to provide a reliable and abundant energy supply while minimizing environmental harm. By diversifying the energy mix and decreasing reliance on finite fossil fuels, we can work towards averting future energy crises and creating a more resilient and sustainable energy infrastructure.

Furthermore, the institutionalization of ESG practices into single-company financial analyses is a key development in sustainable finance. This involves integrating ESG criteria into traditional financial analyses to provide a more comprehensive understanding of a company's performance. Investors and financial analysts now consider not only financial metrics but also factors related to a company's environmental impact, social responsibility, and governance practices. This institutionalization underscores a broader recognition that sustainable and responsible business practices contribute to long-term financial success and resilience. As a result, companies are incentivized to adopt ESG principles, aligning their strategies with broader sustainability goals.

Notably, academic research on sustainable finance and its impact on economic outcomes has gained prominence in the last two decades. Scholars investigate how sustainable finance practices influence investment decisions (Gibson Brandon et al., 2022), corporate behavior (Palvia et al., 2015), and overall economic performance (Fatemi et al., 2018). These studies explore the interconnectedness of financial markets, environmental sustainability, and social responsibility. They provide valuable insights into how integrating sustainable finance principles can contribute to positive economic outcomes, fostering a more resilient and environmentally conscious financial ecosystem. Overall, the academic exploration of sustainable finance plays

a pivotal role in shaping policies, informing industry practices, and guiding the transition toward a more sustainable and economically viable future.

1.3 The ESG score controversy

ESG ratings are assessments of a company's performance in environmental, social, and governance areas. They provide investors and other stakeholders with an indication of how well a company manages environmental risks, engages with social issues, and upholds governance standards. ESG ratings typically involve evaluating various factors, such as a company's carbon emissions, labor practices, diversity and inclusion policies, executive compensation structure, board diversity, and ethics and compliance measures. In the past two decades, the assessment of firms' performance in ESG criteria has become increasingly popular. This trend is largely driven by investors seeking objective measures of sustainability to help them in their investment decisions. While standardized ratings are yet to be universally established, various agencies have emerged to provide ESG ratings since 2010. Notably, Asset4, was an early entrant in this market, later acquired by Thomson Reuters, which is now part of Refinitiv. Other prominent rating agencies include MSCI, Sustainalytics, RepRisk, Moody's ESG (Vigeo-Eiris), S&P Global (RobecoSAM) and Institutional Shareholder Services (ISS).

In recent times, the absence of standardized criteria for ESG ratings has raised concerns among researchers regarding the reliability, consistency, and overall quality of the ESG databases. This concern is particularly pronounced due to substantial disparities found in the evaluations of firms' ESG quality across major rating providers (Berg et al., 2020; Gibson Brandon et al., 2021). Influential sustainability rating agencies such as Kinder, Lydenberg, and Domini (KLD) of Morgan Stanley Capital International (MSCI) have played a pivotal role in shaping perceptions in the U.S. stock market. These Influential rating agencies tend to assign higher scores to firms associated with them through institutional ownership compared to others (Tang et al., 2022). Similarly, Berg et al. (2022) show that there is a significant divergence in the ratings across providers when they considered the six (i.e. Kinder, Lydenberg, and Domini (KLD), Sustainalytics, Moody's ESG (Vigeo-Eiris), S&P Global (RobecoSAM), Refinitiv (Asset4), and MSCI) prominent. They find that this divergence is due to differences in rating methodologies that cut across the measurement, scope and weight applied by the different rating agencies. The implication can be significant when the ESG-firm performance relationship is considered since the reliability of the result is largely dependent on data credibility.

The U.S. Securities and Exchange Commission's (SEC) Asset Management Advisory Committee has also expressed concerns about the backfilling bias in ESG data, emphasizing the potential distortion arising from limited historical data on sustainability measures. For example, Refinitiv's historical ESG scores have undergone

widespread and repeated changes, a phenomenon documented by Berg et al. (2020) and attributed to the retrospective adjustments made when new companies are added to the database. The implications of this data rewriting are substantial, particularly for ESG research and investment. It raises questions about the replicability of studies by other researchers, potentially explaining some of the differences in the observed ESG-firm performance relations in earlier research. Researchers utilizing Refinitiv data must carefully document the timing of data acquisition and may need to implement back-testing strategies to ensure consistency and account for potential result differences. Despite these concerns, the Refinitiv ESG score remains one of the most widely used ratings, with over 1,500 academic articles either referencing or directly using this source since 2003 (Berg et al., 2020).

