

Article

Climate Governance, ESG Reporting, and the Firm Performance: Does It Matter More for Europe or the GCC?

Mohammed Khalifa Al-Kubaisi * and Bashar Abu Khalaf 

Accounting & Finance Department, University of Doha for Science & Technology, Doha P.O. Box 24449, Qatar;
bashar.abukhalaf@udst.edu.qa

* Correspondence: 60303901@udst.edu.qa

Abstract: This paper empirically investigated the impact of climate governance on the relationship between ESG reporting and firm profitability. The collected sample is all the nonfinancial companies in Europe and Gulf countries during the period 2010–2023. All the data have been gathered from Refinitiv Eikon Platform (LSEG), annual reports, and the different stock exchanges. The panel GMM regression has been used to estimate the relationship to deal with the endogeneity problem. The findings revealed that ESG, board independence, growth, inflation, and GDP had a favorable impact on company performance in Europe and the Gulf Cooperation Council, but board meetings had a negative impact. The results indicate a notable difference in the influence of board size on companies' performance. Within the GCC framework, an enlarged board size adversely impacts profitability, potentially attributable to inefficiencies or protracted decision-making. In Europe, a larger board size positively influences outcomes, possibly due to robust regulatory frameworks, more diversity of expertise, and improved strategic oversight. The findings demonstrate that company size positively influences performance in the GCC, indicating that larger firms gain advantages from economies of scale, enhanced market positioning, and improved access to resources in the area. In Europe, firm size adversely affects performance, likely due to increased operational difficulties, legal obligations, and potential inefficiencies linked to managing huge organizations. Based on the robust results reported, our results hold.



Academic Editor: Jianming Cai

Received: 29 March 2025

Revised: 17 April 2025

Accepted: 19 April 2025

Published: 22 April 2025

Citation: Al-Kubaisi, M.K.; Abu Khalaf, B. Climate Governance, ESG Reporting, and the Firm Performance: Does It Matter More for Europe or the GCC? *Sustainability* **2025**, *17*, 3761. <https://doi.org/10.3390/su17093761>

Copyright: © 2025 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

Keywords: corporate governance; ESG reporting; performance; panel GMM; GCC; Europe

1. Introduction

In recent years, investors, legislators, and business executives have paid close attention to corporate governance and environmental, social, and governance (ESG) reporting [1]. As businesses operate in more complicated and regulated marketplaces, effective governance structures and comprehensive ESG disclosures have become important in influencing firm performance [2]. Board composition, shareholder rights, and CEO compensation are all important governance tools that help to ensure accountability and strategic decision-making. ESG reporting also offers stakeholders vital information about a company's environmental practices, risk management, and ethical standards [3]. Understanding the relationship between governance, ESG reporting, and business performance is critical for companies looking to achieve long-term success and sustain investor trust [4].

Investigating this relationship is especially essential, because companies throughout the world are under increasing pressure to implement sustainable business practices while still generating financial benefits [5]. According to previous studies, effective governance

and ESG adherence can improve operational efficiency, reduce risk exposure, and boost capital availability [6]. Nevertheless, the amount to which these characteristics influence business performance is still a matter of discussion, with variances noted across industries, locations, and regulatory structures. Some companies use governance and ESG activities to gain a competitive edge, while others struggle to strike a balance between sustainability and profitability [7]. Exploring this influence provides vital insights into how businesses can optimize their planning processes for enhanced financial and nonfinancial results.

Despite the increasing interest in environmental, social, and governance (ESG) practices and their effects on corporate performance, there is a lack of research examining the function of climate governance as a moderating variable in the relationship between ESG reporting and company profitability [8]. This disparity is particularly evident in comparative analyses that encompass varying legislative and institutional frameworks, such as those between the Gulf Cooperation Council (GCC) states and European countries [6]. The justification for comparing the GCC and European regions is based on their divergent methodologies regarding sustainability, ESG regulation, and climate governance policies. Europe has always been a frontrunner in ESG regulation, characterized by rigorous disclosure mandates, engaged institutional investors, and developed sustainability frameworks. Conversely, GCC nations are at a promising phase of formal ESG integration, mostly propelled by government-led sustainability initiatives rather than market-driven forces [9]. Recent activities in the GCC indicate an increasing dedication to ESG norms and climate governance, rendering it a pertinent and opportune location for examination. This article addresses a significant gap by comparing these two regions, emphasizing how institutional maturity, legal frameworks, and climate governance structures affect the effectiveness of ESG reporting in enhancing corporate profitability. The comparison provides detailed insights for policymakers, investors, and company leaders regarding the circumstances in which ESG disclosures convert into financial value and how climate governance systems might enhance or diminish that relationship.

This investigation aims to examine the influence of climate governance on the association between ESG disclosure and corporate performance using a comparative comparison of European and GCC nations. Due to the growing focus on sustainability and corporate accountability, climate governance is essential in determining how companies incorporate ESG principles into their strategic decision-making [10]. European nations have well-established legal frameworks and investor-driven demand for ESG disclosure, whereas GCC countries are in the formative phases of implementing comprehensive sustainability measures, frequently motivated by governmental initiatives rather than market dynamics [11]. This study seeks to analyze the impact of climate governance on the relationship between ESG disclosure and business performance across several locations, offering insights into the effectiveness of regulatory laws, market expectations, and corporate sustainability plans. This research compares Europe with the GCC to identify region-specific challenges and opportunities, providing significant insights for governments, investors, and business executives focused on improving ESG-related financial and nonfinancial results.

This study offers significant contributions to the current literature on ESG disclosure, corporate performance, and climate governance. Firstly, this empirical evidence builds upon previous research by investigating the moderating influence of climate governance on the relationship between ESG reporting and business performance, an area that is notably underexplored, especially in a comparative regional framework. Secondly, by examining both European and GCC nations, the study offers significant insights into how varying legal environments, market anticipations, and institutional frameworks affect the efficacy of ESG disclosures in enhancing corporate performance. Thirdly, the paper provides empirical data regarding how robust climate governance can improve the financial and sustainability

outcomes of ESG practices, hence contributing to policy and management implications. This research assists legislators in enhancing ESG-related policies and enables corporate leaders to improve their sustainability strategy for optimal long-term value development.

The structure of this paper is as follows: The first section is the introduction, which provides an overview. The literature review is the second section, which includes the theoretical background and the previous studies and hypothesis development. Third is the methodology section, which includes a description of the selected sample, the model development, and the model. Finally, Section 4 is a conclusion that summarizes all the findings of the research.

2. Literature Review

2.1. Theoretical Background: Resource-Based View (RBV)

A resource-based view, also known as RBV, is a managerial framework that tries to create a competitive advantage for the firm using the available resources. Banrey [12] identified that there are three key managerial tasks that should be implemented: firstly, identify the firm's key resources; secondly, evaluate if the resources fulfill four main standards (valuable that it can increase the effectiveness and efficiency when they are implemented, rare that other competitors do not have them, imperfectly imitable, which is not easily implemented by other competitors, and non-substitutable, which is not able to be replaced by others; thirdly, develop, nurture, and protect the resources that pass all these evaluations. Peng [13] concluded that the RBV can create a strong competitive advantage among even international businesses, not only in local businesses. That is attributed to the fact that there are many resources that are hard to substitute. In addition, Madhani [14] classified the resources of the company as all firm-controlled resources, including information, expertise, organizational procedures, assets, and so on that allow it to develop and put into practice plans that increase its efficacy and efficiency. Behl et al. [15] showed that information asymmetry theory and the resource-based view theory support the impact of ESG practices on business performance. Analyzing ESG by the theoretical perspective of the resource-based view (RBV) theory, ESG-related activities create new and distinctive intangible resources that, by combining environmental, social, and governance requirements, strengthen the “socially responsible” culture in the firm. Stakeholders become aware of the integration of social behavior. As a result, businesses gain a competitive advantage in terms of their economic performance and market value while also making a better contribution to the environment and increasing profitability.

2.2. Previous Studies and Hypothesis Development

2.2.1. ESG Reporting and Firm Performance

Previous research has demonstrated a robust connection between sustainable reporting and a firm's financial health. Behl et al. [15] asserted that the resource-based view theory and information asymmetry theory substantiate the influence of ESG practices on corporate performance [16]. Examining the resource-based view (RBV) approach, ESG-related initiatives cultivate distinctive intangible resources that enhance the “socially responsible” culture within the organization by including environmental, social, and governance criteria [17]. The integration of social behavior attracts the interest of stakeholders. Consequently, environmental contributions enhance and profits increase, providing enterprises with a competitive edge in financial performance and market value [18].

