



**University of Bahrain
College of Business Administration
Department of Accounting**

**Board Characteristics and Environmental, Social and Governance
Performance in Financial Sector: Evidence from Gulf
Cooperation Council Countries**

A Thesis Submitted in Partial Fulfilment of the Requirements for the Master of
Science Degree in Accounting

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Thesis Discussion Committee Decision

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Our Prophet Mohammed, “peace and blessings be upon him” said, “Who does not thank people does not thank Allah.” Therefore, I want to start by thanking Allah for bestowing upon me the grace, many blessings, knowledge, and the chance to complete this level of the Master of Science degree in accounting.

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To my beloved grandmother, whose presence in my life brought endless joy and warmth, I carry your memory in my heart with profound sadness at our parting. How I wish you were here with me at these moments, for my happiness feels incomplete without the light of your love shining upon me. I seek solace in knowing that you now rest in peace, and I pray for God’s mercy to grant you eternal bliss in heaven.

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Declaration

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This dissertation titled “**Board Characteristics and Environmental, Social and Governance Performance in Financial Sector: Evidence from Gulf Cooperation Council Countries**” is submitted for obtaining the Degree of Master of Science in Accounting from the University of Bahrain. This declaration is to clarify that this thesis is the original version of my work except for the quotations, which are duly acknowledged.

Signature:

Date:

Dedication

To my parents.

To everyone who has supported me from the beginning to the
end.

ملخص البحث

خصائص مجلس الإدارة والأداء البيئي والاجتماعي والحوكمة في القطاع المالي: دليل من

دول مجلس التعاون الخليجي

حظيت الممارسات البيئية والاجتماعية والحوكمة باهتمام واسع النطاق من قبل مختلف أصحاب المصلحة. ويرجع هذا إلى زيادة الضغوط من مختلف أصحاب المصلحة وخاصة الهيئات التنظيمية والمستثمرين وحتى المجتمع على الشركات لإعداد التقارير المتعلقة بالاستدامة. لذلك، من المتوقع أن تكون تلك الشركات أكثر شفافية في إفصاحها عن الأداء المالي والاجتماعي والبيئي لصالح مختلف أصحاب المصلحة. ومع ذلك، وعلى الرغم من الدراسات السابقة التي تبحث في العلاقة بين آليات حوكمة الشركات، هيكل الملكية أو خصائص الشركة من جانب وممارسات الحوكمة البيئية والاجتماعية والبيولوجية وإعداد التقارير من جانب آخر، إلا أن القليل منها تم استكشافه خاصة في البلدان ذات الأسواق المالية الناشئة بما في ذلك دول مجلس التعاون الخليجي. وفي ضوء ما سبق، تهدف الدراسة الحالية إلى سد هذه الفجوة من خلال دراسة تأثير خصائص مجلس الإدارة (حجم مجلس الإدارة، استقلال مجلس الإدارة، تنوع جنس مجلس الإدارة، التنوع الثقافي لأعضاء مجلس الإدارة، ومدى وجود لجنة المسؤولية الاجتماعية للشركات/الاستدامة والتي تشكل من قبل مجلس الإدارة) على درجة الإفصاح عن المعلومات البيئية، الاجتماعية، ومعلومات الحوكمة (ESG) لعينة من 166 شركة مدرجة في دول مجلس التعاون الخليجي لمدة ثلاث سنوات، من 2021 إلى 2023. لقد تم تجميع بيانات خصائص مجلس الإدارة (المتغيرات المستقلة) من التقارير السنوية للشركات وتقارير حوكمة الشركات، في حين تم استخراج بيانات الإفصاح عن المعلومات البيئية، الاجتماعية والحوكمة (ESG) من قاعدة بيانات مجموعة بورصة لندن (LSEG). ولاختبار فروض الدراسة، تم استخدام تحليل الانحدار المتعدد الهرمي (HMR). أظهرت النتائج أن حجم مجلس الإدارة، تنوع جنس أعضاء مجلس الإدارة، ووجود لجنة المسؤولية الاجتماعية للشركات/الاستدامة تؤثر بشكل إيجابي على المتغير التابع. وفي المقابل، أظهرت النتائج علاقة غير ذات دلالة إحصائية بين استقلال مجلس الإدارة والتنوع الثقافي مع المتغير التابع. وبناءً على نتائج البحث الحالي، قد يكتسب المساهمون وصناع السياسات فهماً أعمق للدور الهام الذي تلعبه خصائص مجلس الإدارة في تحسين درجات الحوكمة البيئية والاجتماعية والمؤسسية. وعلاوة على ذلك، تعد الدراسة الحالية ذات قيمة للممارسين الذين يسعون إلى تحسين جودة ممارسات الحوكمة البيئية والاجتماعية والمؤسسية.

الكلمات المفتاحية: خصائص مجلس الإدارة، ممارسات الحوكمة البيئية والاجتماعية والمؤسسية، ودول مجلس التعاون الخليجي.

Abstract

Environmental, social, and governance (ESG) practices receive broad consideration from various stakeholders. This is driven by increasing pressure from various stakeholders, including regulatory bodies, investors, and society, on business administration to report on sustainability. Therefore, companies are expected to be more transparent in their financial, social, and environmental performance disclosures for the benefit of various stakeholders. However, despite previous research that investigates the association between corporate governance mechanisms, ownership structure, or company characteristics on one side and ESG practices and reporting on the other, little is explored, especially in countries with emerging stock markets, including the Gulf Cooperation Council (GCC) countries. This study aims to fill this gap by investigating the effect of board characteristics (board independence, board size, board gender diversity, board culture diversity, and the existence of a CSR/sustainability committee formed by the board) on the ESG Score of 166 companies listed in six GCC countries for three years, from 2021 to 2023. Data of board characteristics (independent variables) is collected from annual reports and/or corporate governance reports prepared by the sampled companies, while data of ESG scores is extracted from the London Stock Exchange Group (LSEG) database. The effect of board characteristics on ESG scores is explored using Hierarchical Multiple Regression (HMR) analysis, with two HMR models designed (Models 1 and 2), both of which are significant. The results indicate that board size, gender diversity, and the existence of a committee for CSR/sustainability positively impact the ESG scores of the sampled companies. In contrast, an insignificant association between board independence and cultural diversity with ESG scores is found. Based on this research findings, policymakers and shareholders might have a deeper understanding of the important roles that board characteristics play in improving ESG scores. Furthermore, this study may contribute significantly to the accounting literature in this area of research by expanding the existing body of research on ESG practices and reporting in the GCC area. The study is also valuable for practitioners who seek to enhance the quality of ESG practices.

Keywords: Board characteristics, ESG scores, corporate governance, and GCC Countries.

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List of Abbreviations

Abbreviation	Full Name
ADX	Abu Dhabi Stock Exchange
CBB	Central Bank of Bahrain
CEO	Chief Executive Officer
CG	Corporate Governance
CMA	Capital Market Authority
CSR	Corporate Social Responsibility
DFM	Dubai Financial Market
DSM	Doha Securities Market
ESG	Environmental, social, and governance
GCC	Gulf Cooperation Council
GMOs	Genetically Modified Organism
GRI	Global Reporting Initiative
HMR	Hierarchical Multiple Regression
KSA	Kingdom of Saudi Arabia
KSE	Kuwait Stock Exchange
LSEG	London Stock Exchange Group
MSX	Muscat Stock Exchange
PRI	Principles for Responsible Investment
QSE	Qatar Stock Exchange
RDT	Resource Dependence Theory
ROE	Return on Equity
SASB	Sustainability Accounting Standards Board
SCA	Securities and Commodities Authority
SCA	Securities and Commodities Authority
SDGs	Sustainable Development Goals
SEC	Securities and Exchange Commission
SRI	Socially Responsible Investing
TBL	Triple Bottom Line
UAE	United Arab Emirates
UN SSE	United Nations Sustainable Stock Exchanges
UNPRI	United Nation Principles for Responsible Investment
US	United States

Chapter One

Introduction

1.1 Preface

1.2 The Research Problem

1.3 Research Questions

1.4 Research Objectives

1.5 The Research Importance

1.6 Research Motivations

1.7 Research Structure

1.8 Chapter Summary

Chapter One

Introduction

1.1 Preface

Corporate social responsibility (CSR) has been a topic of discussion for over a century. CSR is identified as one of the major issues in corporate governance. Companies and board directors should integrate socially responsible investing into their entire strategy (Beji et al., 2020). According to Beji et al. (2020), CSR is a management concept in which organizations not only comply with all necessary legal duties but also go above and beyond to promote more socially responsible projects. Based on Chouaibi et al. (2021), the focus of accounting, which is on only financial data, neglecting other non-financial data, is considered a weakness that leads to an increasing demand for integrated reporting. Integrated reporting summarizes an organization's governance, strategy, prospects, and performance within its economic, social, and environmental operations (IRF, 2024). The concept of “integrated reporting” represents the final frontier of corporate reporting, with the crucial goal of enhancing the efficiency of the information reported and enabling improved resource allocation (Vitolla et al., 2019).

In addition, based on Chouaibi et. al (2021), integrated reporting is an extension of the annual report, which aims to provide various users with information to better understand how companies operate. Over time, firms become increasingly worried about a variety of matters including environmental (depletion of resources, protection, pollution, waste treatment, climate change, and global warming), social (human rights, working environments, hunger, and social equality), and economic (employment and growth rate) (Bidari and Djajadikerta, 2020; Miranda et al., 2023). This pressure forces companies to increase operational efficiency and financial success while facing substantial stakeholder demand to improve Environmental, Social, and Governance (ESG) activities

(Eliwa et al., 2019; Al-Hiyari et al., 2022). The ESG pillar comprises three pillars: environmental, social, and governance. First, the environmental pillar evaluates a company's efforts to preserve the environment, including initiatives to mitigate climate change and reduce carbon emissions, manage pollution and waste generated during the manufacturing process, conserve energy and water, and promote biodiversity and forest conservation. Second, the social pillar describes how a firm perceives people and connections. Customer satisfaction, data privacy and security, gender and diversity considerations, employee engagement, community interactions, and human rights and labor standards are all addressed. The final pillar is governance, which covers principles for running a firm. It discusses board composition, audit committee structure, bribery and corruption prevention, executive compensation, lobbying, political contributions, and whistleblower protection programs (Radzi et al., 2023). ESG is a commonly accepted indicator of CSR (Al-Jalahma et al., 2020). Therefore, companies are now expected to answer openly for all areas of their performance by demonstrating the linkages between non-financial and financial information (Vitolla et al., 2019).