Generally, the primary purpose of ESG rating agencies is to evaluate a company's exposure to ESG risks and how effectively it manages these risks in comparison to its peers. The Refinitiv database, utilized in this study, employs a performance-based scoring system that measures firms against their industry counterparts. These ratings provide information on companies' performance in activities related to the environment, social values and corporate governance. The Thomson Reuters/Refinitiv database, renowned for its extensive historical coverage and inclusion of over 6,000 global firms, is widely utilized for detailed ESG performance analysis (Dorfleitner et al., 2015). Recently, Refinitiv became LSEG and offers in-depth coverage of more than 12,500 global companies across 74 countries, with over 630 metrics and history dating back to 2002. According to Refinitiv, their ESG scores are derived from publicly available sustainability information sources, such as annual reports, company websites, non-governmental organization (NGO) websites, CSR reports, stock exchange filings, and other news sources. This approach is designed to ensure that ESG performance evaluations are free from potential reporting bias, providing a more objective assessment compared to relying solely on direct firm reporting. In the literature on ESG, the Refinitiv rating is a prominent and widely recognized measure (Bofinger et al., 2022; Flammer, 2021). The extensive coverage of the Refinitiv database, coupled with its comprehensive financial data, positions it as a valuable resource for researchers and analysts seeking to understand and assess the sustainability performance of firms across the globe. The scores not only serve as a benchmark for investors but also contribute to the broader conversation on corporate responsibility, offering a transparent and standardized way to evaluate and compare companies in terms of their commitment to ESG principles. It is worthy of note that the high utilization rate for Refinitiv by academics is also due to easy and cheap access when compared to leading providers like MSCI and Sustainalytics.

In the context of these dissertation essays, the backfilling issue, while acknowledged, holds less significance than it might in other studies. This is because the focus across all the papers is on the directional significance of the ESG-firm performance relationship rather than the market reaction or the magnitude of such significance.

However, acknowledging and addressing these challenges in ESG data reliability is crucial for researchers aiming to contribute robust findings to the broader understanding of the impact of ESG considerations on firm performance. The ongoing debates and evolving methodologies in this field highlight the importance of diligence in navigating the complexities associated with ESG data interpretation and application in academic research.

1.4 The Nordic data: A good foundation for ESG analysis

In investigating the impact of firms' ESG practices on financial performance, this dissertation adopts a focused approach by analyzing a selection of publicly listed firms from the Nordic region. This deliberate choice serves as a foundational element in the study of the topics explored throughout the essays. The Nordic region offers a unique context for investigation, given its distinct ESG model that is well connected with the social-democratic, institutional-cultural, and political-economic fabric of these countries (Strand et al., 2015). This unique alignment enables a robust examination that considers the interplay between sustainability practices and the broader socio-economic landscape. Thus, the findings provide a reliable outcome for stakeholders' evaluation of firms' ESG activities that studies (Silvola and Landau, 2021) have shown to be important to investors in investment decision-making.

The profound connection of the Nordic ESG model with the social-democratic values and institutional framework of the Nordic countries adds depth to the research in this dissertation, providing a well-defined context for understanding the implications of ESG factors on firm performance. Furthermore, the choice of the Nordic region is underscored by the region's reputation for integrity. This commitment to ethical standards enhances the reliability of the data utilized for evaluating firms' sustainability performance, a critical consideration given that ESG scores, sourced from reputable agencies like Refinitiv for this dissertation, heavily depend on the credibility and transparency of companies in their reporting of ESG-related activities.

Moreover, the firms' sustainability assessment within the Nordic region operates within a best-in-class setting, where the quality of ESG performance in Nordic countries is comparatively higher than in other regions globally. This observation aligns with findings from Dimson et al. (2021), highlighting the success of shareholder engagement in countries with elevated social norms. Therefore, by choosing the Nordic sample, this dissertation aims not only to contribute to the broader discourse on ESG and firm performance but also to offer insights into the specific dynamics of sustainability practices within a region known for its exemplary commitment to both integrity and high social norms. Similarly, Hansen (2023) states that the argued 'stakeholder-oriented governance model' of the Nordic countries in the international

discussion on ESG, engulfed in high interpersonal trust is connected to the belief that stakeholder-oriented governance is in line with companies' sustainability efforts than a model oriented towards shareholder superiority. This is based on the conclusion that the Nordics are among the countries most committed to sustainability, suggesting of prevalence of stakeholder orientation. However, he argued that Nordic governance is shareholder-oriented but well-rooted in the adoption and improvement of best sustainability practices that consider all stakeholders and the environment.