Subsequently, the information asymmetry theory posits a substantial disparity among the information accessible to insiders and that accessible to outsiders of the business [19]. Voluntary disclosures are implemented to address this gap [20]. Enhanced voluntary disclosures augment transparency, mitigate information asymmetry, and elevate investor

confidence, hence reducing the estimation risk [21]. Consequently, investors will assess a company's dedication to corporate social responsibility, environmental stewardship, sustainability, governance, and ESG policies through voluntary disclosures. The assessment of ESG concerns by principal stakeholders has significantly increased in the last several years [22].

Stakeholders are focusing on ESG reports recently, and it can be a major variable because of the environmental trends and climate change around the globe [2]. This concludes that ESG reporting is not less important from the perspective of the stakeholders than the financial reports [23]. Zumente and Lăce [24] stated that, after the rise in awareness of responsible investment, ESG scores became one of the main aspects that investors focus on, especially on the certain climate changes that are happening and all the warnings that are announced regarding environmental changes [25]. Mishra [26] concluded that the findings of the research claimed that there is a positive relationship between the performance of the firm and ESG score, since the ESG score represents good management of the firm. Cui et al. [21] and Clément et al. [27] concluded that ESG reports can represent how sustainable the firm is and how responsible it is regarding the environmental, social, and governance factors. This can impact the profitability and the stakeholder's decision massively, especially in the situations and trends that are happening in recent years regarding climate change [28]. The higher the ESG score, the more a company can gain a huge competitive advantage among the other companies in the industry, which will end by gaining more profit [29].

H1. *This paper expects to have a positive relationship between the ESG score and ROE.*

2.2.2. Role of Climate Governance as a Moderator

Climate corporate governance is essential in environmental, social, and governance (ESG) reporting, since it directs organizations in managing and disclosing their climate-related risks and opportunities [26]. Climate corporate governance in ESG reporting guarantees that organizations proficiently manage climate risks and opportunities, match their plans with climate objectives, involve stakeholders, and uphold transparency, fostering a more sustainable and resilient business model [30]. The board of directors is crucial in the governance framework, since their attributes enhance the comprehension of social and environmental dimensions to address stakeholder requirements and enhance sustainable reporting.

2.2.3. Board Independence Moderating the Connection Between ESG Reporting and Performance

Extensive literature on governance indicates that the appointment of external or independent directors enhances the board's efficacy in overseeing management [31]. Moreover, board independence mitigates information asymmetry and tunnelling by preserving the integrity of information dissemination [32]. Consequently, the quality of integrated reporting is enhanced, influencing business performance [33]. Increased firm performance correlates with elevated firm value, as investors perceive favorable indications for investment. Numerous studies have illustrated the beneficial effect of board independence on a firm's social responsibility [34]. Independent board members safeguard shareholders' social interests by enhancing business monitoring. They prioritize long-term investments, thereby enabling executives to partake in and interact with CSR initiatives that may enhance the firm's performance [35]. Consequently, board independence is expected to enhance the correlation between ESG reporting and business value.

H2. *This paper expects to have a positive relationship between the ESG score and ROE when board independence is high.*

2.2.4. Board Size Moderating the Connection Between ESG Reporting and Performance

The extensive literature on board size and firm performance indicates that larger boards better address stakeholder interests than smaller boards, as the monitoring responsibilities are distributed among multiple individuals with diverse education and expertise [23]. A higher board size positively impacts CSR efforts, enhancing the transparency of nonfinancial information [8]. Moreover, an expanded board results in increased CSR investments and guarantees that companies adhere to corporate regulations and norms pertaining to CSR [36].

The size of the board significantly influences corporate governance and strategic decision-making, especially with ESG reporting and organizational performance [35]. An expanded board may augment oversight, introduce varied viewpoints, and boost ESG-related decision-making, potentially reinforcing the favorable correlation between ESG disclosures and financial success [37]. Increased contributions from directors with expertise and experience may enable organizations to implement sustainability programs more effectively, manage stakeholder expectations, and improve the company reputation, ultimately leading to financial success [38]. The influence of board size as a moderating variable is not consistently clear-cut. Larger boards may enhance governance and accountability, although they can also result in protracted decision-making and coordination difficulties, undermining the efficacy of ESG-related policies [39]. Conversely, smaller boards may exhibit greater agility in executing ESG rules; however, they may lack the extensive experience required for thorough sustainable procedures [40]. The efficacy of the board size in regulating the ESG–performance link is likely affected by factors like industry dynamics, regulatory frameworks, and regional governance structures.

H3. *This paper expects to find a positive relationship between the ESG score and ROE when the board size is large.*

2.2.5. Board Meetings Moderating the Connection Between ESG Reporting and Performance

Another measure of corporate governance is the attendance of board members at meetings. Brick and Chidambaran [41] asserted that the frequency of meetings serves as an indicator of a board or committee's engagement and diligence, predicated on the notion that more activity enhances the oversight of managers' decision-making capabilities [42]. The frequent occurrence of meetings enhances the control of corporate operations [43]. The directors disseminate information, enhancing the firm's decision-making process [44]. The interests of relevant stakeholders are addressed by regular contact among board members [23]. The quality of integrated reporting enhances when coordinated actions are implemented in response to the impacts arising from sustainable or CSR activities [45]. Consequently, the board meeting should enhance the connection between ESG reporting and business value.

Board meetings function as an essential governance tool that affects corporate decision-making, especially regarding ESG reporting and its influence on business performance [41]. Regular and organized board meetings facilitate discussions among directors regarding ESG strategies, guarantee adherence to sustainability objectives, and effectively handle stakeholder concerns [25]. Active engagement of boards in ESG debates can improve resource allocation, boost risk management, and bolster the firm's long-term value development [23]. Consequently, regular board meetings may strengthen the correlation between ESG reporting and corporate performance by guaranteeing the effective integration of sus-

tainability activities into corporate strategies [46]. The moderating effect of board meetings is not always linear. Increased meeting frequency can improve supervision and reaction to ESG concerns; nevertheless, an overabundance of meetings lacking a defined topic may result in inefficiencies, protracted decision-making, and administrative difficulties [47]. Furthermore, if board deliberations on ESG issues are cursory or devoid of implementable plans, the prospective advantages of regular meetings may not result in enhanced performance [2]. The efficacy of board meetings in influencing the ESG–performance relationship is contingent upon the quality of the discourse, the proficiency of board members in sustainability issues, and the congruence of ESG objectives with the firm’s overarching strategic aims [9].

H4. *This paper expects to find a positive relationship between the ESG score and ROE when board meetings are high.*

3. Materials and Methods

3.1. Sample Used

The sample gathered the data for all nonfinancial companies in Europe and Gulf Cooperation Council (GCC) countries during the period 2010–2023. All the data have been gathered using the Refinitiv Eikon Platform (LSEG). In addition, any missing data have been collected either from the annual reports “if available” and, if not, have been gathered from the relevant stock exchange. All data related to financial companies have been excluded due to the different structure of financial statements and due to the unique nature of factors affecting the required disclosure. The credibility, replicability, and comprehensiveness of the research are considerably impacted by the selection of Refinitiv Eikon (LSEG) as a data source. The decision is determined by the availability of data, the consistency of the data over time, and the access provided by UDST. In addition, robust data treatment techniques were implemented to maintain the integrity of the analysis. For example, winsorization was implemented to reduce the impact of outliers while maintaining the potential for valuable observations. This method facilitated the preservation of the dataset’s structure while simultaneously mitigating distortion caused by extreme values.

The following Table 1 provides the details of the sampling procedure followed in this empirical investigation.

Table 1. Overview of the sampling procedure used to select GCC and European firms.

Sampling Procedure	Description	Total Population	Sample Size
1.	All listed nonfinancial companies in GCC region and 5 European countries	2987	-
2.	Data Availability Consideration	-	647
3.	Selection of nonfinancial companies with data	-	94
4.	Period covered	-	2010–2023
Country	Population	Final Sample	
	Europe		
Germany	278	189	
France	630	133	
Spain	205	40	
Sweden	837	25	
Norway	271	8	
Finland	154	8	

Table 1. *Cont.*

Country	Population	Final Sample
	GCC	
Qatar	34	29
United Arab Emirates	84	30
Saudi Arabia	308	127
Bahrain	20	15
Kuwait	89	16
Oman	77	27
Total	2987	647

3.2. Model Development

The subsequent variables were employed to analyze the influence of ESG reporting on the performance of firms listed in Europe and the GCC, considering essential financial and governance issues. The dependent variable is ROE, and the independent variable is ESG score while moderating for corporate governance proxied by board size, board meetings, and board independence and also controlling for firm characteristics such as firm size and growth opportunities and controlling for macroeconomic variables such as GDP and inflation rate. It is essential to incorporate a range of control and moderating factors to differentiate the genuine impact of ESG practices and strengthen the analysis's robustness.