ESG reporting provides a recent accountability metric, demonstrating a voluntary obligation to non-financial goals. Additionally, to identify non-financial goals for ESG activities, companies are involved in and report on ESG practices to obtain financial and strategic benefits (Arayssi et al., 2020). Over time, ESG reporting has become important and of interest to investors, the government, and shareholders (Galbreath, 2012). Recently, governments and supervisory and regulatory authorities worldwide are increasingly focusing on ESG operations to protect customers and promote sustainable practices among investors and enterprises (Chebbi and Ammer, 2022). Moreover, investors typically use ESG reporting as a standard and technique to assess company behaviour and potential future financial performance. The three fundamental aspects of ESG are the most important criteria to consider when conducting investment analysis and making

investment decisions. ESG is a result of the responsible investing concept which is defined as “a strategy and practice to incorporate environmental, social, and governance (ESG) factors in investment decisions and active ownership” (PRI Academy, 2024). ESG factors often play a role in traditional finance decisions. Previously, impact and ethical investors were responsible for considering nonfinancial risk. All major financial institutions are now releasing ESG reports that expose their effect while also outlining criteria for making ESG-related investment decisions (Dye et al., 2021). Academics support ESG ratings by objectively and effectively measuring a company's ESG efforts through its corporate competitive advantage, social reputation, and operating performance, providing stakeholders with comprehensive and comparable data to address information asymmetries (Tan and Zhu, 2022). This helps investors and other stakeholders in general in their decision-making.

Disclosure of non-financial information about companies' socially responsible initiatives can have a beneficial effect on market performance and stakeholders' relationships. However, the structure and characteristics of a board have a significant impact on what board members can achieve (Cucari et al., 2017). Corporate governance mechanisms, in particular, characteristics of boards such as board independence, board size, and duality structure, as well as director profiles such as gender, foreign directors, age, and educational level, could be beneficial to understand better the board's dynamics and how they influence firm performance from different perspectives (Beji et al., 2020). According to Kao and Saari (2019), a firm's board of directors has a fundamental role in corporate success and CSR performance. Moreover, based on Birindelli et al. (2018), the decisions and actions of the board of directors ultimately determine whether a company succeeds or fails. Success or failure is largely due to boards being assigned the heavy tasks of monitoring and advising corporate leaders, strategically aligning a firm's direction, and establishing legitimacy and networking (Francoeur et al., 2020). Indeed, a broad composition allows the board

to encompass a variety of cognitive and professional skills (Boukattaya and Omri, 2021), and effective corporate governance can impact a company's decision-making regarding ESG practices and disclosure (Albitar et al., 2020).

Nowadays, diversity and inclusion, along with other key characteristics, are crucial for businesses and society, as they must demonstrate knowledge, flexibility, and adaptability to provide value to organizations, shareholders, and society (Koutoupis et al., 2022). Although numerous studies have investigated the effect of the board on company ESG performance and disclosures, few, mostly in developed market countries, focus on the effects of board characteristics, specifically board gender diversity, on ESG practices and disclosures. A variety of previous studies examined the association between board attributes and ESG performance or disclosure in different regions (Cucari et al., 2017; Suttipun, 2021; Chebbi and Ammer, 2022; Nuhu and Alam, 2023; Menicucci and Paolucci, 2022; Paolone et al., 2024). In addition, Chouaibi et al. (2021) analyze the correlation between board attributes and the quality of integrated reporting in European companies' ESG reports. Yilmaz et al. (2022) explore how gender and cultural diversity on boards impact corporate governance and social performance in 24 emerging countries; Nery and Morales (2022) examine how Philippine companies' board composition affects the quality of their ESG disclosures, and Arayssi et al. (2020), investigate the effect of board composition on the level of ESG disclosures in the Gulf Cooperation Council (GCC) countries. Although there are studies for countries of emerging markets, including GCC countries, they are considered few.

GCC countries witnessed speedy growth in their capital markets and devoted serious efforts to appeal to foreign investors to divert their economies from oil and gas reliance (Arayssi and Fakih, 2015). Countries in the GCC are also focusing on forming and developing a governance system (Arayssi et al., 2020). In addition, as an outcome of globalization and the GCC's strategy to attract foreign and local investors, the council followed recommendations of the global

economy to establish a common stand by offering voluntary disclosures intended to assist investors in obtaining more comprehensive information, which includes ESG disclosures (Arayssi et al., 2020). Recently, social responsibility and social projects have attracted some attention in the GCC. However, ESG practices encompass a wide range of issues primarily concerned with firms' stakeholders rather than their shareholders. Thus, on a theoretical level, it is unlikely that these latest regulations, which primarily address board concerns, would have a direct impact on firms' ESG policies and disclosures (Chebbi and Ammer, 2022). As previously discussed, given the importance of the board of directors' role in enhancing voluntary disclosures such as ESG disclosures, this current research attempts to investigate the association between board characteristics and the ESG score in GCC countries.

1.2 The Research Problem

In recent years, financial markets and governmental bodies have prioritized sustainable issues, which include ESG performance. ESG plays a critical role in company strategy, driving competitive advantage, innovation, and opportunity. It is also a key indicator of managerial and financial competency (Menicucci and Paolucci, 2022). However, ESG disclosures and financial performance are argued on two opposing grounds: one approach is that CSR causes companies to incur additional costs and thus reduces a firm's financial performance; another is that CSR promises a competitive advantage in the marketplace and thus increases company profitability (Lee et al., 2013; Uyar et al., 2019). Nevertheless, the shift in social attitudes toward companies' responsibilities to society led to a rise in companies adopting sustainable practices that link financial profitability to environmental and social performance (Cramer and Loeber, 2004). Due to globalization, GCC companies tend to enhance their sustainability performance by improving openness, increasing foreign direct investment, and strengthening governance structures (Jizi et al., 2021).

One of the recent main areas of business discussion is related to issues of sustainability strategy execution and its effect on an organization's financial performance and value (Dalal and Thaker, 2019; Giannopoulos et al., 2022; Behl et al., 2021). However, some researchers tend to examine the impact of other factors on the ESG score. For instance, Khalid et al. (2022) examine the impact of firm features and governance mechanisms on ESG disclosure. On the other hand, factors such as board composition are most favourable to supporting CSR that can be expressed through ESG disclosures, which may aid organizations' corporate governance structuring and priority (Kao and Saari, 2019). Therefore, other researchers have tended to investigate the effect of board attributes on ESG performance and disclosure. Several studies have been conducted in developed countries, including some in East Asia and a few in the Middle East, particularly in the GCC region.

The majority of GCC studies focused on financial value, performance, board gender diversity, and board composition. However, to the researcher's best knowledge, no GCC study tests other characteristics, such as cultural diversity and its effect on ESG. Moreover, these studies focus on the overall effect on the GCC countries but do not compare the effects among them or different industries. Often, the researchers exclude the financial sector from their studies due to their unique accounting and financial characteristics (Killins et al., 2021). Although GCC authorities are establishing sustainability reporting to increase interaction between society and corporate groups, the current application of regulation is considered weak (Al-Jalahma et al., 2020). That could be the reason for the low studies in the field.

There have been few studies in countries of the GCC examining the relationship between board characteristics and ESG scores, underlining a need for more investigation. Furthermore, the researcher was motivated to investigate the relationship between board characteristics and ESG in both financial and non-financial organizations, as prior studies had only examined one type of company.

This study considers all of the gaps in the GCC literature. By utilizing new board characteristics, such as the board's cultural diversity, as well as the inclusion of a CSR/sustainability committee, which has been employed in limited research in GCC countries. Additionally, the researcher aims to compare the ESG scores of the GCC countries, which will contribute to the existing GCC literature.

1.3 Research Questions

Considering the previously mentioned investigation gaps, the current research aims to fill them by answering the following research questions:

The main research question is as follows:

- To what extent do characteristics of the board of directors affect the ESG score of listed companies in GCC countries?

The research sub-questions are:

- To what extent does board size affect ESG score in GCC countries?
- To what extent does board independence affect ESG scores in GCC countries?
- To what extent does the board's gender diversity affect ESG scores in GCC countries?
- To what extent does the cultural diversity of the board of directors affect the ESG score in GCC countries?
- To what extent does the existence of a CSR/sustainability committee affect ESG scores in GCC countries?

1.4 Research Objectives

As previous research explores the effect of the board features on companies' financial performance, the main aim of the current study is to investigate the effect of the board features: size, independence, gender diversity, culture diversity, and

the existence of a CSR / sustainability committee on ESG score in GCC countries, using a sample of GCC listed companies. Additionally, the existing literature reveals contradictory results across various regions. Therefore, this study is an initial attempt to empirically investigate the association between board characteristics and the ESG score in countries of the GCC. As well as determining if the findings of this study are consistent with those of previous studies in other areas of the world, or otherwise. The above primary aim can be broken into the following sub-objectives:

- To examine the connection between board size and ESG scores.
- To examine the connection between board independence and ESG scores.
- To examine the connection between board gender diversity and ESG scores.
- To examine the connection between board culture diversity and ESG scores.
- To examine the connection between the existence of a CSR/sustainability committee and ESG scores.

1.5 The Research Importance

This study is expected to influence ESG practice, given the majority of the research analysing the effect of board attributes on ESG scores is done in countries of developed markets (Birindelli et al., 2018; Shakil et al., 2020; Khairreddine et al., 2020; Martínez-Ferrero et al., 2020; Khemakhem et al., 2022; Marrone et al., 2023; Nuhu and Alam, 2023; Lewa et al., 2024). To address an absence in the accounting literature, this study examines the same issue in countries of emerging markets including the GCC area, which contains six countries “The Kingdom of Bahrain, the Kingdom of Saudi Arabia (KSA), Kuwait, Sultanate of Oman, Qatar, and the United Arab Emirates (UAE)”. Therefore, the current study's findings may provide a valuable resource for future research into the impact of board attributes on ESG scores and related grounds in general, beyond the GCC.