2 Theoretical Background

This section discusses the different theories related to the ESG and firm performance essays in this dissertation. The theories are the shareholder and stakeholder theories, the customer, and investor preference theories, and the theory of large equity holding.

2.1 Shareholder and stakeholder theory

Understanding the core purpose of companies has sparked debates among researchers. One perspective, championed by Friedman (1970) asserts that the sole responsibility of a business is to maximize profit and increase the value of the company for owners. This view is referred to as the shareholder theory. Empirical studies have pointed out a potential downside to emphasizing corporate social responsibility (CSR) or environmental, social, and governance (ESG) activities, suggesting a negative link with the overall performance of the company. For instance, studies (Lee and Faff, 2009; Branco and Rodrigues, 2008) have indicated that companies heavily involved in CSR or ESG endeavors might experience a decrease in their overall value. This implies that, according to the shareholder theory, efforts directed toward social or environmental causes might not be in the best interest of the company's financial success.

In contrast to the shareholder theory, Freeman (1984) stakeholder theory proposes a broader perspective on a company's responsibilities. The stakeholder theory posits that businesses should not only prioritize profit for shareholders but also consider the interests of other stakeholders such as creditors, employees, and the community. Recent studies (Fatemi et al., 2015; Wang and Sarkis, 2017) have shown a positive connection between ESG practices and a company's overall performance. The studies attributing this positive impact to the stakeholder theory argue that companies benefit when they acknowledge and fulfill their responsibilities to a broader range of stakeholders beyond just shareholders. In this view, a company's success is linked with its ability to consider and contribute to the welfare of various groups associated with its operations. According to Huang (2021), the link between ESG performance and operating corporate financial performance (CFP) is stronger than that with accounting CFP, which, in turn, exceeds the correlation with market-based CFP. In general, the transition of firms away from solely prioritizing shareholders highlights the potential advantages of adopting a more comprehensive approach to

corporate responsibility. This sentiment is echoed in the phrase 'Good Ethics is Good Business' coined by Van Beurden and Gössling (2008), in a study examining the relationship between CSR and CSP.

In recent years, there has been growing recognition of the importance of ESG performance in shaping firm valuation (Fatemi et al., 2018). While the shareholder theory suggests that prioritizing ESG initiatives may detract from a company's financial success, empirical evidence increasingly supports the idea that integrating CSR (Wang et al., 2016) or ESG (Whelan et al., 2021; Fatemi et al., 2015) considerations can enhance firm performance. Studies have shown that companies with strong ESG practices tend to attract more investors (Pástor et al., 2021), and experience lower financing costs (Cornell, 2021). In addition, the positive correlation between ESG performance and firm value aligns with the stakeholder theory, which emphasizes the importance of considering the interests of all stakeholders, not just shareholders. By adopting ESG principles, companies can build brand trust and reputation (Asante-Appiah and Lambert, 2023) which strengthens their relationship with stakeholders, and ultimately drives sustainable growth and long-term value creation (Cohen, 2023). Although there is a well-established positive relationship between ESG and CFP, theoretical expectations regarding the relationship suggest either no significant link or a modestly positive association (Huang, 2021). Thus, research identifying the drivers of ESG activity in firms and the mechanisms that result in corporate financial outcomes is essential. Similarly, studies on the CSR-CFP relationship have attributed methodological inconsistencies such as measures and datasets utilized as a significant factor in the direction of the relationship (Griffin and Mahon, 1997).

2.2 Consumer and investor preference

The customer preference theory offers insights into how firms with high Environmental, Social, and Governance (ESG) performance may experience better financial outcomes, especially during economic challenges such as the COVID-19 pandemic (Albuquerque et al., 2020). According to this theory, when economic conditions tighten, customer demand becomes less sensitive to price changes for certain goods and services. In the context of ESG, the theory suggests that strong ESG performance acts as a product differentiation strategy. This means that companies focusing on ESG are setting their products and services apart from alternatives, potentially leading to higher financial performance (Albuquerque et al., 2019).

Furthermore, the socially responsible investing (SRI) consideration adds another layer to understanding the link between ESG and firm financial performance (Renneboog et al., 2011). According to the investor preference theory, investors who prioritize ESG factors exhibit less sensitivity to market changes, particularly those holding ESG stocks in SRI funds (Bollen, 2007). This perspective suggests that ESG-focused companies may attract investors who are less swayed by short-term

market fluctuations, contributing to the overall financial stability of the firms.