3.2.1. Dependent Variable

Return On Equity (ROE): This is the dependent variable, and it is used to measure the profitability. It is measured by dividing the net income over the total equity [46]. Return on equity is considered one of the main variables that are widely used in research to measure the profitability of a firm. Moreover, it can be considered one of the most accurate measurements to measure the performance of a company throughout the fiscal year. This measure has been used following Al-Kubaisi and Khalaf [48]. In addition, Ichsani and Suhardi [49] stated that ROE is considered one of the main factors that stakeholders focus on regarding investment in companies and is also one of the most accurate measurements to be used to measure profitability. Also, Sukmawati and Garsela [50] justified the importance of ROE from the perspective of the investors, because it is one of the major impacts on the stock price. Moreover, firms with high ROE have more competitive advantage among the other competitors, which leads to an increase in the demand of investing in the company from the stakeholder's point of view [51].

3.2.2. Independent Variable

ESG Reporting (ESG Score): The ESG score is a measure for assessing a company's ESG reporting, indicating the degree to which it reveals and incorporates environmental, social, and governance aspects into its business operations [24]. This score is based on publicly accessible reports, sustainability disclosures, and third-party evaluations, offering investors and stakeholders a uniform metric of a company's dedication to responsible and sustainable business practices [26]. An elevated ESG score signifies enhanced transparency and robust ESG policies, which can favorably influence profitability by boosting business reputation, mitigating regulatory and legal risks, and facilitating access to financing [27]. Companies with robust ESG reporting frequently draw more investors, enjoy reduced financing costs, and attain long-term financial stability owing to their proactive stance on sustainability and risk management [1].

3.2.3. Moderating Variables (Climate Governance)

Board Size: The moderating effect of board size on the relationship between ESG reporting and company performance is significant, since it might affect the successful implementation of ESG strategy integration into corporate decision-making [23]. An expanded board size may offer varied skills, more viewpoints, and improved oversight, augmenting the quality of ESG disclosures and their influence on corporate performance [52]. Increased directorship may enhance enterprises' access to knowledge regarding sustainability practices, regulatory compliance, and stakeholder management, potentially reinforcing the connection between ESG reporting and profitability [2]. Nonetheless, an overly big board can result in inefficiencies in decision-making, delayed responses to ESG-related concerns, and obstacles in reaching a consensus [9]. In addition, the advantages of ESG reporting may not result in enhanced business performance, as bureaucratic obstacles and opposing interests could impede the execution of sustainable initiatives [25]. The influence of board size as a moderator is contingent upon elements including governance efficacy, industry standards, and regional corporate customs. Comprehending this relationship enables organizations to enhance board structures to maximize the financial advantages of ESG projects [28].

Board Independence: Board independence significantly moderates the association between ESG reporting and business success, as independent directors are anticipated to deliver impartial monitoring and guarantee that ESG initiatives are consistent with long-term profitability [33]. An increased ratio of independent board members can bolster the credibility of ESG disclosures, mitigate agency conflicts, and foster transparency in decision-making, potentially benefiting business performance [32]. Independent directors can advocate for responsible company practices, enhance risk management, and promote stakeholder engagement, thereby augmenting the financial advantages of ESG reporting. The value of board independence as a moderator is contingent upon the authority and influence exercised by independent directors inside the board. If independent directors lack the authority to implement ESG-related plans, their participation may have a negligible effect on enhancing corporate performance [7]. Moreover, in specific instances, an excessive focus on compliance and risk aversion by independent directors may result in conservative decision-making that could hinder growth potential [23]. Consequently, the influence of board independence on the ESG–performance link is complex and contingent upon governance frameworks, industry characteristics, and regional business contexts.

Board meetings: Board meetings serve a fundamental function in moderating the relationship between ESG reporting and business performance by enabling effective monitoring, strategic discourse, and decision-making about sustainability-related matters [41]. Regular board meetings allow directors to evaluate ESG disclosures, oversee the execution of sustainable practices, and confirm that these initiatives are consistent with the company's financial goals [44]. Active discussions on ESG reporting in board meetings increase the likelihood of firms incorporating sustainability into their company strategy, resulting in heightened stakeholder trust, improved risk management, and, ultimately, enhanced financial performance [26]. The efficacy of board meetings as a moderator is contingent upon their quality rather than merely their frequency. Frequent meetings that do not engage in meaningful conversations regarding ESG initiatives may have a negligible effect on corporate performance [23]. In contrast, effectively organized and planned board meetings that focus on ESG-related risks and opportunities can enhance long-term profitability by promoting innovation, bolstering the business's reputation, and increasing investor trust. Consequently, board meetings function as an essential governance tool that reinforces the connection between ESG reporting and corporate performance, guaranteeing that sustainability initiatives result in financial success [47].

3.2.4. Control Variables (Firm Characteristics)

Firm Size: Firm size is typically quantified using the natural logarithm of total assets, as it offers a more standardized and consistent metric among organizations of varying scales [53]. This transformation alleviates the impact of outliers and skewness in financial data, facilitating a more resilient analysis [54]. Large corporations frequently obtain advantages from economies of scale, more market influence, and improved access to financial resources, augmenting profitability [55]. They may possess more diverse revenue streams and enhanced risk management measures, resulting in financial stability. Nonetheless, in certain instances, an excessive firm size may result in inefficiencies, bureaucratic obstacles, and increased operational expenses, which can adversely impact profitability. The correlation between business size and performance is consequently affected by industry dynamics, corporate governance, and regional economic conditions [56].

Growth: Growth is assessed by the price-to-book ratio (P/B), indicating the market's valuation of a company in relation to its book value [26]. A greater P/B ratio signifies that investors expect substantial future growth, whilst a lower ratio may indicate undervaluation or diminished growth possibilities [57]. This metric is essential for evaluating how companies with varying growth anticipations react to ESG reporting about profitability. When analyzing the association between ESG reporting and profitability, the P/B ratio reveals whether high-growth organizations derive greater advantages from ESG disclosures than low-growth firms [9]. High-growth firms may realize enhanced financial benefits from ESG activities, as investors and stakeholders increasingly emphasize sustainability and responsible business practices. Conversely, companies with diminished growth aspirations may not experience rapid enhancements in profitability from ESG reporting, since market confidence and valuation may already be limited [23]. Consequently, using the P/B ratio as a control variable guarantees a more precise evaluation of the financial effects of ESG reporting among enterprises with differing growth trajectories [23].

3.2.5. Control Variables (Macroeconomic Variables)

Inflation: Inflation significantly impacts a firm's profitability, especially when examining the association between ESG reporting and financial success [56]. Inflation influences business expenditures, consumer purchasing capacity, and general market dynamics, thereby affecting a company's income and costs [58]. An increase in inflation may result in heightened expenses for raw materials, labor, and borrowing, thereby diminishing profit margins, particularly for companies with inflexible pricing methods [59]. Firms with robust ESG processes may be more adept at alleviating inflationary pressures via sustainable cost management, increased stakeholder trust, and long-term strategic planning [33]. This study controls for inflation to ensure that the relationship between ESG reporting and profitability is not influenced by macroeconomic fluctuations, thereby clarifying how sustainability efforts impact financial performance across varying economic conditions [60].

Gross Domestic Product: Gross domestic product (GDP) is a crucial macroeconomic metric that indicates a nation's economic vitality and substantially affects business profitability [46]. An increasing GDP signifies a robust economy characterized by heightened consumer expenditure, investment, and company growth, typically resulting in elevated revenues and enhanced profitability for enterprises [61]. Conversely, during phases of negative GDP growth, enterprises may have diminished demand, limited investment prospects, and financial limitations, adversely affecting their profitability. In examining the relationship between ESG reporting and corporate performance, accounting for GDP guarantees that fluctuations in profitability are not exclusively influenced by overarching economic factors [59]. Companies with robust ESG policies may exhibit resilience during

economic recessions by promoting long-term stability, mitigating operational risks, and enhancing stakeholder connections.

The following Table 2 provides a summary of the operational definitions and measurements used for the study variables.

Table 2. Operational definitions and measurement approaches for the study variables.