This study differs from earlier studies in several aspects. First, this research provides evidence on non-financial disclosures (ESG scores) using a selected sample from GCC countries, representing 498 firm observations over three years (2021-2023). Secondly, this study may contribute to the accounting literature by expanding the research into the effect of board characteristics on companies' ESG scores, using five board characteristics (size, independence, gender diversity, culture diversity, and the existence of a CSR or sustainability committee), given that they were researched independently and together in prior literature, but not in the same way as the current study, which provides a thorough assessment of additional factors such as board culture diversity and the existence of a CSR or sustainability committee. Thirdly, to the best of the researcher's knowledge, no comparable study has been conducted in the GCC countries using the same independent variables.

The results of this investigation may be helpful to investors, policymakers, regulators, and other interested stakeholders in GCC countries. However, it can also assist in studying other emerging capital markets in the area by providing a deeper understanding of the significant role of board characteristics, both in general and specifically in this investigation, in enhancing ESG practices. As a result, regulators and authority bodies could focus more on governing the corporate governance that is linked to the board, also the implementation of the sustainability reporting process, and strengthening enforcement.

1.6 Research Motivations

Sustainable development plans have emerged as critical development strategies for all businesses and industries worldwide (Dong et al., 2023). Therefore, firms are now anticipated to reveal their financial, social, and environmental performance openly, focusing on transparency for the stakeholders' benefit (Vitolla et al. 2019). The board of directors is a valuable factor in corporate governance. According to governance theories, board composition defines its

quality and influences its activities, including firm's financial and non-financial performance (Boukattaya and Omri, 2021). This study is inspired and motivated by the widespread awareness of the relevance of ESG practices globally and the ongoing discussion regarding whether board characteristics have a beneficial impact on ESG practices, especially in GCC countries. This is due to the lack of studies conducted on this topic in emerging market countries, including those in the GCC.

1.7 The Research Structure

This study contains six chapters as explained below:

Chapter 1: Introduction

Chapter One begins with a brief introduction to the chapter's contents, followed by the identification of the research problem and the research questions, followed by a description of the research's main objective and sub-objectives. It also emphasizes the importance of the research and the motivation to conduct it.

Chapter 2: Theoretical Framework and Background of GCC Countries

This chapter provides an overview of the development of ESG, the dependent variable, and the theoretical framework of the study by stating the relevant theory for the current research. Furthermore, it provides a basic overview of the ESG practices in the GCC countries.

Chapter 3: Literature Review

This chapter begins with a brief introduction and then reviews previous studies on the current topic, specifically examining the influence of board attributes on ESG scores. Furthermore, it addresses the five theories proposed in this chapter.

Chapter 4: Methodology

This chapter begins with a brief description of its contents. It then displays the sample size selected in the study, as well as the data-gathering resources and the

measurement of the variables. This chapter also includes all of the study's analysis models.

Chapter 5: Findings and Discussions

Chapter five begins with a brief introduction and then discusses the study's statistical analysis. The current study used three analytic techniques: descriptive statistics, “Pearson correlation”, and “Hierarchical Multiple Regression” - HMR to determine if the findings of the analyses were consistent with the study assumptions.

Chapter 6: Summary, Implications, Limitations, Recommendations, and Areas for Future Research

As the final chapter of the study, it presents the main findings, implications mitigation of limitations in future studies, and the possibilities of using the suggestions in future research.

1.8 Chapter Summary

This chapter introduces the topic of the increase of interest in sustainability in general and in ESG practice and reporting in particular. Additionally, how the role of the board of directors and their characteristics can improve ESG practices. The second section presents the research problem, which is the lack of previous studies on this topic regarding the importance of the current interests of the stakeholders. Followed by research questions, which, if answered, solve the problem. This chapter also presents the study objectives and their importance to the regulators and authority bodies. The study motivations are presented in the sixth section of this chapter: the need to investigate the impact of board attributes on ESG scores in GCC because of the lack of studies on this subject in GCC countries. Finally, this chapter ends with the study structure and summary of the six chapters of the current study.

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2.6 Chapter Summary

Chapter Two

Theoretical Framework and GCC Countries' Background

2.1 Introduction

This chapter aims to provide an overview of ESG development and explain the role and characteristics of the board of directors in the disclosures. Moreover, it elaborates on the three theories (legitimacy, agency, and shareholder) that relate to investigating the effect of board attributes on ESG scores and helps in understanding why corporations voluntarily provide information. The final section of this chapter provides a brief overview of the stock markets in the six GCC countries and their respective ESG practices.

2.2 Overview of the Development of ESG

According to McBride (2024), the global focus has shifted towards sustainability as a fundamental requirement for responsible business practices. Companies that actively adopt socially responsible practices and demonstrate a genuine commitment to ESG principles are significantly more likely to attract and retain the interest of investors, stakeholders, consumers, and the broader public (Nugroho et al., 2024). However, ESG considerations can be traced back several decades. Understanding the historical development of ESG is crucial to contextualizing its current prominence and significance in business and investment. Corporate social responsibility (CSR) has been a prominent concept in the corporate world since the 1950s. The term was coined in 1953 by Howard Bowen and has since become the norm for corporations. The origins of corporate responsibility and the initial concept of ESG may be traced back to the late 1800s and the Industrial Revolution, which sparked greater awareness of social and environmental considerations (Carroll, 2007).

However, the roots of ESG are more directly tied to the concept of socially responsible investing (SRI). The social and sustainability reporting originates from SRI (Purwar, 2021). Furthermore, Viviers and Eccles (2012) found that over the past 35 years, SRI has been the primary term used to describe investment practices considering ESG factors. The core principle of SRI is to avoid investing in companies engaged in ecologically or socially unethical behaviours. This faith-based investment approach, also seen in Judaism, Christianity, and Islam, has a long history, with churches in the 1920s pushing against gambling, alcohol, and tobacco (Fulton et al., 2012).

The SRI sector began establishing a widely recognized pattern in the 1970s. Despite its conservative religious origins, SRI has shown adaptability to evolving cultural norms and progressive societal ideas. Investors have responded to various legislative and cultural challenges, such as nuclear energy, sweatshops, Apartheid, Genetically Modified Organisms (GMOs), climate change, and more (Townsend, 2020). SRI investors have influenced the market by avoiding firms that do not align with their principles and values, reflecting the aspirational attitude of the 1960s and 1970s. The Vietnam War events led to the development of SRI, as evidenced by the establishment of the Pax World Fund in 1971, the first US mutual fund to incorporate social and environmental factors into investors' decisions (Lawton, 2023). Additionally, in 1975, the US Securities and Exchange Commission (SEC) announced a public proceeding to investigate the disclosure of corporate information on social and environmental practices (Hills, 1975). This period also saw the emergence of external social accounting and audits today (Larrínaga and Bebbington, 2021).

In the 1980s, ESG investing gained clarity through the anti-apartheid movement in South Africa. The pressure on the African government led to widespread corporate divestment, with over 150 US educational and corporate entities fully or partially divesting from South African businesses (King, 2023; Barnes and Barnes, 2023). This strategy played a pivotal role in ending apartheid,

marking a significant moment for social consciousness and sustainable investing (King, 2023). Compared to previous religious investment movements, the moral imperatives of the anti-apartheid and anti-Vietnam War causes had a broader appeal (Viviers and Eccles, 2012). This period also saw a growing interest in social reporting, with businesses and executives emphasizing its importance (Dierkes and Antal, 1986). However, stand-alone social and environmental reports were uncommon at the time; their frequency increased throughout the 1980s and 1990s. To set them apart from the environmental and social disclosures included in the corporate annual reports (Larrínaga and Bebbington, 2021).

The quantity of businesses publishing sustainability, social, and environmental reports has consistently increased since the 1990s (Gray and Milne, 2007). This follows the initial emergence of "sustainability reporting" in the 1990s, where organizations complement their financial accounting with non-financial performance data (Hohnen, 2012). Before this, only a few firms were involved in social responsibility reporting. However, in response to growing public attention on environmental issues, non-financial reporting proliferated, from under 100 reports in 1993 to over 1,500 annually by 2003 (ACCA, 2004). Furthermore, the 1990s saw the establishment of the Triple Bottom Line (TBL) framework, representing sustainability's equity-related, economic, and environmental dimensions (Elkington, 1998). The economic aspect of TBL encompasses not just profit but also compliance, risk management, and effective governance (Lucas, 2022). Therefore, it was partially transformed into a governance aspect, adding to environmental and social considerations. Organizations can utilize ESG characteristics as indicators of their contributions to sustainable development and CSR (Goel, 2010).

In the early 2000s, there was renewed interest in defining SRI to include corporate governance alongside financial, social, and environmental factors. SRI differentiates itself from ESG by stating that ESG is based on criteria that consider financial factors, which are not only related to a moral stance against unethical

businesses, as in SRI (Purwar, 2019). The renewed interest was driven by high-profile corporate scandals, such as Enron, which highlighted the importance of effective governance in relation to investment risk and return (Fulton et al., 2012). In response, the “Sarbanes-Oxley Act” was enacted in 2002 to establish new standards for US public firm boards, management, and accounting firms (Coates, 2007).

ESG principles were further formalized in the 2006 UN Principles for Responsible Investment (UNPRI) report, which emphasized the incorporation of ESG criteria into financial analysis to promote sustainable investing (Atkins, 2020; Purwar, 2019). As a result, ESG has become an approach used by investors to assess a company's behavior and financial performance, focusing on three key factors crucial for sustainable enterprise development, which are essential in investment analysis and decision-making (Li et al., 2021). As described by Lucas (2022), ESG factors involve analyzing how sustainability-related issues can impact a company's risk-return profile. This can lead to improved financial returns and the identification of new opportunities by considering a business's environmental, social, and governance dimensions.