The COVID-19 pandemic has served as a stress test for various business strategies, and understanding how ESG factors impact financial performance during such challenging times can provide valuable insights for both businesses and investors. By examining these dynamics, studies can contribute to our understanding of the longterm viability and resilience of firms with strong ESG practices. The insights gained from studying the interplay between ESG practices and financial performance amid such adversity are invaluable for businesses and investors alike. For businesses, it offers a chance to assess the effectiveness of their ESG strategies as a key component of their overall resilience. Understanding how ESG practices contribute to a company's ability to withstand shocks and uncertainties can guide strategic decision-making for the long term. On the investor side, this exploration provides critical information for those who prioritize socially responsible investing. It offers a channel of assessment into the performance of companies with strong ESG practices under stress, helping investors make informed decisions aligned with their values. Moreover, it contributes to the ongoing dialogue about the role of ESG factors in shaping a company's durability and endurance in the face of unforeseen challenges.

2.3 Equity blockholding and corporate impact

The acquisition of large equity stakes by investors (blockholders) grants them the ability to direct and influence the strategic direction of the company (Dimson et al., 2021). Edmans (2009) argue that having a blockholder enables managers to pursue investment projects that they may have previously avoided due to concerns about short-term changes in ownership. Companies with owners focused on short-term gains may prioritize actions that yield quick profits but could overlook investments in sustainable practices or initiatives that contribute to long-term value creation (Graham et al., 2006). Conversely, firms with owners who adopt a long-term perspective are more likely to prioritize sustainable strategies and investments, recognizing the importance of building resilience, fostering stakeholder trust, and positioning the company for sustained success over time (Edmans, 2009). In other words, a significant long-term owner could help mitigate managerial short-termism by providing stability and support for strategic decisions that prioritize long-term value creation over immediate gains. Therefore, understanding the orientation of owners is essential for assessing a firm's ability to navigate challenges, adapt to changing market conditions, and achieve sustainable growth in the long run.

Edmans and Holderness (2017) see voice and exit as two theoretical models for blockholders to affect corporate decisions. They recognize that the integrated model i.e. a combination of the strategies is what blockholders can employ to influence corporate actions. This dual approach is available through cash flow and voting rights to these investors. Meanwhile, the influence of large investors becomes a defining

characteristic of their investment horizon i.e. the timeframe over which they envision the company's success and development. Studies (e.g., Brunzell et al. (2015)) have documented instances of short-termism and myopia in firms, reflecting a focus on immediate gains rather than long-term sustainability. This short or long-term orientation of owners becomes inherently crucial for the long-term performance of the firm, as it directly influences strategic decisions regarding investments, resource allocation, and organizational priorities.

The alignment of investors' horizons with a firm's ESG focus is crucial. ESG issues, by definition, are oriented toward long-term impact and positive outcomes for both the company and its broader stakeholders. Investors who prioritize ESG are positioned to play a vital role in steering the company toward sustainable practices, reflecting a commitment to long-term value creation (Dyllick and Muff, 2016; Tirole, 2018). Therefore, understanding the interplay between investor behavior and corporate decisions, particularly in ESG matters, is essential for understanding the factors that contribute to a company's success. The choices made by investors, whether driven by short-term gains or a commitment to long-term goals, shape the corporate landscape (Brunzell et al., 2015). Consequently, research in this domain not only sheds light on existing dynamics but also provides insights that can inform strategies aimed at fostering sustainable, responsible, and enduring corporate practices.

Generally, investors with significant equity stakes hold considerable influence over corporate actions, including ESG activities. Their influence, expressed through cash flow and voting rights, defines the company's trajectory, making the alignment of their investment horizon with the long-term nature of ESG goals a critical factor in determining a firm's success in navigating the complexities of today's business environment.

3 Summary of the Essays

In essay I, ESG and Firm Performance: Evidence from the Nordic Countries, we examine the relationship between ESG and firms' financial performance. Earlier research (Orlitzky, 2005; Waddock and Graves, 1997) shows that high CSR performance is both a determinant and consequence of high financial performance. We extended this finding beyond the social performance and tested the possibility on a sample of publicly listed Nordic firms' ESG and financial performance. The Nordic data can be regarded as the best in class as evidence of its reliability due to the track record of prowess in socio-economic, socio-political, and environmental initiatives that have set the standard for companies in the region (Strand et al., 2015).