Variable	Abbreviation	Measurement	References	Source
Dependent Variable				
Return on Equity	ROE	[Net Income/Total Equity]	[46,62]	Refinitiv
Independent Variable				
ESG Reporting	ESG	ESG Score	[1,26]	Refinitiv
Moderator Variables				
Board Independence	BIND	Percentage of independent directors on board	[7,63]	Refinitiv
Board Size	BSize	Number of members on board	[2,64]	Refinitiv
Board Meetings	BMeet	Total Number of Board meetings per year	[47,65]	Refinitiv
Control Variables (Bank Characteristics)				
Firm Size	FSize	Natural Log of Total Assets	[11,64]	Refinitiv
Growth	Growth	Price per share/Book per share	[15,66]	Refinitiv
Control Variables (Macroeconomic Variables)				
GDP	GDP	The growth in annual GDP	[46,59]	World Bank Open Data
Inflation	Inf	The change in annual CPI	[59,67]	World Bank Open Data

3.3. Model

The following regression models have been used to investigate the impact of the moderating role of climate governance on the relationship between the ESG reporting and firm profitability. Consider controlling for firm characteristics such as firm size and growth opportunities and control for macroeconomic variables such as GDP and inflation.

$$ROE_{i,t} = \alpha_0 + \alpha_1 ROE_{i,t-1} + \alpha_2 ESG_{i,t} + \alpha_3 BSize_{i,t} + \alpha_4 BIND_{i,t} + \alpha_5 BMeet_{i,t} + \alpha_6 FSize_{i,t} + \alpha_7 Growth_{i,t} + \alpha_8 Inf_t + \alpha_9 GDP_t + e \quad (1)$$

$$ROE_{i,t} = \alpha_0 + \alpha_1 ROE_{i,t-1} + \alpha_2 ESG_{i,t} + \alpha_3 BSize_{i,t} + \alpha_4 BIND_{i,t} + \alpha_5 BMeet_{i,t} + \alpha_6 ESG_{i,t} \times BSize_{i,t} + \alpha_7 FSize_{i,t} + \alpha_8 Growth_{i,t} + \alpha_9 Inf_t + \alpha_{10} GDP_t + e \quad (2)$$

$$ROE_{i,t} = \alpha_0 + \alpha_1 ROE_{i,t-1} + \alpha_2 ESG_{i,t} + \alpha_3 BSize_{i,t} + \alpha_4 BIND_{i,t} + \alpha_5 BMeet_{i,t} + \alpha_6 ESG_{i,t} \times BIND_{i,t} + \alpha_7 FSize_{i,t} + \alpha_8 Growth_{i,t} + \alpha_9 Inf_t + \alpha_{10} GDP_t + e \quad (3)$$

$$ROE_{i,t} = \alpha_0 + \alpha_1 ROE_{i,t-1} + \alpha_2 ESG_{i,t} + \alpha_3 BSize_{i,t} + \alpha_4 BIND_{i,t} + \alpha_5 BMeet_{i,t} + \alpha_6 ESG_{i,t} \times BMeet_{i,t} + \alpha_7 FSize_{i,t} + \alpha_8 Growth_{i,t} + \alpha_9 Inf_t + \alpha_{10} GDP_t + e \quad (4)$$

The regression models used in this study are used to measure the impact of the climate governance on the relationship between firm profitability and ESG reporting. The dependent variable is return on equity, “ROE”, which is used to measure the profitability of a firm. The independent variable is ESG score, “ESG”, which represents the ESG score of a firm. The board of director’s size, “BSize”, represents the size of the board of directors of the firm. Board independence, “BIND”, represents the percentage of independent board members. Board meetings, “Bmeet”, represents the number of board meetings per year. Firm size, “FSIZE”, represents the amount of total assets of the firm. Growth rate, “Growth”, represent the price-to-book ratio. Inflation rate, “Inf”, represents the change in the inflation

rate, and it is measured using the consumer price index indicator, which measures the percentage change in the inflation rate. Gross domestic product, “GDP”, represents the measurement of the added value on the final goods and services in a certain country. The panel GMM regression was applied to estimate the models.

4. Results and Analysis

4.1. Descriptive Statistics

The following two tables present the data for the GCC and European nonfinancial companies during the period 2010–2023 for all the selected variables. The mean, standard deviation, minimum, and maximum values for the GCC region are presented in Table 3, and the descriptives for the European countries are presented in Table 4.

Table 3. Summary statistics of the study variables in the GCC region.

	ROE	ESG	FSize	BSize	BIND	BMeet	Growth	Inf	GDP
Mean	0.261	40.051	20.606	9.951	0.382	6.748	4.786	0.018	0.033
St. Dev.	0.581	19.402	1.080	1.277	0.215	1.893	13.061	0.019	0.043
Min.	−0.699	3.651	17.227	7	0	4	−0.416	−0.025	−0.053
Max.	4.465	71.348	23.333	12	1	13	106.008	0.058	0.196

Table 4. Summary statistics of the study variables in the European region.

	ROE	ESG	FSize	BSize	BIND	BMeet	Growth	GDP	Inf
Mean	0.131	43.213	21.878	12.552	0.496	9.939	1.500	0.028	0.019
St. Dev.	0.158	29.537	1.964	3.749	0.150	3.474	1.970	0.127	0.019
Min.	−0.987	−0.056	17.077	6	0.222	3	−6.532	−0.299	−0.026
Max.	1.336	89.544	26.440	23	0.933	21	4.382	0.329	0.051
Count	3416	3416	3416	3416	3416	3416	3416	3416	3416

The mean return on equity (ROE) is superior in the GCC countries compared to Europe, signifying that companies in the GCC region, on average, yield more returns for their shareholders in relation to their equity base. This may be ascribed to various variables, including a more advantageous tax regime, governmental assistance, and elevated profit margins in the central sectors such as oil and gas, which prevail in the GCC economy. The regulatory framework and market dynamics in the GCC may enable enterprises to operate with greater leverage and efficiency, resulting in enhanced profitability compared to their European counterparts, where more stringent regulations and competitive market conditions may limit profits.

In addition, the average ESG score is superior in European countries compared to GCC countries, indicating a greater focus on sustainability, corporate governance, and social responsibility in European markets. This can be ascribed to more stringent regulatory frameworks, investor demands for ethical company practices, and enduring commitments to environmental programs within the European Union. European companies are obligated to comply with obligatory ESG disclosure standards, promoting transparency and accountability, which results in elevated ESG rankings. Conversely, GCC nations are in the process of building up their ESG reporting standards. Although there is an increasing awareness and adoption of sustainability practices, ESG integration is not as thoroughly ingrained in corporate governance frameworks as it is in Europe.

4.2. Correlation Matrix

The following tables (Tables 5 and 6) provide a correlation between the selected variables for the GCC and European countries.

Table 5. Correlation matrix of the key variables in GCC stock markets.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
(1) ROE	1								
(2) ESG	0.236	1							
(3) FSize	0.097	0.350	1						
(4) BSize	−0.088	−0.075	−0.081	1					
(5) BIND	0.034	−0.193	−0.004	−0.009	1				
(6) BMeet	−0.126	−0.063	0.034	0.091	0.016	1			
(7) Growth	0.003	0.198	0.127	−0.054	0.049	−0.119	1		
(8) Inf	−0.011	0.019	0.002	0.021	−0.029	−0.007	−0.019	1	
(9) GDP	−0.016	−0.002	0.020	0.018	0.039	−0.029	−0.008	0.171	1

Table 6. Correlation matrix of the key variables in European stock markets.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
(1) ROE	1								
(2) ESG	0.095	1							
(3) FSize	−0.160	0.820	1						
(4) BSize	0.026	−0.134	−0.037	1					
(5) BIND	0.059	0.017	0.043	0.003	1				
(6) BMeet	−0.124	−0.056	0.053	−0.180	−0.040	1			
(7) Growth	0.023	−0.311	−0.223	−0.259	0.075	0.206	1		
(8) GDP	0.026	−0.015	0.023	−0.019	0.038	0.032	−0.009	1	
(9) Inf	0.008	0.051	0.023	−0.158	−0.090	0.023	0.087	0.226	1

The correlation analysis in the GCC region, as provided in Table 5, indicates that the ESG score, business size, board independence, and growth potential demonstrate a positive association with return on equity (ROE). This indicates that firms with robust ESG practices, greater size, and more independent boards generally attain higher profitability, as these elements enhance risk management, operational efficiency, and investor trust. Moreover, companies with increased growth prospects gain from an expanded market potential, improving their returns. In contrast, board size, frequency of board meetings, inflation, and GDP exhibit a negative link with ROE in the GCC region. An expanded board size may result in decision-making inefficiencies, diminishing the business performance, whereas frequent board meetings could signify governance inefficiencies instead of strategic efficacy. Furthermore, elevated inflation typically escalates expenses and diminishes profit margins, adversely affecting returns. Likewise, GDP growth, although often advantageous for economic expansion, may not directly result in increased profitability for individual enterprises due to market competition and macroeconomic fluctuations.