According to Wang and Phillips (2023), the term ESG is primarily attributed to the "Who Cares Wins" report, which played a key role in formalizing its use as a framework for integrating sustainability and societal impact factors into investment and corporate practices. Definitions of ESG highlight its purpose of evaluating the long-term sustainability and ethical impact of companies and investments. The UNPRI describes ESG as the environmental, social, and governance factors considered alongside traditional financial metrics” (PRI Academy, 2024). Similarly, the Global Reporting Initiative (GRI) and Sustainability Accounting Standards Board (SASB) define ESG as the set of issues important to a company's performance and the attractiveness of its investment opportunities from a sustainability perspective (GRI, 2019; SASB, 2024).

Sustainability is now a critical differentiator, propelling organizations towards a more sustainable and profitable future, making it a strategic advantage rather than just a buzzword. Successful businesses align with ESG principles to achieve long-term success, meet regulatory requirements, and foster trust among investors, consumers, and stakeholders (McBride, 2024). Companies that do well on ESG indicators are seen to be better able to predict and handle future non-financial risks and opportunities (Daugaard and Ding, 2022). The increasing focus on ESG compatibility is a significant shift in the perception of sustainability by businesses, investors, and policymakers. Transparent, standardized ESG frameworks are crucial for guiding global investments towards sustainable growth. International ESG practices provide valuable insights for collective action to address challenges such as climate change, social inequality, and economic instability. Fostering cooperation across borders and driving meaningful change can lead to a more equitable and sustainable world for future generations (Emergent Africa, 2024).

2.3 Board of Directors Role

The responsibilities of directors on boards have evolved. In recent decades, and possibly because of the financial crisis's effects on companies' shareholders and, indirectly, on society in general, there has been a necessity for a shift in the importance of the responsibilities that must be fulfilled by the board of directors, with oversight and monitoring being more significant than the traditional duty of administration (Martín and Herrero, 2018). Thus, the role of the board is to monitor managers' behaviour and advise them on strategy identification and implementation. For example, according to De Andres and Vallelado (2008), in the banking sector, directors have particular expertise in the complexities of the banking institution, allowing them to oversee and advise management effectively. The board oversees relations with the regulator to prevent conflicts of interest between the bank and the regulator. The board of directors is important to

corporate governance since it considers the organization's interests while supporting shareholders' demands (Bektur and Arzova, 2020). According to Madhani (2017), boards provide four primary functions: control, strategy, resource provision, and finally, advice and counsel.

As globalization leads to the integration of economies and societies through cross-border flows of goods, services, ideas, information, technologies, capital, finance, and people, CSR is crucial in transforming the current situation to ensure long-term socioeconomic development. As a result, CSR initiatives foster a positive relationship between the local community and the firm, which can benefit the enterprise in the long term (Banik and Shil, 2022). According to Yatim and Yusoff (2014), the board, in addition to serving as stewards and guardians of the firm, is important in achieving first-class corporate governance standards. The ideal Board builds upon the legal framework to enhance standards beyond compliance, fully embracing the spirit and essence of best practices. However, corporate governance and CSR have addressed the importance of the board, which, due to its composition, plays a critical role in strategic decision-making and determining socially responsible actions (Bektur and Arzova, 2020). In addition to controlling the performance of business leadership and achieving transparency, most nations' laws governing business activity have recognized the need to create a board of directors with specific characteristics that can effectively supervise their operations. The board characteristics are regarded as one of the most essential components in the efficacy of the board of directors' supervisory and directing functions in achieving the business's goals (Kanakriyah, 2021), and ensuring that all stakeholder expectations are legitimate in a changing business environment (Birindelli et al., 2018). Therefore, the board structure and procedures have a crucial role in maintaining an organization's corporate governance (Yatim and Yusoff, 2014).

CSR disclosure plays a vital role in corporate strategy, influencing how firms engage with and produce value for stakeholders (Di Guida et al., 2022). The board is regarded as a crucial component of the governance system. Thus, its most significant duty is to ensure the quality and integrity of information exchanged between management and stakeholders (Bueno et al., 2018). Moreover, their involvement in monitoring and expanding volunteer governance disclosure decreases asymmetric information (Hapsoro and Fadhilla, 2017). The board must promote public communications that are complete, accurately present material facts, and comply with applicable regulations and laws. The board's characteristics could facilitate transparent, stakeholder-oriented actions and operations, ensuring accountability and engagement in the company's work. As a consequence, it may help firms improve their disclosure, accountability, and transparency to their stakeholders (Di Guida et al., 2022). It is therefore necessary to determine the characteristics required to perform their role efficiently (McLeod, 2019). According to Di Guida et al. (2022), certain board characteristics can play a crucial role in enhancing the level of disclosure, transparency, and accountability of companies towards their stakeholders, including board independence, gender diversity, and the presence of a CSR committee. The monitoring of sustainability reporting, including ESG reports, has become an essential component of the board of directors' job in ensuring the efficacy and thoroughness of the company's disclosure procedures (Tonello, 2010). According to Gupta and Chanchal (2022), effective ESG governance provides a robust structure for functional board oversight and proactive management of ESG issues. The board should include individuals with appropriate ESG skills and experience. However, clear roles and duties for board members and committees should be set to hold personnel and committees responsible and to promote the overall growth of ESG. Finally, the board should conduct frequent reviews of the organization's ESG strategy and performance against the agreed-upon ESG standards to maintain relevance and continuity in reporting (Gupta and Chanchal, 2022).

2.4 Theoretical Framework

In the accounting literature, researchers rely on many theories, including agency theory (Vitolla et al., 2019; Arayssi et al., 2020; Khaireddine et al., 2020; and Pozzoli et al., 2022), stakeholder theory (Manita et al., 2018; Issa and Fang, 2019; Abdelmoneim and El-Deeb, 2024), and legitimacy theory (Lokuwaduge and Heenetigala, 2016; Buallay and Al-Ajmi, 2019; and Buallay et al., 2020). These theories support the connection between CG and disclosure behavior (Khaireddine et al., 2020). Moreover, Gray et al. (1995) claimed that these theories might serve as a foundation for CSR disclosures and, by extension, ESG disclosures. That is because, through reporting, companies seek to inform their stakeholders about various ESG goals, activities, and performance (Buallay and Al-Ajmi, 2019). In addition, the companies engaged in and reported on their ESG practices to gain strategic and financial benefits (Arayssi et al., 2020). This section presents the above theories.

2.4.1 Legitimacy Theory

Over the past few decades, there have been academic arguments on the significance of sustainability reporting. According to Fatemi et al. (2018), many companies have begun voluntarily expanding their efforts to provide information on ESG, aiming to legitimize their existence and enhance their reputations. therefore, the legitimacy theory has become one of the most frequently cited ideas in social and environmental accounting. Parsons (1960, p. 175) cited in Mousa and Hassan (2015) defines legitimacy as “the appraisal of action in terms of shared or common values in the context of the involvement of the action in the social society”. Thus, companies are legitimate to the extent that their activities are consistent with the goals of the society in which they operate. According to the theory, companies should always strive to function within the borders and norms of their respective societies. These boundaries and conventions adapt with time, necessitating the company's responsiveness (Brown and Deegan, 1998).

However, according to Dowling and Pfeffer (1975), it is not always the case that companies engaging in illegal activities engage in effective inter-organizational transactions. In contrast, legal companies cannot get the necessary resources through voluntary transaction processes. They argue that a legitimate goal does not guarantee resource allocation, nor does resource allocation guarantee legitimacy. The first example is the relative lack of medical facilities in low-income and rural areas of the United States. The organized heroin distribution is an example of the latter. Three reasons could justify that: first, norms are dynamic and change over time, whereas legal change is considerably more formal, delayed, and requires a special statute or common law legislation. Second, standards can and do contradict one another, but the legal code is presumed to be more consistent. Third, regarding the formal character of legislation, society may be willing to allow certain behaviours informally but not legalize them; gambling may fall into this category. Under more authoritarian systems of administration, there may be an even weaker link between legality and legitimacy (Dowling and Pfeffer, 1975).

Any company operates within society and business is no exception, all function in a community via a social compact, stated or inferred, wherein its existence and expansion are reliant on delivering socially desirable outcomes for society as a whole and distributing economic, social, or political rewards to those who have power (Shocker and Sethi, 1973). As a result, a company must continuously fulfill the twin standards of legitimacy and relevance by proving that society needs its services and that the groups that benefit from them have society's acceptance. This implies that a company's survival may be jeopardized if society perceives that the organization has breached its social contract. When society believes that a company is not functioning acceptably or lawfully, particularly in relation to social and environmental issues, it can essentially revoke the organization's "contract" to carry out its activities (Chelli et al., 2014). Thus, a

difference between any two values presents a threat to the company's credibility. The legitimacy theory contends that companies can only exist if they adhere to societal norms, values, and beliefs.

Corporate disclosures are a response to environmental forces and the desire to justify their existence and conduct. Companies share social and environmental information freely to maintain their credibility. They want to give the appearance to society that they are socially responsible. The validity of this view rests on strict respect for the rule of law, as well as investors' and citizens' rights to a healthy environment, which are entrenched in the constitution (Ofoegbu et al., 2018). That gives organizations much flexibility in deciding on how much to publish and what to reveal within their responsibility. It is consequently necessary for the board of directors, policymakers, and investors to place a higher focus on board characteristics, such as the composition of audit committee members, when establishing the company's ethical disclosure (Othman et al., 2014). Aside from monitoring capacities, directors on the board provide essential resources to the organization in the form of knowledge, relationships, and legitimacy (Mallin et al., 2012). That shows the importance of the board of directors in maintaining the organization's legitimacy. Finally, according to Al-Hiyari et al. (2022), the legitimacy theory expands on stakeholder theory by recognizing that ESG considerations must include not just stakeholders' demands and expectations, but also societal values, principles, and norms. Relying on legitimacy theory, it shows that a strong ESG commitment contributes to legitimacy, resulting in fewer financial restrictions for enterprises and, ultimately, less investment inefficiency.