The findings of the study show a positive relationship between ESG and firms' financial performance and valuation. In particular, the study shows that a firm's profitability is influenced by both its current ESG scores and those from the immediate past year. Additionally, the result evidences a reciprocal relationship, indicating that firms with higher profitability in the current and immediate past year also tend to exhibit better ESG performance. This interconnectedness suggests a dynamic relationship where financial success and responsible business practices mutually reinforce each other.

In a closer look at the aspects of ESG that matter most to firms' financial performance, we find that the social pillar (how the firm interacts with their employees, the society, and handles human rights issues as well as product responsibility) is linked to better profits for the company. On the other hand, the governance pillar (the management, shareholder, and CSR strategy) has a negative link with profits. Though this goes against what we might expect, an explanation would be that the region has high standards that continuously require improvements in the area of corporate governance.

In addition, the study considers firm valuation, showing a positive relationship with all individual ESG pillars, the overall ESG score of firms, and immediate past year ESG scores. This suggests that investors and markets value companies with strong ESG performance. Notably, the significance of past period ESG scores becomes apparent, particularly when considering more than one year of historical ESG performance in relation to firm valuation. This temporal dimension underscores the importance of sustained and consistent ESG practices over time in contributing to a firm's overall value in the eyes of investors and the market.

In essay II, *The role of ESG performance in firms' resilience during the COVID-19 pandemic: Evidence from Nordic firms*, the impact of movement restrictions, such as lockdowns, during the COVID-19 pandemic on the financial, nonfinancial, and sustainability performance of companies in the Nordic countries is examined. The unique data from this region allows us to analyze how economic shocks differed between places with and without lockdowns, offering insights into firms' resilience during times of crisis. We're particularly interested in understanding how external shocks affect firms, given the varied economic, health, and social responses across borders.

To capture the immediate and future performance of firms during the crisis, we consider profitability measures (Return on Assets - ROA) and valuation (Tobin's Q). Additionally, we consider revenue (sales) to understand where firms are making money during this period. Drawing on insights from previous research (Albuquerque et al., 2020), we use environmental and social performance (E and S of ESG scores) as proxies for sustainability, aiming to gauge how well "sustainable firms" weather the challenges posed by the COVID-19 pandemic. The result of this study shows significant differences in firm revenue and profitability between firms in countries under lockdown and those without during the COVID-19 pandemic. Surprisingly, despite the severity of the pandemic and the restrictions, the impact on financial performance is not negative. The result of the analysis shows a positive relationship between ESG performance and revenue, profitability, and firm valuation, emphasizing the importance of sustainability practices for companies, even in times of crisis.

In another analysis comparing firms focused on ESG principles and those not prioritizing these factors, the study documents that ESG firms were less profitable during the COVID-19 lockdown. However, in the year following the lockdown, there is a positive and economically significant relationship between firms' environmental and social performance and profitability. This is seen as encouraging signs of recovery for the firms. In contrast, firm valuation is positively related to ESG performance both during the lockdown and in the subsequent post-lockdown years, suggesting that investors always value companies with strong sustainability practices.

In essay III, *Blockholding, Ownership Horizon, and Firms' ESG Performance: Nordic Evidence*, we examine the influence of large owners via their voting and cash flow rights and the relationship between ownership type and a firm's performance in Environmental, Social, and Governance factors. Following Brunzell et al. (2015), we categorize firm owners based on their holding periods: long-term owners (holding shares for three consecutive years) and short-term owners (holding shares for less than three consecutive years). Our emphasis on blockholders aligns with documented evidence (Barnea and Rubin, 2010; Dimson et al., 2021) indicating that these influential shareholders, with the capacity to monitor management, significantly influence a firm's ESG investment and the potential effect of ownership myopia and short-termism on long-term focus projects like ESG.

Our findings show a significant connection between blockholding and enhanced ESG performance, particularly when considering the voting shares of the three largest owners of firms. Through univariate analysis, we find a positive and significant difference in ESG scores between long-term and short-term owner samples, indicating that long-term owners have a greater impact on increasing ESG performance than their short-term counterparts. Further exploration shows that long-term ownership in the largest two owner groups is linked to improved ESG performance. This result is reinforced when we examine changes in ownership horizon, highlighting improved ESG performance when ownership shifts from short to long-term in firms. Overall, our findings support the established conclusion (see, e.g., Bénabou and Tirole (2010)) that sustainability helps counter short-termism, enabling a long-term perspective and maximizing inter-temporal profits.