On the other hand, Table 6 provides the correlation analysis in the European region, which reveals that the ESG score, board size, board independence, growth opportunities, inflation, and GDP demonstrate a positive link with return on equity (ROE). An elevated ESG score indicates superior sustainability practices, thereby bolstering a firm's reputation, attracting investors, and enhancing long-term profitability. Expansive boards can offer varied skills and enhanced governance monitoring, positively impacting the financial performance. Board independence correlates with enhanced decision-making and diminished agency issues, resulting in increased profitability. Growth opportunities enable

enterprises to expand and yield greater returns, whereas inflation and GDP growth, in specific situations, can stimulate economic activity and corporate profits. Conversely, the business size and board meetings exhibit a negative link with ROE in the GCC region. Large corporations may encounter bureaucratic inefficiencies, hindering their capacity to swiftly adapt to market fluctuations and diminishing their overall profitability. Frequent board meetings, although designed to improve governance, may reflect inefficiencies or excessive oversight, which can obstruct strategic decision-making and operational agility, ultimately resulting in diminished profits.

4.3. Panel GMM Regression Results

The following Table 7 provides the results of the panel GMM regression for the four models, including the moderation of climate governance for the GCC region, and Table 8 reports the results for the European countries. The utilization of panel GMM regression presents numerous benefits. Initially, panel GMM mitigates endogeneity issues that frequently occur in ESG research due to omitted variable bias, simultaneity, or measurement inaccuracies. Utilizing lagged values as instruments guarantees that the calculated association between ESG and profitability remains unbiased and consistent. Furthermore, considering that corporate performance and ESG practices develop over time, panel GMM is ideally suited for dynamic models, effectively reflecting the long-term influence of governance on the ESG–profitability relationship. This approach additionally considers unobserved firm-specific variability, ensuring that governance mechanisms are adequately incorporated into the study.

Table 7. Panel GMM estimation results for the GCC region.

Dependent Variable: Return on Equity				
	Model 1	Model 2	Model 3	Model 4
Lag ROE	0.025 ***	0.011 ***	0.019 ***	0.026 ***
ESG	0.058 ***	0.040 ***	0.037 ***	0.048 ***
BSize	−0.034 **	−0.042 **	−0.053**	−0.038 **
BIND	0.040 **	0.024 **	0.019 **	0.037 **
BMeet	−0.021 **	−0.014 **	−0.057 **	−0.061 **
ESG × BSize		0.062 ***		
ESG × BIND			0.059 **	
ESG × BMeet				0.048 **
FSize	0.081 ***	0.074 ***	0.099 ***	0.043 ***
Growth	0.033 *	0.021 **	0.071 *	0.036 **
Inf	0.152	0.249	0.521	0.419
GDP	0.184	0.287	0.265	0.179
Constant	0.521 ***	0.412 **	0.356 **	0.485 **
Hansen Test	0.265	0.363	0.425	0.288
AR (1)	0.365	0.396	0.346	0.412
AR (2)	0.425	0.305	0.432	0.265
Wald Chi ²	578.258 (0.000)	578.258 (0.000)	578.258 (0.000)	578.258 (0.000)

***, **, * are the statistical significance levels at 0.01, 0.05 and 0.10 respectively.

Table 8. Panel GMM estimation results for European markets.

	Dependent Variable: Return on Equity			
	Model 1	Model 2	Model 3	Model 4
Lag ROE	0.038 ***	0.028 ***	0.034 ***	0.038 ***
ESG	0.074 ***	0.050 ***	0.046 ***	0.041 ***
BSize	0.056 **	−0.095 **	−0.073 **	−0.065 **
BIND	0.027 **	0.036 **	0.025 **	0.039 **
BMeet	−0.036 **	−0.027 **	−0.044 **	−0.058 **
ESG × BSize		0.049 ***		
ESG × BIND			0.049 **	
ESG × BMeet				0.032 **
FSize	−0.048 ***	0.052 ***	0.041 ***	0.063 ***
Growth	0.029 *	0.022 **	0.070 *	0.049 **
Inf	0.265	0.299	0.381	0.340
GDP	0.326	0.305	0.278	0.367
Constant	0.448 ***	0.395 **	0.374 **	0.427 **
Hansen Test	0.228	0.251	0.270	0.254
AR (1)	0.267	0.286	0.294	0.352
AR (2)	0.336	0.363	0.396	0.312
Wald Chi ²	788.121 (0.000)	852.421 (0.000)	953.188 (0.000)	755.652 (0.000)

***, **, * are the statistical significance levels at 0.01, 0.05 and 0.10 respectively.

The above findings demonstrate that a lagged return on equity (ROE) and ESG score show a positive and significant influence on ROE for nonfinancial companies in both the Gulf Cooperation Council (GCC) and Europe [23]. This indicates that historical profitability significantly influences a firm's present financial performance, illustrating the evolving character of profitability and the continuity of returns across time [41]. In addition, the significant positive effect of ESG on ROE indicates that companies with robust ESG practices are likely to attain greater financial returns, attributable to superior risk management, enhanced reputation, and heightened investor confidence [54]. This relationship is apparent in both locations, even though its extent and relevance may differ based on regulatory frameworks, market maturity, and investor preferences. In Europe, where ESG laws are more rigorous and sustainable investing is prioritized, companies that effectively use ESG practices may realize enhanced financial advantages [47]. In the GCC, the increasing emphasis on sustainability and governance reforms improves the financial performance of companies which actively participate in ESG activities [24].

The significant and positive influence of board independence on return on equity (ROE) in both the GCC and Europe underscores the essential function of robust corporate governance in improving business profitability. In the GCC area, corporate governance changes have accelerated recently, with authorities prioritizing board independence to enhance transparency and bolster investor trust [9]. Considering that numerous enterprises in the GCC are either family-owned or state-affiliated, independent directors assist in alleviating conflicts of interest and guarantee that corporate decisions are taken in the shareholders' best interests. Independent boards augment risk oversight and financial discipline, resulting in superior decision-making and enhanced operational efficiency, yielding increased ROE [6]. In Europe, where corporate governance frameworks are more developed and statutory mandates for board independence are more stringent, the inclusion

of independent directors is essential for guaranteeing management responsibility and strategic oversight [2]. European companies gain from robust investor protection legislation, while independent boards foster long-term value creation by improving decision-making, mitigating financial mismanagement, and encouraging sustainable company practices. This increased focus on governance and transparency enhances the financial performance, thereby elevating ROE [3].

On the other hand, the findings reveal a significant inverse association between board meetings and corporate performance in both the GCC and Europe, indicating that an increased frequency of board meetings does not inherently lead to enhanced profitability [47]. Although board meetings are crucial for strategic planning and monitoring, an excessive frequency may indicate inadequate governance procedures, inefficiencies, or volatile decision-making, resulting in a diminished business performance in both the GCC and Europe. Effective boards prioritize quality over quantity, guaranteeing that meetings are productive, strategic, and aligned with shareholder interests [8].

Moreover, the findings indicate a considerable negative effect of board size on firm performance in the GCC, whereas, in European nations, board size exerts a significant beneficial influence on performance. This comparison underscores the disparities in corporate governance frameworks, regulatory contexts, and decision-making methodologies between the two areas [68]. The divergent outcomes indicate that board size influences business performance variably, contingent upon governance quality, ownership arrangements, and market maturity [32]. In the GCC, smaller, well-organized boards may demonstrate greater efficacy, whereas, in Europe, larger boards characterized by robust independence and competence enhance corporate success.

The results demonstrate that corporate governance significantly and positively moderates the relationship between ESG and business performance for board size, board independence, and board meetings. This indicates that robust governance frameworks improve the correlation between ESG practices and corporate performance, underscoring the belief that well-governed companies can derive higher financial advantages from their ESG efforts [10]. The findings indicate that robust corporate governance structures enhance the beneficial effects of ESG on business performance [26]. An effectively organized governance framework—featuring expansive boards with varied experience, independent directors guaranteeing responsibility, and regular strategic meetings—improves an organization's capacity to utilize ESG practices for financial prosperity [48].

Furthermore, the findings demonstrate that business size employs a considerable positive influence on performance in the GCC, whereas it has a detrimental effect in Europe. This disparity is primarily influenced by market structure and governance frameworks in each region [54]. In the GCC region, larger enterprises generally exhibit superior performance owing to market dominance, access to government contracts, and financial stability [54,69]. In Europe, the adverse effect of business size on performance may be ascribed to increased operational difficulties and regulatory obligations linked to larger enterprises. Although variations in company size effects, both the GCC and Europe exhibit a positive correlation between growth opportunities and business performance. This indicates that companies with significant potential for growth, innovation, or market entry generally exhibit superior performance, irrespective of regional variations [4].