2.4.2 Stakeholder Theory

The term "stakeholders" is common in management studies and the accounting literature. Mitchell et al. (1997) explain the concept more broadly when identifying two views of stakeholder definition: the broad and narrow definitions.

On the one hand, according to the board definition by Freeman and Reed (1983), stakeholders are the individuals or groups who "can affect the achievement of an organization's objectives or who are affected by the achievement of an organization's objectives". On the other hand, Clarkson (1994) has defined the stakeholder in a narrower definition: "Voluntary stakeholders bear some form of risk as a result of having invested some form of capital, human or financial, something of value, in a firm. Involuntary stakeholders are placed at risk due to a firm's activities. But without the element of risk, there is no stake". Then Mitchell et al. (1997) classified stakeholders into three categories based on their power, legitimacy, and urgency.

According to Mitchell et al. (1997), power is the ability of stakeholders to impose their will on an organization and affect its activities. Powerful stakeholders can influence an organization's conduct. As a result, a party in a relationship can enforce its will on the relationship to the degree that it possesses. However, stakeholder power is not a constant; it can be gained and lost depending on the resources that they offer to the organization. Stakeholder legitimacy, the second category, refers to the perceived credibility or suitability of a stakeholder's claim for consideration in decision-making. Legitimate stakeholders are perceived as having the right to affect the organization.

Stakeholders could be anyone who may affect or be affected by the firm's operation or achievement, such as shareholders, community, government, customers, and even employees of the organization. According to Abdelmoneim and El-Deeb (2024), stakeholder theory considers all stakeholders appropriately and without discrimination. However, Amosh et al. (2022) built their study based on the stakeholders versus the shareholders' (owners') perspective, as shareholders comprise a significant part of the stakeholders. Shareholders, as owners, will be primarily interested in the organization's financial statements. As owners, they possess inherent rights and a contractual connection between shareholders and the organization. This link is described through agency theory

(Khatib and Nour 2021). Generally, according to the shareholder theory, an organization's board should prioritize improving corporate financial performance. However, according to stakeholder theory, the board of directors and corporate management have an impact on non-financial performance as well as meeting other stakeholder expectations (Amosh et al., 2022). As a result, according to stakeholder theory, integrated reports are used to fulfil a variety of stakeholder demands. It addresses the increased requirement for managers to focus on non-financial external challenges, such as resource shortages and market and economic developments. The idea is to integrate external elements with non-financial internal ones, such as future planning and organizational strategy. The combination offers a comprehensive long-term firm evaluation (Abdelmoneim and El-Deeb, 2024).

2.4.3 Agency Theory

The agency relation is defined as “a contract under which one or more persons (the principal(s)) engage another person (the agent) to perform some service on their behalf which involves delegating some decision-making authority to the agent” (Jensen and Meckling, 1976). Based on agency theory, the board serves as a control mechanism for aligning the interests of managers and shareholders in both financial and non-financial information. This obligation may thus be extended to integrated reporting, which is a tool that incorporates both non-financial and financial information. However, based on Vitolla et al. (2019), it is critical that the board not only encourages managers to use integrated reporting, which may be only a formal decision, but also ensures that high-quality data is delivered to eliminate asymmetric information and, as a result, agency costs.

Since the relationship between shareholders and corporate managers meets the definition of a pure agency relationship, it should come as no surprise that the issues surrounding the "separation of ownership and control" in the modern ownership corporation are inseparably linked to the general problem of agency.

That creates agency costs, in which the contractual relationship (including financial incentives) between the principal and agent provides suitable incentives for the agent to make decisions that maximize the principal's welfare. The disparity between his interests and those of the shareholders will increase agency costs. While the agent will then suffer just a portion of the expenses of any non-pecuniary advantages, he/she agrees to maximize his/her utility (Jensen and Meckling, 1976). Barako et al. (2006) explained that organizations' primary concern is the information irregularity between managers (agents) and shareholders (principals). According to the agency relationship, the information advantage is held by managers. Nevertheless, shareholders face ethical dilemmas because they are unable to assess and quantify the value of actions taken accurately. The agents may use the anonymity of their acts to achieve personal interests, which gives them the space to manipulate the information they provide.

In the agency theory, managers engage in actions that profit them even if they harm the organization's and shareholders' long-term interests. Therefore, separate CSR reports are expected to provide investors with gradually more helpful information in evaluating an organization's long-term viability. Focusing on separate CSR reports shedding insight into this new type of voluntary nonfinancial disclosure. In addition, organizations with better CSR operations are more likely to introduce themselves to the market to demonstrate their long-term commitment and differentiate themselves from competitors (Dhaliwal et al., 2011).

Suttipun (2021) employs agency theory to explain how the composition of boards affects ESG disclosure in the annual reports of Thai-listed companies. This is because board composition is critical to improving firm financial and non-financial reporting processes. Board information richness can be assessed through various operational characteristics, including the frequency of board meetings, the presence of board subcommittees, the tenure and experience of board members, and the representation of different ownership groups (Eisenhardt, 1989). Board

attributes such as size, independence, activity level, and diversity can enhance managers' control over their roles, leading to improved information quality (Vitolla et al., 2019). Moreover, A diverse board is crucial for effective monitoring of managers' activities while also providing them with the necessary autonomy to pursue growth opportunities that benefit the firm (Yang et al., 2022).

2.5 General background of ESG practice in GCC

GCC consists of six countries: Bahrain, the Kingdom of Saudi Arabia (KSA), Kuwait, Oman, Qatar, and the United Arab Emirates (UAE). It was established on November 11, 1981 (Uyar et al., 2019). They share the same geographical area and they are similar in their histories, cultures, traditions, and ethnicities, as well as in Islam as a religion, Arabic as a language, monarchy as a political regime, and oil as a source of economic growth (Benbouziane and Benmar, 2010; Shehata, 2016). However, banks and other financial institutions play a significant role in supporting the economies of the GCC countries (Al-Qudah and Houcine, 2023). It is ranked second after the oil industry in terms of GDP, except in Bahrain, where the sector represents the majority of GDP and banks are the largest publicly traded firms on local markets (Buallay and Al-Ajmi, 2019). In addition, GCC countries often have tight relationships with Western enterprises, either as subsidiaries or franchises or through their management practices (Shehata, 2016). These relationships aim to enhance GCC companies' transparency and disclosure practices (Uyar et al., 2019). Therefore, all GCC nations have implemented their corporate governance systems, either through code or legislation (Al-Musali et al., 2019). According to Salman and Nobanee (2019), CG rules mandate high-quality disclosure and openness of certain information and data, such as financial information, share ownership structure, pay of board of directors' members and senior executives, related party transactions, governance structure, and policies.

Since GCC countries hold nearly half of the global oil reserves, approximately 47%, GCC companies should begin to enhance their sustainability disclosures,

including ESG disclosures. During January 2023, the Exchanges Committee of the GCC published unified indicators and instructions for voluntary ESG disclosures by local listed companies. Although the indicators are still voluntary and do not replace existing ESG disclosure rules established by the GCC stock exchanges, they represent a significant step forward for regional organizations and investors. ESG indicators also show that the six GCC countries, all of which are oil-producing nations, are serious and committed to fostering and integrating green and sustainable economies, and that the region's future direction may be towards further harmonization of sustainability-related regulations.

However, the new approach develops ESG indicators for the three pillars of sustainability: the environment (e.g., GHG emissions and climate risk mitigation), social (e.g., child labor and global health), and governance (e.g., board diversity and sustainability reporting). They include 29 metrics associated with the World Federation of Exchanges (WFE) and the United Nations Sustainable Stock Exchanges (UN SSE) Initiative. Finally, these changes have the potential to massively expand the region's already rising foreign direct investment, and similar sustainability-related trends are expected to continue in the future.

2.5.1 ESG Practice in the Kingdom of Bahrain

The Kingdom of Bahrain is a major rising economy in the GCC area with a strong connection to global economic trends. In 2011, the Kingdom of Bahrain developed its corporate governance Code with the Ministry of Industry, Commerce, and Tourism, the Central Bank of Bahrain (CBB), and the National Corporate Governance Committee (Aktan et al., 2018). To boost investor confidence and economic development by implementing beneficial corporate governance practices. Disclosure and openness are fundamental aspects of this Code. Disclosure is required for outside monitoring to operate successfully. However, market monitoring alone cannot ensure adequate compliance with the Code. Thus, the Code proposes a joint monitoring system involving the board, the

firm's shareholders, and other relevant authorities and procedures. The firm's board of directors should encourage entrepreneurship while ensuring effective monitoring and management. Thus, the board must comprise both executive and non-executive directors, including completely independent non-executive members. The board is liable for ensuring the correctness and completeness of the firm's corporate governance principles, as well as conformity with this code.

As part of its voluntary commitment to the UN SSE initiative to promote sustainable and transparent capital markets, Bahrain Bourse considers ESG issues to be critical to its core business and is guided by the Bahrain Economic Vision. The rising emphasis on sustainable development, climate change, and the worldwide transition to more sustainable and inclusive economies has resulted in a surge in demand for transparent and thorough reporting on ESG data. Bahrain Bourse's optional ESG reporting standard for listed firms and other stakeholders came into life in June 2020. In January 2024, CBB provided guidance and two Appendices on how to report and disclose data for each ESG aspect. In addition to references to major international frameworks to provide additional guidance for Bahrain-listed companies. The optional ESG Guideline comprises the most recent reporting methodology generally embraced by the industry and helps listed firms navigate the shifting demands for ESG data disclosure. Investors use ESG data to assess a company's resilience and preparedness to manage changes in the environment in which it operates. The ESG Guideline also intends to help diverse market players incorporate sustainability into their everyday business operations, increase ESG data disclosure, and encourage openness for the long-term benefit of the market and, ultimately, society. ESG practices may benefit both firms and investors, and a focus on ESG can lead to improved and harmonized management practices, which are commonly related to a firm's ability to produce value and, therefore, important to the business and its shareholders. Finally, the ESG Guidelines have been implemented to help organizations identify, prioritize, and disclose the ESG concerns that are most important to them as a company.