The use of data from Nordic countries in our study provides a robust sample for testing ownership influence on firm performance, especially in the realm of sustainability. The unique Nordic ESG model, intricately connected with social—democratic, institutional—cultural, and political—economic institutions, offers a valuable setting for exploring corporate actors' (i.e. owners) influence on firms' sustainability. Our study contributes to this exploration in a best-in-class setting, considering the high-quality Nordic countries' ESG performance that surpasses standards in other regions of the world. This aligns with the idea that shareholder engagement is more successful when investors from countries with high social norms are involved (Dimson et al., 2021).

4 Contribution to the literature

The contributions of the essays in this dissertation to the literature on Environmental, Social, and Governance (ESG) factors using the case study of Nordic firms are substantial and multifaceted. Firstly, essay I extend prior research by confirming the correlation between high Corporate Social Responsibility (CSR) performance and strong financial results, a relationship previously observed in literature. By broadening this investigation to include ESG factors beyond social performance and applying them to publicly listed Nordic companies, the essays deepen our understanding of how these factors interact with financial performance within a specific regional context. Similarly, the essay shed light on the interconnectedness between ESG performance and financial success. The essay demonstrates that firms exhibiting higher profitability are likely to have better ESG performance, and vice versa, suggesting a reciprocal relationship where responsible business practices and financial success mutually reinforce each other. This finding highlights the importance of considering ESG factors as integral components of overall business strategy, rather than isolated initiatives.

In addition to exploring the overall relationship between ESG and financial performance, the essays identify specific pillars within the ESG framework that have differential impacts on firm profitability. While the social pillar, encompassing interactions with employees, society, and human rights, is positively associated with profitability, the governance pillar shows a negative link. This nuanced understanding challenges simplistic assumptions about the relationship between governance and financial outcomes and highlights the need for context-specific analysis. Furthermore, the essays contribute valuable insights into the relationship between firm valuation and ESG performance. They reveal a positive association between firm valuation and ESG factors, indicating that investors and markets tend to value companies with strong ESG performance more highly. Importantly, the essay emphasizes the significance of sustained and consistent ESG practices over time in enhancing a firm's overall value and attractiveness to investors.

Second, amidst the backdrop of the COVID-19 pandemic, essay II provides valuable insights into the resilience of Nordic firms. Despite the challenges posed by the pandemic and associated lockdowns, firms with higher ESG performance demonstrated greater resilience in terms of revenue, profitability, and firm valuation. This highlights the enduring importance of sustainability practices even in times of crisis,

further emphasizing the relevance of ESG practices for long-term business success. Furthermore, the essay contributes to understanding the relationship between firm valuation and ESG performance during times of crisis, emphasizing the positive association between firm valuation and strong ESG performance. It also explores the differential impact of the pandemic on firms prioritizing ESG principles, showing that while ESG firms were initially less profitable during the lockdown, they exhibited positive signs of recovery in the subsequent post-lockdown years. This finding suggests that companies with strong ESG performance are better positioned to navigate adverse market conditions and rebound from temporary setbacks, ultimately driving long-term value creation and enhancing shareholder returns.

Lastly, essay III examines the influence of ownership structure on a firm's ESG performance. Specifically, we find a significant connection between long-term ownership, particularly by blockholders, and enhanced ESG performance. This suggests that sustainability practices may help counter short-termism and foster a long-term perspective among owners, ultimately contributing to maximizing inter-temporal profits. The significant connection between long-term ownership and enhanced ESG performance, our analysis highlights the pivotal role of blockholders in driving sustainability initiatives within firms. Blockholders, with their substantial voting power and cash flow influence, can advocate for and facilitate the implementation of sustainable practices across various aspects of a firm's operations. By promoting a focus on ESG practices, blockholders contribute to building trust among stakeholders, enhancing corporate reputation, and mitigating risks associated with environmental and social issues. This collaborative effort towards sustainable business practices not only strengthens the firm's ESG performance but also reinforces its long-term viability and competitiveness in the market. Thus, our findings reflect the importance of ownership structure in shaping firms' sustainability agendas and emphasize the potential of long-term ownership to foster enduring value creation through responsible corporate behavior. Similarly, by leveraging data from the Nordic region, known for its high-quality ESG performance and robust socio-economic initiatives, the essays offer unique insights that contribute to a more comprehensive understanding of the relationship between ESG factors and firm performance.