5. Robustness of Results

The following Tables 9 and 10 provide the results of panel GMM regression on the four models used to investigate the relationship between ESG reporting and the performance of companies while moderating for the climate governance. Different proxies have been used to check the robustness of the results.

Table 9. Panel GMM estimation results for the GCC stock markets.

Dependent Variable: Return on Assets				
	Model 1	Model 2	Model 3	Model 4
Lag ROA	0.019 ***	0.021 **	0.013 ***	0.032 **
ESG	0.037 ***	0.059 ***	0.028 ***	0.031 ***
BSize	−0.052 ***	−0.071 **	−0.038 ***	−0.022 **
BIND	0.028 ***	0.036 **	0.027 **	0.048 **
BMeet	−0.036 **	−0.044 **	−0.048 **	−0.057 **
ESG × BSize		0.050 ***		
ESG × BIND			0.061 ***	
ESG × BMeet				0.033 **
FSize	0.074 ***	0.066 ***	0.057 ***	0.082 ***
Growth	0.045 **	0.038 **	0.066 *	0.057 **
Inf	0.118	0.185	0.364	0.258
GDP	0.125	0.208	0.296	0.235
Constant	0.408 ***	0.496 **	0.399 **	0.442 **
Hansen Test	0.202	0.316	0.395	0.327
AR (1)	0.300	0.263	0.293	0.336
AR (2)	0.409	0.385	0.366	0.288
Wald Chi ²	663.352 (0.000)	623.151 (0.000)	596.998 (0.000)	638.652 (0.000)

***, **, * are the statistical significance levels at 0.01, 0.05 and 0.10 respectively.

Table 10. Panel GMM estimation results for European stock markets.

Dependent Variable: Return on Equity				
	Model 1	Model 2	Model 3	Model 4
Lag ROE	0.042 ***	0.033 ***	0.039 ***	0.028 ***
ESG	0.065 ***	0.059 ***	0.051 ***	0.048 ***
BSize	0.036 ***	−0.087 ***	−0.069 ***	−0.055 ***
BIND	0.048 **	0.048 **	0.037 **	0.062 **
BMeet	−0.059 **	−0.062 **	−0.068 **	−0.071 **
ESG × BSize		0.037 ***		
ESG × BIND			0.052 ***	
ESG × BMeet				0.044 ***
FSize	−0.052 ***	0.056 ***	0.048 ***	0.059 ***
Growth	0.037 **	0.042 **	0.066 **	0.062 **
Inf	0.362	0.390	0.308	0.382
GDP	0.399	0.357	0.362	0.390
Constant	0.509 ***	0.440 **	0.492 **	0.456 **
Hansen Test	0.362	0.405	0.482	0.510
AR (1)	0.395	0.300	0.372	0.365
AR (2)	0.308	0.373	0.311	0.328
Wald Chi ²	826.664 (0.000)	1120.525 (0.000)	962.285 (0.000)	885.954 (0.000)

***, ** are the statistical significance levels at 0.01 and 0.05 respectively.

Tables 9 and 10 utilize alternative metrics for the variables under investigation to evaluate the robustness of the findings, thereby preventing the results from being influenced by specific operational definitions. Return on assets (ROA) serves as an accurate proxy for firm performance, providing a comprehensive evaluation of financial results. The number of independent board members is a refined reflection of corporate governance structures, as it captures the board independence. The natural logarithm of market capitalization is a widely accepted method for measuring firm size, as it reduces data skewness and enables comparability. Furthermore, the expansion of a company is evaluated by the changes in its total assets, which serve as a practical proxy for its development over time. The study's robustness is bolstered by these alternative specifications, which also reinforce the reliability and consistency of the results across various model configurations. As a result, the important findings are still valid and significant when the panel GMM regression approach is employed.

6. Conclusions, Implications, and Limitations

This paper investigated and compared how the impact of climate governance impacts the relationship between ESG and firm performance in the GCC and Europe. The sample included all the nonfinancial companies in the GCC and five European countries. The period of study covered 14 years from 2010 to 2023. Data have been gathered from the Refinitiv Eikon Platform (LSEG). The missing data have been collected either from annual reports "if available", and if not, they have been gathered from the relevant stock exchanges. The panel GMM regression was applied to estimate the relationship. The dependent variable was return on equity. The independent variable was ESG, and the moderating variables were board size, board independence, and board meetings, representing the climate governance, while controlling for firm characteristics proxied by firm size and growth and controlling for macroeconomic variables proxied by inflation and GDP.

The findings indicate that, in both the GCC and Europe, enhanced ESG performance, increased board independence, and robust development potential lead to superior business performance. This indicates that companies emphasizing sustainability, governance transparency, and growth potential are more likely to attain long-term success in both areas. Significant distinctions arise between the GCC and Europe concerning board size and firm size. In the GCC, an enlarged board adversely affects performance, presumably due to bureaucratic inefficiencies and governance issues, but, in Europe, larger boards improve performance by offering diversified experience and enhanced monitoring. In the GCC, business size positively affects performance, as larger enterprises enjoy market dominance and financial stability; conversely, in Europe, larger firms have a deteriorating performance, perhaps due to heightened operational difficulties and regulatory limits. In addition, the results demonstrate that board size, the frequency of board meetings, and board independence significantly and positively influence the relationship between ESG and company performance in both the GCC and Europe. This indicates that robust corporate governance frameworks amplify the financial advantages of ESG activities, underscoring the necessity of effective supervision and governance procedures for converting ESG pledges into enhanced business performance.

Several implications can be provided based on the results for investors, managers, and policy regulators. Higher ESG performance, board independence, and growth opportunities are favorable indications of GCC and European firm success for investors. They should invest in companies with a solid ESG strategy and independent governance structures for long-term financial stability and shareholder benefits. Given that board meetings hurt performance in both regions, investors should consider whether frequent meetings improve decision-making or create inefficiencies. Regional governance disparities suggest

that investors in the GCC should be cautious of corporations with large boards, whereas, in Europe, larger boards may provide supervision and experience. The beneficial impact of business size in the GCC and negative impact in Europe show that investment plans should consider regional market dynamics and firm scalability. In addition, organizations in both regions must prioritize board independence, since it enhances supervision and transparency, fostering more market confidence. Firms should prioritize efficiency above frequency, ensuring that talks result in concrete initiatives. GCC companies want to restrict excessive board enlargement, whereas European companies can gain from more extensive boards with varied knowledge. Moreover, companies should acknowledge that fortifying governance frameworks might amplify the financial advantages of ESG projects.

Furthermore, regulators ought to formulate policies that enhance ESG integration and optimal corporate governance standards, taking into account regional market characteristics. Policies ought to encourage companies to uphold separate boards with distinct oversight duties. Furthermore, authorities ought to prioritize an enhancement in board meeting efficacy instead of imposing requirements for increased meeting frequencies. Governance frameworks must be customized for each market, guaranteeing that legislation facilitates effective decision-making mechanisms in the GCC while promoting diverse board experiences in Europe. Ultimately, governance rules should enhance the beneficial moderating effect of corporate governance on the relationship between ESG performance and financial outcomes, ensuring that sustainability initiatives yield robust financial results for companies and countries.

This study offers significant insights into the connection of ESG, corporate governance, and firm performance in the GCC and Europe; however, it possesses specific limitations. The study is confined to these two locations, indicating that the findings cannot be extrapolated to other markets with varying economic, regulatory, and governance frameworks. Subsequent study may broaden the investigation to more locations, including North America, Asia, or emerging economies, to ascertain whether analogous correlations persist in diverse institutional contexts. This study analyzes organizations across many industries; nonetheless, sector-specific factors may affect the relationship between ESG and performance. Future research may concentrate on specific sectors, such as banking, energy, or technology, to yield a more nuanced knowledge of ESG and governance processes within those industries. Third, although the study incorporates board size, board meetings, and board independence as governance moderators, additional characteristics such as CEO duality, gender diversity, and ownership structure warrant investigation in future research to provide a more holistic understanding of governance efficacy. This study ultimately depends on quantitative financial statistics, which may inadequately reflect the qualitative dimensions of ESG strategies and governance decision-making. Future studies may utilize survey or interview methodologies to obtain a more profound understanding of how corporations execute ESG policies and governance procedures across varying regulatory contexts.

Based on the previous, this empirical evidence provides the main recommendations for both regions. Mandating standardized and transparent climate-related financial disclosures that are consistent with international frameworks would be a customized policy recommendation for both regions. This would promote greater consistency and accountability in ESG reporting for GCC countries, thereby bolstering investor confidence and aligning firms with global sustainability standards. To enhance data quality and facilitate the more effective integration of ESG factors into financial decision-making and risk assessment processes, the policy should concentrate on strengthening enforcement mechanisms and ensuring comparability across sectors in European countries, where ESG regulations are more mature.