2.5.2 ESG Practice in the Kingdom of Saudi Arabia (KSA)

In 2017, the Saudi Capital Market Authority (CMA) published corporate governance regulations for firms listed on the Saudi Arabia Exchange (Tadawul). Saudi Arabia is one of the countries with significant potential for foreign investment and a higher share value. As a result, there is a growing expectation that, shortly, international corporations will compete more for best practices in corporate governance to improve their performance (Algoere and Hasani, 2019). The goal was to promote accountability, transparency, and responsible stewardship of investor funds. The 2017 modification improved corporate governance and replaced the old version of the 1965 legislation, which was long overdue. It is inspired by other corporate governance advances across the world (Algoere and Hasani, 2019).

On April 25, 2016, Saudi Arabia released the Saudi Vision 2030. It is an ambitious economic strategy designed to cement the kingdom's position as the center of the Arab and Islamic worlds, an investment powerhouse, and a crossroads connecting three continents. Embracing best practices in openness and accountability is one of the primary pillars of Vision 2030, which aims to safeguard investors, reduce agency difficulties, and attract local and foreign funding (Habtoor et al., 2018). The decision to issue this guideline was a critical step in the development of accounting and reporting processes in Saudi Arabia. Moreover, the environment encompasses newly implemented corporate governance standards, a direct result of Saudi Arabia's economic reforms. As corporate transparency becomes a more important factor in investors' decisions on the Saudi stock market (Tadawul) (Alturki, 2014). In recent years, Saudi enterprises have become increasingly aware of the importance of ESG elements in their operations. While fully incorporating ESG factors into business procedures remains a challenge, organizations that value sustainability and ethical business practices may capitalize on enormous potential. The Saudi Exchange has introduced ESG disclosure requirements, aiming to support over 200 listed

companies and those in the pipeline. These rules aim to raise awareness and provide tools for managing the ever-changing marketplace. The reporting options track progress and highlight the benefits of adopting a sustainable strategy for company growth (Al-Surf, 2023).

2.5.3 ESG Practice in Kuwait

The Kuwait Stock Exchange (KSE), founded in 1944, is the oldest in the GCC area. Kuwait's government is promoting economic development and improving business and accounting processes (Alfraih and Almutawa, 2017). Following ratification by the National Assembly, the Kuwaiti Parliament adopted legislation establishing the CMA in January 2010. The Kuwaiti CMA aims to regulate securities activities based on principles of fairness and transparency, as well as to promote fair disclosure in operations and transactions. The KSE's recent growth has sparked interest from government bodies to improve the accounting and auditing profession, business environment, and investment laws to increase capital inflows and attract more local and foreign investors (Almutawa and Suwaidan, 2022).

Boursa Kuwait formalized its commitment to driving corporate sustainability in financial markets by joining the UN SSE at the end of 2017. Building on that initiative, Boursa Kuwait developed a comprehensive guide to enable market players to take their first step into the ESG universe by understanding the various methods of reporting and their significance, the rise of corporate sustainability, and the key areas to report on. Boursa Kuwait has developed an ESG report under Capital Markets Authority Resolution No. 136/2022. Boursa Kuwait published its latest ESG guidance on May 23, 2023, to assist listed companies in reporting on ESG issues and to meet the growing needs of various stakeholders, including investors, customers, suppliers, and regulators, for transparent and timely information.

2.5.4 ESG Practice in Sultanate of Oman

The Muscat Stock Exchange (MSX) was founded as the Muscat Securities Market (MSM) in 1988. After 10 years, the Omani Capital Market Law was enacted, and the Capital Market Authority (CMA) was established. The first corporate governance code was introduced in 2002. The codes of corporate governance got a second amendment in 2016. Oman is actively working to enhance its accounting and auditing structure. The primary goal of these changes has been to restore investor trust, enhance financial reporting quality, and protect stakeholders' interests by increasing board independence, accountability, transparency, openness, and responsibility among Omani-listed companies (Elghuweel et al., 2016). The CG code in Oman is well-established for improving the transparency of forward-looking reporting. In addition, the CMA serves as a monitoring authority for Oman's listed enterprises to ensure compliance with business legislation and CG codes.

In response to prevailing financial and economic challenges, the government has developed a new strategy and vision for 2040. This vision will help the government and society shift toward a thriving future. The goal is to diversify the economy and strengthen the Sultanate's private sectors (Al Sinani et al. 2021). Listed firms are subject to heightened scrutiny from stakeholders, legislators, and foreign institutional investors, who demand high levels of transparency and accountability in their annual reports. As a result, the vision will reduce information asymmetry (Lawati, 2022). Oman and the rest of the globe confront enormous problems regarding environmental sustainability, social justice, human rights, inclusion, and diversity. Therefore, Oman promotes sustainable development, and MSX became a partner exchange in 2022, embracing the UN Sustainable Development Goals (SDGs) and encouraging the formation of a sustainable and inclusive financial culture through Environmental, Social, and Governance (ESG) best practices. The MSX released ESG guidelines in 2023. The guidelines aim to increase openness and robustness in ESG reporting

by promoting voluntary reporting in 2024 (for actions completed in 2023). Reporting will be mandatory for public corporations starting in 2025, with the first reports due by March 31, 2025.

2.5.5 ESG Practice in Qatar

Qatar's stock market was founded in 1995, with the formation of the Doha Securities Market (DSM), which commenced operations in 1997. Qatar appropriately responded to the increased focus on corporate governance by amending the Qatar Code of CG in 2009, with numerous revisions issued after that, the most recent of which was in May 2017. The code includes rules that primarily address the various aspects of corporate governance that have emerged in recent years, particularly those relating to boards of directors, internal audit departments, audit committees, externally sourced auditors, social policy disclosure, and avoiding conflict of interest. The primary goal of these guidelines was to promote responsible and transparent behavior in the administration of such organizations (Awadallah, 2020). Qatar's rapid economic expansion necessitates the development of an investor protection environment through enhanced financial regulations for financial and non-financial reporting.

Since 2008, the State of Qatar has moved toward the concept of sustainable development as a general strategy (Vision 2030) aimed at achieving a balance between social, economic, human, and environmental development by supporting international efforts to reduce the contrary impact of climate change and implementing preventive measures to mitigate the adverse effects of pollution caused by economic activities on society and the environment (Al-Dhaimesh, 2020). In 2016, the Qatar Stock Exchange (QSE) joined the UN SSE project. Qatar aims to become a global hub for ESG investors, implementing an ESG guideline in line with international best practices in 2017 and establishing a specialized sustainability platform in 2018, which is considered the first in the region and continues to be maintained and updated for the benefit of listed

companies and investors alike. The platform allows listed firms to track their progress toward implementing sustainability standards and investors to examine and utilize that data when making their own investment decisions.2016

2.5.6 ESG Practice in the United Arab Emirates (UAE)

The United Arab Emirates (UAE) has become an appealing destination for foreign investment. With globalization, robust government oversight and investor safeguards are necessary. To maintain its appeal as an investment hub, the UAE government strives to foster strong openness and accountability for both domestic and foreign investors (Farhan et al., 2017). The stock markets in the UAE were established in 2000. To gain investors' trust, the government enacted specific laws, including those related to corporate governance. The efforts to construct corporate governance regulations in the UAE began in 2004. The Emirates Securities and Commodities Authority (SCA) developed the corporate governance code in 2006, which was made public in 2007 (Shehata, 2016). To address this requirement, the UAE SCA issued its CG Code in 2009, which applies to all companies listed on the Abu Dhabi Stock Exchange (ADX) and the Dubai Financial Market (DFM). The code went into effect in April 2010. The CG Code is based on the highest international corporate governance principles (Al-Gamrh et al., 2020).

During the previous several years, the UAE has made significant efforts to advance sustainability, as outlined in the “UAE Vision 2021” and the UN Sustainable Development Goals (SDGs). The use of ESG data is becoming increasingly critical by the day. Now, open and publicly available ESG data has a direct effect on investment research and decision-making processes. ADX and DFM have both made a formal commitment to driving sustainability in financial markets by partnering with the United Nations-led SSE program. In keeping with its commitment to driving market growth and sustainability in financial markets, the UAE government has launched this ESG Guide. That per Article (76) of the Chairman of the SCA Board resolution No. (03 R.M.) of 2020 about the adoption

of the Corporate Governance Guide for PJSCs requires PJSCs listed on any of the UAE capital markets to produce a sustainability report. On January 10, 2021, SCA released a general clarification to Article 76 of the Governance Code, providing greater information on the required components of the sustainability report and confirming that such a report must be published yearly.

2.6 Chapter Summary

This chapter provides an overview of ESG, its origins, and its evolution over time. The idea originated from the concept of socially responsible investing, whose core principle is to avoid investing in companies that engage in socially unethical behaviors. At the beginning of the 21st century, the ESG principles were further formalized by the UN Principles for Responsible Investment, which emphasized the incorporation of ESG criteria into financial analysis to promote sustainable investing. Since the board of directors' role is important in enhancing corporate disclosures. The following section provides an overview of their role and how board characteristics are regarded as one of the most essential components in the efficacy of the board's supervisory and directing acts in achieving the business's goals. Moreover, specific board characteristics can play a crucial role in enhancing the level of disclosure and transparency that companies provide to their stakeholders, including board size, independence, age, gender diversity, and the presence of a CSR committee. The chapter also reviews three theories (legitimacy, agency, and stakeholder) that explain the relationship between CG and disclosure behaviour. All the theories demonstrate the board of directors' role attributes and their effect on the overall corporation's disclosures, which include ESG disclosures and performance. The final section of the chapter provides an overview of the stock markets in the six GCC countries, as well as their respective ESG practices.

Chapter Three

Literature Review

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3.4 Chapter Summary

Chapter Three

Literature Review

3.1 Introduction

This chapter supplies an overview of previous literature on various board characteristics and their impact on ESG scores in different regions, followed by the research hypotheses. The purpose of reviewing the relevant research is to provide viewpoints and ideas from previous studies that are related to the study's scope and support the development of the study's hypotheses.