References

- Aguilera, R. V., Rupp, D. E., Williams, C. A., and Ganapathi, J. (2007). Putting the S back in corporate social responsibility: A multilevel theory of social change in organizations. *Academy of Management Review*, 32(3):836–863.
- Albuquerque, R., Koskinen, Y., Yang, S., and Zhang, C. (2020). Resiliency of environmental and social stocks: An analysis of the exogenous COVID-19 market crash. *The Review of Corporate Finance Studies*, 9(3):593–621.
- Albuquerque, R., Koskinen, Y., and Zhang, C. (2019). Corporate social responsibility and firm risk: Theory and empirical evidence. *Management Science*, 65(10):4451–4469.
- Alessi, L., Battiston, S., Melo, A. S., Roncoroni, A., et al. (2019). The EU sustainability taxonomy: a financial impact assessment. European Commission, available at: https://ec. europa. eu/jrc/en/publication/eusustainability-taxonomy-financial-impact-assessment.
- Asante-Appiah, B. and Lambert, T. A. (2023). The role of the external auditor in managing environmental, social, and governance (ESG) reputation risk. *Review of Accounting Studies*, 28(4):2589–2641.
- Barnea, A. and Rubin, A. (2010). Corporate social responsibility as a conflict between shareholders. *Journal of Business Ethics*, 97:71–86.
- Bénabou, R. and Tirole, J. (2010). Individual and corporate social responsibility. *Economica*, 77(305):1–19.
- Berg, F., Fabisik, K., and Sautner, Z. (2020). Is history repeating itself? The (un) predictable past of ESG ratings. *European Corporate Governance Institute–Finance Working Paper*, 708.
- Berg, F., Koelbel, J. F., and Rigobon, R. (2022). Aggregate confusion: The divergence of ESG ratings. *Review of Finance*, 26(6):1315–1344.
- Bofinger, Y., Heyden, K. J., and Rock, B. (2022). Corporate social responsibility and market efficiency: Evidence from ESG and misvaluation measures. *Journal of Banking & Finance*, 134:106322.
- Bollen, N. P. (2007). Mutual fund attributes and investor behavior. *Journal of Financial and Quantitative Analysis*, 42(3):683–708.
- Branco, M. C. and Rodrigues, L. L. (2006). Corporate social responsibility and resource-based perspectives. *Journal of Business Ethics*, 69:111–132.
- Branco, M. C. and Rodrigues, L. L. (2008). Social responsibility disclosure: A study of proxies for the public visibility of portuguese banks. *The British Accounting Review*, 40(2):161–181.
- Brunzell, T., Liljeblom, E., and Vaihekoski, M. (2015). Short-term expectations in listed firms: the effects of different owner types. *Journal of International Financial Management & Accounting*, 26(3):223–256.

- Cohen, G. (2023). The impact of ESG risks on corporate value. *Review of Quantitative Finance and Accounting*, 60(4):1451–1468.
- Cornell, B. (2021). ESG preferences, risk and return. European Financial Management, 27(1):12–19.
- Dimson, E., Karakaş, O., and Li, X. (2015). Active ownership. *The Review of Financial Studies*, 28(12):3225–3268.
- Dimson, E., Karakaş, O., and Li, X. (2021). Coordinated engagements. European Corporate Governance Institute–Finance Working Paper, (721).
- Dorfleitner, G., Halbritter, G., and Nguyen, M. (2015). Measuring the level and risk of corporate responsibility—An empirical comparison of different ESG rating approaches. *Journal of Asset Man*agement, 16:450–466.
- Dyllick, T. and Muff, K. (2016). Clarifying the meaning of sustainable business: Introducing a typology from business-as-usual to true business sustainability. *Organization & Environment*, 29(2):156–174.
- Edmans, A. (2009). Blockholder trading, market efficiency, and managerial myopia. *The Journal of Finance*, 64(6):2481–2513.
- Edmans, A. and Holderness, C. G. (2017). Blockholders: A survey of theory and evidence. *The Handbook of the Economics of Corporate Governance*, 1:541–636.
- Fatemi, A., Fooladi, I., and Tehranian, H. (2015). Valuation effects of corporate social responsibility. *Journal of Banking & Finance*, 59:182–192.
- Fatemi, A., Glaum, M., and Kaiser, S. (2018). ESG performance and firm value: The moderating role of disclosure. *Global Finance Journal*, 38:45–64.
- Fatemi, A. M. and Fooladi, I. J. (2013). Sustainable finance: A new paradigm. *Global Finance Journal*, 24(2):101–113.
- Flammer, C. (2021). Corporate green bonds. Journal of Financial Economics, 142(2):499-516.
- Freeman, R. E. (1984). Strategic Management: A stakeholder approach. Pitman.
- Friedman, M. (1970). A theoretical framework for monetary analysis. *Journal of Political Economy*, 78(2):193–238.
- Gibson Brandon, R., Glossner, S., Krueger, P., Matos, P., and Steffen, T. (2022). Do responsible investors invest responsibly? *Review of Finance*, 26(6):1389–1432.
- Gibson Brandon, R., Krueger, P., and Schmidt, P. S. (2021). ESG rating disagreement and stock returns. *Financial Analysts Journal*, 77(4):104–127.
- Giglio, S., Kelly, B., and Stroebel, J. (2021). Climate finance. *Annual Review of Financial Economics*, 13:15–36.
- Graham, J. R., Harvey, C. R., and Rajgopal, S. (2006). Value destruction and financial reporting decisions. *Financial Analysts Journal*, 62(6):27–39.
- Griffin, J. J. and Mahon, J. F. (1997). The corporate social performance and corporate financial performance debate: Twenty-five years of incomparable research. *Business & Society*, 36(1):5–31.