Author Contributions: Conceptualization, M.K.A.-K. and B.A.K.; Methodology, M.K.A.-K. and B.A.K.; Validation, M.K.A.-K.; Formal analysis, M.K.A.-K. and B.A.K.; Investigation, M.K.A.-K. and B.A.K.; Resources, M.K.A.-K.; Data curation, M.K.A.-K.; Writing—original draft, M.K.A.-K. and B.A.K.; Writing—review & editing, M.K.A.-K. and B.A.K.; Supervision, B.A.K.; Project administration, B.A.K. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Institutional Review Board Statement: Not applicable.

Informed Consent Statement: Not applicable.

Data Availability Statement: The data that support the findings of this study are available from Refinitiv Eikon Platform (LSEG), but restrictions apply to the availability of these data, which were used under subscription for the current study and so are not publicly available. The data are, however, available from the authors upon reasonable request and with the permission of LSEG.

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

References

1. Ahmed, O.; Abu Khalaf, B. The Impact of ESG on Firm Value: The Moderating Role of Cash Holdings. *Heliyon* **2025**, *11*, e41868. [CrossRef] [PubMed]
2. Chouaibi, S.; Chouaibi, Y.; Zouari, G. Board Characteristics and Integrated Reporting Quality: Evidence from ESG European Companies. *EuroMed J. Bus.* **2021**, *17*, 425–447. [CrossRef]
3. Jizi, M. The Influence of Board Composition on Sustainable Development Disclosure. *Bus. Strategy Environ.* **2017**, *26*, 640–655. [CrossRef]
4. Hollindale, J.; Kent, P.; Routledge, J.; Chapple, L. Women on Boards and Greenhouse Gas Emission Disclosures. *Account. Financ.* **2019**, *59*, 277–308. [CrossRef]
5. Bhagat, S. An Inconvenient Truth About ESG Investing. *Harv. Bus. Rev.* **2022**, *31*. Available online: <https://hbr.org/2022/03/an-inconvenient-truth-about-esg-investing> (accessed on 1 March 2025).
6. Al-Hiyari, A.; Kolsi, M.C. How do Stock Market Participants Value ESG Performance? Evidence from Middle Eastern and North African Countries. *Glob. Bus. Rev.* **2021**, *25*, 934–956. [CrossRef]
7. Rossi, M.; Festa, G.; Chouaibi, S.; Fait, M.; Papa, A. The Effects of Business Ethics and Corporate Social Responsibility on Intellectual Capital Voluntary disclosure. *J. Intellect. Cap.* **2021**, *22*, 1–23. [CrossRef]
8. Kachouri, M.; Jarboui, A. Exploring the Relation Between Corporate Reporting and Corporate Governance Effectiveness. *J. Financ. Report. Account.* **2017**, *15*, 347–366. [CrossRef]
9. Buallay, A.; Hamdan, A.; Zureigat, Q. Corporate Governance and Firm Performance: Evidence from Saudi Arabia. *Australas. Account. Bus. Financ. J.* **2017**, *11*, 78–98. [CrossRef]
10. Luo, C.; Wei, D.; He, F. Corporate ESG Performance and Trade Credit Financing—Evidence from China. *Int. Rev. Econ. Financ.* **2023**, *85*, 337–351. [CrossRef]
11. Ktit, M.; Abu Khalaf, B. Assessing the environmental, social, and governance performance and capital structure in Europe: A board of directors' agenda. *Corp. Board Role Duties Compos.* **2024**, *20*, 139–148. [CrossRef]
12. Barney, J. Firm Resources and Sustained Competitive Advantage. *J. Manag.* **1991**, *17*, 99–120. [CrossRef]
13. Peng, M.W. The Resource-based View and International Business. *J. Manag.* **2001**, *27*, 803–829. [CrossRef]
14. Madhani, P.M. Resource Based View (RBV) of Competitive Advantage: An Overview. In *Resource Based View: Concepts and Practices*; Madhani, P., Ed.; Icfai University Press: Hyderabad, India, 2009; pp. 3–22.
15. Behl, A.; Kumari, P.; Makhija, H.; Sharma, D. Exploring The Relationship of ESG Score and Firm Value Using Cross-lagged Panel Analyses: Case of The Indian Energy Sector. *Ann. Oper. Res.* **2021**, *313*, 231–256. [CrossRef]
16. Sun, Y.; Zhao, D.; Cao, Y. The Impact of ESG Performance, Reporting Framework, and Reporting Assurance on the Tone of ESG Disclosures: Evidence from Chinese Listed Firms. *J. Clean. Prod.* **2024**, *466*, 142698. [CrossRef]
17. Khan, M.A. ESG Disclosure and Firm Performance: A Bibliometric and Meta Analysis. *Res. Int. Bus. Financ.* **2022**, *61*, 101668. [CrossRef]
18. Odell, J.; Ali, U. ESG investing in emerging and frontier markets. *J. Appl. Corp. Financ.* **2016**, *28*, 96–101. [CrossRef]
19. Patel, P.C.; Pearce, J.A., II; Oghazi, P. Not so myopic: Investors lowering short-term growth expectations under high industry ESG-sales-related dynamism and predictability. *J. Bus. Res.* **2021**, *128*, 551–563. [CrossRef]
20. Zhou, G.; Liu, L.; Luo, S. Sustainable development, ESG performance and company market value: Mediating effect of financial performance. *Bus. Strategy Environ.* **2022**, *31*, 3371–3387. [CrossRef]