3.2 Literature Review

Previous research has investigated the relationship between ESG and various determinants or factors, including firm performance, firm characteristics, and board characteristics. For the purpose and the focus of the current study, the relationship between ESG and board characteristics is presented in some detail. ESG research has been significantly influenced by the work of John Elkington, who coined the phrase "Triple Bottom Line" in 1997. He emphasized the importance of balancing environmental and social concerns with financial performance for corporate success, leading to the incorporation of sustainability factors into corporate procedures and reporting. Another significant researcher is Robert G. Eccles, who has studied and written about sustainability and corporate reporting since the 1990s. Eccles helped to build frameworks and standards for reporting on ESG problems, including integrated reporting. Eccles and Krzus (2010) state that "It was agreed that now is the time to have the same level of coordinated international response as occurred with the financial crisis to the environmental crisis".

It is essential to acknowledge that ESG research and conversations have evolved over time, driven by the efforts of various scholars, practitioners, and

organizations. A diverse range of scholars and thought leaders contribute to the field's growth, generating new insights. All that has made ESG one of the most important topics recently. Interest in ESG integration is growing due to environmental and social concerns, the importance of non-financial variables in long-term financial success, and investor desire for sustainable and ethical investment alternatives (Hebb et al., 2015). Additionally, it motivates researchers to study ESG from various perspectives or areas, examining its impact and the factors that may affect or be affected by it.

The accounting literature contains several studies on this important research topic. For example, some studies investigate the relationship between ESG and company financial performance (Velte, 2017; Dalal and Thaker, 2019; Giannopoulos et al., 2022), reporting that ESG good performance enhances financial performance. On the other hand, other researchers examine the relationship between ESG and company value. For instance, Yoon et al. (2018) find that ESG, particularly governance practices, significantly affects the value of chaebol firms in the Korean market. Additionally, Behl et al. (2021) find that ESG and its individual components negatively and significantly affect the firm value of the Indian energy sector in the short run. In contrast, they have a positive and significant impact on company value in the long run. Aydoğmuş et al. (2022) and Cheng et al. (2023) find that the ESG composite score has a significant and positive correlation with company value. However, others highlight that considering ESG criteria can provide insights into a company's risk profile and help investors make more informed decisions (Kotsantonis and Serafeim, 2019).

On the other hand, other studies such as Barrymore and Sampson (2021) examine the impact of ESG disclosure on labour productivity and find that the effect of ESG disclosure on labour productivity is statistically significant and positive in some sectors and significantly negative in others; however, their main finding shows that firms with better environmental performance have higher labour productivity. Furthermore, several studies, such as Khalid et al. (2022),

examine the relationship between ESG disclosure and firm characteristics and governance mechanisms, including the characteristics of the audit committee (AC). For instance, Buallay and Al-Ajmi (2019), Salleh et al. (2022), and Al Lawati and Kuruppu (2023) investigate the relationship between AC characteristics and their role in sustainability performance. Their main results indicate that AC attributes, especially AC independence, are positively associated with ESG disclosers.

As interest in the effectiveness of boards of directors and their characteristics is central to these corporate governance shifts, the corresponding challenges have gathered substantial attention in academic research on boards of directors. Studies have focused on developing efficient boards and examining how changes in composition affect overall performance outcomes, including ESG performance. Therefore, many studies tend to examine the association between ESG performance and disclosure, as well as board characteristics.

For instance, Cucari et al. (2017) examine the impact of board diversity, including gender diversity, average age, the presence of independent directors, and the availability of CSR committees, on voluntary ESG disclosure. Managers and investors utilize ESG in their decision-making processes. They use a sample of 54 Italian listed companies from 2011 to 2014. The findings show that CSR disclosure of Italian companies is related to independent directors and the committee's CSR activities. Furthermore, females on the board of directors are negatively associated with a company's CSR disclosure, although board age is not significantly associated.

Biswas et al. (2018) study the effect of board composition on corporate social and environmental performance in Australia. The global demand for more diverse corporate boards has prompted firms to increase female representation on their boards. Additionally, the presence of women on corporate boards has a significant impact on women's equality, fair treatment, and human rights. In addition, Biswas et al. (2018) argue that the inclusion of women on the corporate board provides

an opportunity for a boardroom discussion on broader stakeholder issues that go beyond a discussion of financial performance and that, contrary to male directors, who are more focused on financial performance, females' directors exhibit a stronger orientation toward CSR. The ASSET4 ESG database is used as the dependent variable for social and environmental performance, while the independent variables are gender diversity, board independence, and the occurrence of a sustainability committee. They report that boards with more gender diversity, independence, and sustainability committees perform better in terms of social and environmental impact.

Birindelli et al. (2018) investigate the features of the board of directors that improve CSR performance through ESG scores. They use a sample of 108 listed banks in the US and Europe during the period of 2011–2016. The study aims to examine the influence of a critical mass of female directors on ESG performance. They use ESG score as the dependent variable, while board gender diversity, board independence, board size, board activity, and CSR committee are all used as independent variables, which were identified from the Thomson Reuters Asset4 database. The empirical findings show that there is a positive association between ESG scores and board size and the existence of a CSR committee; on the other hand, there is a negative association with board independence. According to gender diversity, the study demonstrates that the association between women on boards of directors and a bank's ESG scores is an inverted U-shaped curve. As a result, the critical mass hypothesis for banks is not confirmed, demonstrating that a board with a balanced gender composition has a positive influence on a bank's sustainability performance.

Ismail and Latiff (2019) investigate the relationship between the board of directors' diversity features that go beyond gender diversity and include board age, board composition, board abilities, and board reputation, and the ESG score in Malaysia from 2010 to 2016. As publicly listed firms in Malaysia become increasingly aware of the need for sustainability disclosure, more corporations are

disclosing their sustainability efforts in their annual reports. Despite the necessity for a sustainability statement issued by Bursa Malaysia in 2015, records reveal that several corporations made sustainability disclosures in their annual reports considerably earlier than required by the regulator (Ismail and Latiff, 2019). As a result, it is unclear whether such disclosures are driven by the board of directors' commitments or by heavy regulatory pressure. Ismail and Latiff (2019) find that board diversity, including age, abilities, and reputation, positively affected a company's sustainability practices. In contrast, gender diversity and independent directors negatively correlate with corporate sustainability practices.

Martínez-Ferrero et al. (2020) investigate the effect of the board of directors in emerging American nations on the sustainability performance of an organization. The study was conducted in four emerging countries (Chile, Argentina, Brazil, and Mexico) in the period from 2012 to 2018. Since, most prior studies performed in Latin America do not take into consideration the impact of board diversity, including gender, nationality, and cultural variations, on CSR performance, Martínez-Ferrero et al. (2020) aim to contribute through their study by studying the effect of implications of board composition (board cultural diversity and the presence of a CSR committee) on sustainability performance. They use Thomson Reuters Eikon to provide ESG scores, the dependent variable, for publicly held companies in Latin America. On the other hand, the independent variable is the board's cultural diversity. The findings demonstrate the mediating influence of a CSR committee, with a positive effect on sustainability performance (ESG score) connected to board cultural diversity.

Shakil et al. (2020) examine the impact of board gender diversity on ESG performance in 37 banks from 2013 to 2017 in the US. Refinitiv's ESG score serves as a proxy for banks' ESG performance. The employed independent variable is gender diversity, measured as a percentage of women on the board of banks. Bank-specific (bank size, leverage, market-to-book value, profitability, and dividend yield) variables are used as control variables. The final analysis

reveals a significant positive correlation between board gender diversity and the ESG performance of US banks. Nevertheless, the results suggest that ESG issues have a negligible moderating influence on the relationship between board gender diversity and ESG performance.

Arayssi et al. (2020) investigate the impact of the board of directors' composition on ESG reporting in GCC countries. The study employs a sample of publicly listed firms from 2008 to 2017. Board independence, the presence of women on the board, and the duality of the chief executive officer are used as independent variables. In contrast, the dependent variable is the ESG score, as indicated by Thomson Reuters' database. The empirical findings of the study indicate that board independence and female board representation have a positive impact on ESG scores. While CEO-chaired boards are less likely to promote social initiatives and report on ESG scores.

Khairredine et al. (2020) explore the French market via a sample of 82 listed companies from 2012 to 2017. They investigate the influence of board characteristics on governance, environmental, and ethics disclosure. The dependent variable used by Khairddine et al. (2020) contains the corporate governance disclosure index (CGDI), the corporate environment disclosure index (ENVDI), and voluntary ethics disclosure (ETHDI), while the independent variables include the board size, the board gender diversity, board independence, CEO/chair duality, and board meetings. The findings show a positive and significant association between board independence, board meetings, and board gender diversity with governance, environmental, and ethics disclosure. In contrast, the board size has a positive relationship with corporate environmental disclosure only.

Suttipun (2021) examines the impact of board composition on ESG disclosures in Thailand. Traditionally, companies focus on profit maximization to meet their stockholders' satisfaction over other stakeholders. To promote sustainable development, since 2015, listed companies on the Stock Exchange of Thailand

have been required to provide ESG disclosures in their annual reports. Therefore, the author conducted the study between 2015 and 2019. The dependent variable is the ESG disclosure collected from the company's annual report, while the independent variables include board size, board meetings, female board committee, compensation committee, nomination committee, audit committee, CSR committee, remuneration, CEO compensation, and board compensation. The findings revealed a significant positive relationship between board size, the presence of a feminine board, the compensation committee, the CSR committee, and the remuneration committee, and ESG disclosures. In contrast, the audit committee and CEO remuneration showed a negative relationship with ESG disclosure. Additionally, the author notes that from 2015 to 2019, listed companies in Thailand increased their ESG disclosure in annual reports.