- Hansen, J. L. (2023). The Nordic Approach to Corporate Governance and ESG. Research Handbook on Environmental, Social, and Corporate Governance, Forthcoming, Nordic & European Company Law Working Paper, 1(23-03).
- Huang, D. Z. (2021). Environmental, social and governance (ESG) activity and firm performance: A review and consolidation. Accounting & Finance, 61(1):335–360.
- Lee, D. D. and Faff, R. W. (2009). Corporate sustainability performance and idiosyncratic risk: A global perspective. *Financial Review*, 44(2):213–237.
- Orlitzky, M. (2005). Social responsibility and financial performance: Trade-off or virtuous circle. *University of Auckland Business Review*, 7(1):37–43.
- Orlitzky, M., Schmidt, F. L., and Rynes, S. L. (2003). Corporate social and financial performance: A meta-analysis. *Organization Studies*, 24(3):403–441.
- Palvia, A., Vähämaa, E., and Vähämaa, S. (2015). Are female CEOs and chairwomen more conservative and risk averse? Evidence from the banking industry during the financial crisis. *Journal of Business Ethics*, 131:577–594.
- Pástor, L., Stambaugh, R. F., and Taylor, L. A. (2021). Sustainable investing in equilibrium. *Journal of Financial Economics*, 142(2):550–571.
- Renneboog, L., Ter Horst, J., and Zhang, C. (2011). Is ethical money financially smart? nonfinancial attributes and money flows of socially responsible investment funds. *Journal of Financial Intermediation*, 20(4):562–588.
- Schütze, F., Stede, J., Blauert, M., and Erdmann, K. (2020). EU taxonomy increasing transparency of sustainable investments. *DIW Weekly Report*, 10(51):485–492.
- Silvola, H. and Landau, T. (2021). Sustainable investing: beating the market with ESG. Springer.
- Strand, R., Freeman, R. E., and Hockerts, K. (2015). Corporate social responsibility and sustainability in scandinavia: An overview. *Journal of Business Ethics*, 127:1–15.
- Tang, D. Y., Yan, J., and Yao, C. Y. (2022). The determinants of ESG ratings: Rater ownership matters. In *Proceedings of Paris December 2021 Finance Meeting EUROFIDAI-ESSEC*.
- Tirole, J. (2018). Economics for the common good. Princeton University Press.
- Van Beurden, P. and Gössling, T. (2008). The worth of values—a literature review on the relation between corporate social and financial performance. *Journal of Business Ethics*, 82:407–424.
- Vitezić, N., Vuko, T., and Mörec, B. (2012). Does financial performance have an impact on corporate sustainability and CSR disclosure? A case of Croatian companies. *Journal of Business Management*, 5(Special Edition).
- Waddock, S. A. and Graves, S. B. (1997). The corporate social performance–financial performance link. *Strategic Management Journal*, 18(4):303–319.
- Wang, Q., Dou, J., and Jia, S. (2016). A meta-analytic review of corporate social responsibility and corporate financial performance: The moderating effect of contextual factors. *Business & Society*, 55(8):1083–1121.
- Wang, Z. and Sarkis, J. (2017). Corporate social responsibility governance, outcomes, and financial performance. *Journal of Cleaner Production*, 162:1607–1616.

Whelan, T., Atz, U., Van Holt, T., and Clark, C. (2021). ESG and financial performance. *Uncovering the Relationship by Aggregating Evidence from*, 1:2015–2020.