21. Cui, J.; Jo, H.; Na, H. Does Corporate Social Responsibility Affect Information Asymmetry? *J. Bus. Ethics* **2018**, *148*, 549–572. [CrossRef]
22. Chen, H.-Y.; Yang, S.S. Do Investors exaggerate corporate ESG information? Evidence of the ESG momentum effect in the Taiwanese market. *Pac.-Basin Financ. J.* **2020**, *63*, 101407. [CrossRef]
23. Birindelli, G.; Dell’Atti, S.; Iannuzzi, A.P.; Savioli, M. Composition and Activity of The Board of Directors: Impact on ESG Performance in The Banking System. *Sustainability* **2018**, *10*, 4699. [CrossRef]
24. Zumente, I.; Lăce, N. ESG Rating—Necessity for the Investor or the Company? *Sustainability* **2021**, *13*, 8940. [CrossRef]
25. Akbas, H. The Relationship Between Board Characteristics and Environmental Disclosure: Evidence from Turkish Listed Companies. *South East Eur. J. Econ. Bus.* **2016**, *11*, 7–19. [CrossRef]
26. Mishra, G.; Patro, A.; Tiwari, A.K. Does Climate Governance Moderate the Relationship Between ESG Reporting and Firm Value? Empirical Evidence from India. *Int. Rev. Econ. Financ.* **2024**, *91*, 920–941. [CrossRef]
27. Clément, A.; Robinot, L.; Trespeuch, L. Improving ESG Scores with Sustainability Concepts. *Sustainability* **2022**, *14*, 13154. [CrossRef]
28. Yan, C.; Hui, Y.Z.; Xin, L. The Relationship Between Board Size and Firm Performance. *E3S Web Conf.* **2021**, *257*, 02079. [CrossRef]
29. Ma’in, M.; Asmuni, S.; Junos, S.; Rostam, S.N.; Azmi, N.H.A.; Sahidza, K.R. Impact Of Environmental, Social, And Governance (ESG), Profitability and Macroeconomics Indicators on Firm Performance. *J. Entrep. Bus. Econ.* **2022**, *10*, 1–17.
30. Brooks, C.; Oikonomou, I. The Effects of Environmental, Social and Governance Disclosures and Performance on Firm Value: A Review of the Literature in Accounting and Finance. *Br. Account. Rev.* **2018**, *50*, 1–15. [CrossRef]
31. Botosan, C.A.; Plumlee, M.A. A Re-examination of Disclosure Level and the Expected Cost of Equity Capital. *J. Account. Res.* **2002**, *40*, 21–40. [CrossRef]
32. Liao, P.C.; Shih, Y.N.; Wu, C.L.; Zhang, X.L.; Wang, Y. Does corporate social performance pay back quickly? A longitudinal content analysis on international contractors. *J. Clean. Prod.* **2018**, *170*, 1328–1337. [CrossRef]
33. Walker, K.; Zhang, Z.; Ni, N. The Mirror Effect: Corporate Social Responsibility, Corporate Social Irresponsibility and Firm Performance in Coordinated Market Economies and Liberal Market Economies. *Br. J. Manag.* **2019**, *30*, 151–168. [CrossRef]
34. Ntim, C.G.; Soobaroyen, T. Corporate Governance and Social Responsibility. *Corp. Gov. Int. Rev.* **2013**, *21*, 468–494. [CrossRef]
35. Jizi, M.I.; Salama, A.; Dixon, R.; Stratling, R. Corporate governance and corporate social responsibility disclosure: Evidence from the U.S. banking sector. *J. Bus. Ethics* **2014**, *125*, 601–615. [CrossRef]
36. Jo, H.; Harjoto, M.A. Corporate governance and firm value: The impact of corporate social responsibility. *J. Bus. Ethics* **2011**, *103*, 351–383. [CrossRef]
37. Sattipun, M.; Bomlai, A. The Relationship Between Corporate Governance and Integrated Reporting: Thai Evidence. *Int. J. Bus. Soc.* **2019**, *20*, 348–364.
38. Cooper, E.W.; Uzun, H. Busy outside directors and ESG performance. *J. Sustain. Financ. Invest.* **2022**, 1–20. [CrossRef]
39. Homroy, S.; Slechten, A. Do Board Expertise and Networked Boards Affect Environmental Performance? *J. Bus. Ethics* **2019**, *158*, 269–292. [CrossRef]
40. Chakravarty, S.; Rutherford, L.G. Do busy directors influence the cost of debt? An examination through the lens of takeover vulnerability. *J. Corp. Financ.* **2017**, *43*, 429–443. [CrossRef]
41. Brick Ivan, E.; Chidambaran, N.K. Board meetings, committee structure, and firm value. *J. Corp. Financ.* **2010**, *16*, 553. [CrossRef]
42. Lipton, M.; Lorsch, J.W. A Modest Proposal for Improved Corporate Governance. *Bus. Lawyer* **1992**, *48*, 59–77.
43. Conger, J.; Finegold, D.; Lawler, E., III. Appraising Boardroom Performance. *Harv. Bus. Rev.* **1998**, *76*, 136–148.
44. Laksmana, I. Corporate Board Governance and Voluntary Disclosure of Executive Compensation Practices[†]. *Contemp. Account. Res.* **2008**, *25*, 1147–1182. [CrossRef]
45. Dienes, D.; Velte, P. The Impact of Supervisory Board Composition on CSR Reporting. Evidence from the German Two-Tier System. *Sustainability* **2016**, *8*, 63. [CrossRef]
46. Faradila, S.; Effendi, K.A. Analysis Of Financial Performance and Macroeconomic on Firm Value. *J. Manaj.-Fak. Ekon. Univ. Tarumanagara/J. Manaj.* **2023**, *27*, 276–296. [CrossRef]
47. Chaudhary, N.; Gakhar, K. Corporate governance and financial performance with a perspective on board size and frequency of board meetings: Empirical evidence from India. *Drishtikon A Manag. J.* **2018**, *9*, 37–64.
48. Al-Kubaisi, M.K.; Khalaf, B.A. Does Green Banking Affect Banks’ Profitability? *J. Gov. Regul.* **2023**, *12*, 157–164. [CrossRef]
49. Ichani, S.; Suhardi, A.R. The Effect of Return on Equity (ROE) And Return on Investment (ROI) on Trading Volume. *Procedia Soc. Behav. Sci.* **2015**, *211*, 896–902. [CrossRef]
50. Sukmawati, F.; Garsela, I. The Effect of Return on Assets and Return on Equity to The Stock Price. In Proceedings of the 2016 Global Conference on Business, Management and Entrepreneurship, Bandung, Indonesia, 8 August 2016; Atlantis Press: Amsterdam, The Netherlands, 2016. [CrossRef]
51. Kharatyan, D.; Nunes, A.; Lopes, J. Financial Ratios and Indicators That Determine Return on Equity. XVII—Encuentro AECA. 2016. Available online: <https://core.ac.uk/download/pdf/153414647.pdf> (accessed on 1 March 2025).

52. Wagi, F.A.; Mekel, P.A. The Effect of Firm Size, Profitability, Leverage and Board Size on Disclosures of Corporate Social Responsibility in Companies Annual Reports. *J. EMBA J. Ris. Ekon. Manaj. Bisnis Dan Akunt.* **2014**, *2*, 1443–1563.
53. Mustafa, N. Impact of the 2019-20 Coronavirus Pandemic on Education. *Int. J. Health Prefer. Res.* **2020**, *4*, 25–30.
54. Zuhroh, I. The Effects of Liquidity, Firm Size, And Profitability on The Firm Value with Mediating Leverage. *KnE Soc. Sci.* **2019**, *3*, 203–230. [\[CrossRef\]](#)
55. Işık, Z.; Ünal, E.A.; Ünal, Y. The Effect of Firm Size on Profitability: Evidence from Turkish Manufacturing Sector. *J. Bus. Econ. Financ.* **2017**, *6*, 301–308. [\[CrossRef\]](#)
56. Dayı, F. The Effect of Inflation on Firm Profitability: An Application in Retail Sector of Borsa Istanbul. *Süleyman Demirel Üniversitesi Vizyoner Derg.* **2020**, *11*, 62–72. [\[CrossRef\]](#)
57. Çoban, S. The Interaction Between Firm Growth and Profitability: Evidence from Turkish (Listed) Manufacturing Firms. *Bilgi Ekon. Ve Yönetimi Derg.* **2014**, *9*, 41–58.
58. Kobia, A.M. Effect of Inflation Rate on Profitability of Commercial Banks in Kenya. Ph.D. Thesis, University of Nairobi, Nairobi, Kenya, 2018. Available online: <http://erepository.uonbi.ac.ke/handle/11295/105453> (accessed on 1 January 2025).
59. Li, L.; Saat, M.M.; Jiayi, W. The Effect of ESG Disclosure on Firm Value: An Empirical Evidence from Chinese Listed Companies. *Int. J. Acad. Res. Bus. Soc. Sci.* **2024**, *14*, 1091–1101. [\[CrossRef\]](#) [\[PubMed\]](#)
60. Adow, M.A.; Ochiri, G. Effect of Interest Rate Risk Mitigation on The Profitability of Forex Bureau in Nairobi, Kenya. *Int. Acad. J. Econ. Financ.* **2018**, *3*, 123–141.
61. Liu, J.; Ohlson, J.A.; Zhang, W. An Evaluation of Chinese Firms' Profitability: 2005–2013. *Account. Horiz.* **2015**, *29*, 799–828. [\[CrossRef\]](#)
62. Febriana, D.A.; Setiawati, E. The Effect of Profitability, Company Size, Operating Complexity and Leverage on The Timely Submission of Financial Reports in Manufacturing Companies in the Various Industrial Sectors Listed on IDX in 2018–2021. *Int. J. Sci. Res. Publ. (IJSRP)* **2023**, *13*, 13403. [\[CrossRef\]](#)
63. Ktit, M.A.; Abu Khalaf, B. Does Digital Transformation Reflect the Adjustment of Capital Structure? *J. Risk Financ. Manag.* **2025**, *18*, 168. [\[CrossRef\]](#)
64. Abu Khalaf, B. Impact of board characteristics on the adoption of sustainable reporting practices. *Cogent Bus. Manag.* **2024**, *11*, 2391563. [\[CrossRef\]](#)
65. Abu Khalaf, B.; Awad, A.B. Awad Exploring the Bearing of Liquidity Risk in the Middle East and North Africa (MENA) Banks. *Cogent Econ. Financ.* **2024**, *12*, 2330840. [\[CrossRef\]](#)
66. Gharios, R.; Awad, A.B.; Abu Khalaf, B.; Seissian, L.A. The Impact of Board Gender Diversity on European Firms' Performance: The Moderating Role of Liquidity. *J. Risk Financ. Manag.* **2024**, *17*, 359. [\[CrossRef\]](#)
67. Gharios, R.; Abu Khalaf, B. Digital Marketing's Effect on Middle East and North Africa (MENA) Banks' Success: Unleashing the Economic Potential of the Internet. *Sustainability* **2024**, *16*, 7935. [\[CrossRef\]](#)
68. Kalsie, A.; Shrivastav, S.M. Analysis of Board Size and Firm Performance: Evidence From NSE Companies Using Panel Data Approach. *Indian J. Corp. Gov.* **2016**, *9*, 148–172. [\[CrossRef\]](#)
69. Alshaiba, S.; Abu Khalaf, B. The impact of board gender diversity on the Gulf Cooperation Council's reporting on sustainable development goals. *Corp. Board Role Duties Compos.* **2024**, *20*, 33–41. [\[CrossRef\]](#)

Disclaimer/Publisher's Note: The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.