Chouaibi et al. (2021) analyse the relationship between board characteristics (board size, board independence, CEO duality, and board gender diversity) and integrated reporting quality. They employ a sample of 253 listed companies from the ESG index between 2010 and 2019, using data from the Thomson Reuters database (ASSET4) and annual reports of European organizations, mainly France, Spain, Germany, and Italy. The findings indicate that the size, independence, and gender diversity have a positive and significant correlation with the quality of integrated reporting. It is also worth noting that the appointment of an independent non-executive chairman is favourably connected with the quality of integrated reporting, and this holds for organizations with a non-independent chairperson.

Nery and Morales (2022) examine the influence of board independence, gender diversity, CEO duality, and board size on the quality of ESG disclosures of businesses listed on the Philippine Stock Exchange (PSE). To identify what characteristics the board needs to possess to effectively support higher-quality ESG disclosures, they discovered that board gender diversity has a significant positive impact on the quality of ESG disclosures, but they are unable to state the same for board independence, CEO duality, or board size. Their findings highlight

the significance of independence and diversity in CG. Furthermore, they encourage corporations to strive to strengthen board independence, not only to increase ESG scores but also to improve stakeholder and minority shareholder participation, which is compatible with sound corporate governance.

Chebbi and Ammer (2022) observe the relationship between board composition and ESG disclosure moderated by corporate governance improvements in the Saudi Arabia market. The sample of the study comprises 38 Saudi companies listed on the primary market of the Saudi Stock Exchange (Tadawul) from 2015 to 2021. They utilize the Bloomberg database to obtain the ESG scores, the dependent variable, while board composition (size, independence, and gender diversity) serves as the independent variable. Data is collected manually from companies' annual reports. Regression findings show that board size and independence have a significant positive association with ESG disclosures, while gender diversity has a positive but insignificant association with ESG disclosures.

Yilmaz et al. (2022) examine the impact of board gender and cultural diversity on corporate governance and social performance in 24 emerging market nations, selected according to the International Monetary Fund's classification, for a period of 10 years (2010–2019). The study employs two dependent variables: corporate governance and social performance, both identified from the Thomson Reuters database. The independent variables are the board's cultural and gender diversity. The results indicate that both gender and cultural diversity have a positive impact on corporate governance performance. However, under social performance, gender and cultural diversity have positive but insignificant impacts. The results provide valuable insights for organizations, policymakers, and stakeholders to promote the link between gender and cultural diversity requests and corporate sustainability in emerging economies.

Güngör and Şeker (2022) investigate the effect of board structure (board gender diversity, board independence, board size, CEO duality, audit committee (AC) expertise, and CSR committee) on the ESG performance of worldwide

corporations in the coal, oil, and gas sectors. Regression analyses show that board gender diversity, board size, board independence, AC experience, and the CSR committee have a positive and significant association with ESG performance. In comparison, CEO duality has a significant negative association with ESG performance.

Khemakhem et al. (2022) investigate the correlation between gender diversity on boards and main committees and ESG disclosure in Canadian-listed corporations. Using a structural equation model, the authors find that gender diversity has a joint impact on ESG disclosure at both the board and committee levels. Furthermore, the analysis shows that female committee presence has a greater effect on ESG disclosure than female board representation. Ultimately, the study reveals that serving on committees enables women to make more significant contributions to board decisions. Moreover, the effect of board gender diversity is not only limited to the presence of females on the board, but also to their representation on committees.

Menicucci and Paolucci (2022) examine the impact of board gender diversity on Environmental, Social, and Governance (ESG) performance in Italian banks. Since the board of directors has to be knowledgeable about ESGs for their importance to be integrated into corporate strategies, Menicucci and Paolucci (2022) investigate particular board of directors' characteristics (board size, age, activity, gender diversity, independence, and (CSR)/sustainability committees) and their impact on ESG performance. The study employs a sample of 274 Italian banks over five years (2017-2021). Through the use of panel data regression analysis, they report that the board's activity, size, independence, and the establishment of a CSR/sustainability committee all have a positive impact on a bank's ESG performance; however, there is no substantial association between the board's average age and ESG practices.

Based on agency theory, Marrone et al. (2023) analyze 863 multinational organizations from Bloomberg's S&P 1200 global index to examine how

governance characteristics and high-tech industry participation influence ESG disclosure quality. The study's dependent variable is the ESG disclosure collected from Bloomberg's ESG Disclosure Index (ESGD), which represents the quantity of ESG information published by sampled companies. In contrast, the independent variables are board features such as board size, gender diversity, independence, average age, tenure, frequency of meetings, and membership in high-tech industries. The findings reveal that board features, such as size, gender diversity, independence, and participation in the high-tech industry, all have a positive impact on ESG disclosure. Surprisingly, the average age of board members has a positive impact on ESG disclosure, while board tenure has a negative impact.

Nuhu and Alam (2023) investigate the influence of board features on ESG disclosure in emerging markets. The authors aim to fill the gap in the need for a study that focuses on the association between board characteristics and ESG disclosure in the energy industry. The study encompasses a panel of 1,260 firm-year observations from five BRICS member nations over ten years, from 2010 to 2019. To measure the dependent variable, data from listed energy industry companies were collected using the Bloomberg database. The study's independent variables include board size, board gender diversity, board composition, and board diligence. Findings revealed that board gender diversity, board composition, and board diligence are all positively connected to the amount of ESG disclosure, whereas board size had no association with ESG disclosure. The study presents new indications on the association between BC and ESG disclosure in the energy business of rising BRICS nations.

Almaqtari et al. (2023) investigate the impact of board attributes, environmental disclosures, and firm specifics on ESG practices in two regions, Asia and Europe. The study sample consists of 8094 listed companies from 2016 to 2021. The authors utilize two dependent variables (the ESG score and the environmental pillar score). For independent variables, the study categorized

them into three groups: the first group includes five variables related to the environmental dimension. The second category contains four financial and environmental variables. The third category related to board characteristics includes board diversity, board size, board independence, board meetings, and board tenure. The findings indicate that most environmental dimension factors and financial environmental variables have a positive and significant impact on the degree of organizations' environmental and ESG performance. Additionally, the study finds that board tenure, independence, size, and the frequency of meetings are related to higher levels of environmental disclosures, reporting, and ESG scores. However, board diversity appears to have a minimal impact on environmental disclosures, particularly in Asian nations. Finally, the findings show that organizations with stronger revenue growth, larger size, market capitalization, and superior presentation disclose environmental and sustainability concerns more frequently and thoroughly.

Finally, Lewa et al. (2024) attempt to evaluate the effect of board attributes on sustainability reporting. Based on the stakeholder, agency, and legitimacy theory. The study evaluated 110 non-financial enterprises listed in ten Sub-Saharan African (SSA) countries over five years (2016–2021). The dependent variable used is the sustainability reporting index (SRI score), calculated using a composite measure that includes SEE performance metrics. Independent variables include board size, board independence, board meetings, board gender diversity, board chair gender, and CEO gender. The findings indicate that board size, independent meetings, and gender diversity have positive effects on sustainability reporting. However, there is no relationship between the board chair's gender and the CEO's gender in sustainability reporting. Overall, the findings support the board's responsibility in directing resources to sustainability programs, monitoring managerial conduct, and assuring the company's sustainability commitment.

Considering the preceding, the current study differs from previous studies in various aspects: First, the current study provides a shred of evidence on the effect

of the board of directors' characteristics on the ESG scores by using a sample of 498 observations from GCC countries. Second, the board of directors' characteristics used in the current study include five variables (board size, board independence, board gender diversity, board culture diversity, and the presence of a CSR or sustainability committee formed by the board). Previous research has not examined these characteristics as a collection of independent variables in a single GCC study. Third, to the best of the researcher's knowledge, no comparable previous research has been undertaken that focuses on the all-listed companies of various sectors, which mostly focus on nonfinancial sectors and exclude the financial sector or banking.

3.3 Hypotheses Development

This study utilizes specific board characteristics to examine their impact on ESG disclosure scores, addressing the research gap, particularly in studies conducted in the GCC region. Therefore, some board characteristics are selected to investigate the impact on ESG disclosure scores. Previous studies present a range of results; some findings from previous research show positive relationships between specific board characteristics and the existence of a CSR committee, as well as ESG disclosure scores, while others find negative relationships. However, some previous studies have not found a significant relationship between board characteristics and the existence of a CSR committee, on the one hand, and ESG disclosure scores, on the other.

Non-financial information, including environmental and social aspects, has become just as important as financial information (Arayssi et al., 2020). Companies strive to enhance transparency to meet stakeholder demands, which extend beyond financial performance alone (Welbeck et al., 2017). Nowadays, investors rely on integrated reports as strategic components for assessing a company's development, profitability, and competitiveness (Tomo and Landi, 2016; Chouaibi et al., 2021). The existing literature emphasizes the crucial role of

the board of directors in safeguarding stakeholders' interests, including those of investors, against opportunistic management behaviour. The board of directors is also seen as playing a fundamental role in corporate profitability and CSR performance, as measured by ESG scores (Kao and Saari, 2019; Francoeur et al., 2017). Based on the above literature review and the main objectives mentioned earlier, the current study employs five independent variables (board size, board independence, board gender diversity, board culture diversity, and the presence of a CSR/sustainability committee) to investigate the impact of these variables on ESG disclosure scores. The variables were chosen in line with the study's objective and are appropriate for the countries being studied, as board size and independence are considered critical characteristics that help maintain the effectiveness of the board's role, despite knowing that women's presence on GCC boards is the world's lowest, a result of societal and cultural constraints (Issa and Fang, 2019). However, GCC nations have recently followed the worldwide trend of increasing female diversity on boards. Therefore, the board gender diversity variable was selected to be included in the study variables and to investigate if it has an effect on the ESG score in GCC. Regarding board cultural diversity, it is considered a relatively new variable in recent studies. To the best of the researcher's knowledge, very few studies have utilized it as a variable, especially those conducted in the GCC. The last variable is the existence of a CSR/sustainability committee within the selected board committees, as it is one of the recent variables to test its impact on ESG scores. It is used in the current study to explore whether GCC companies have a committee or not.

3.3.1 Board Size

Many researchers claim that one of the most critical characteristics that determines the effectiveness of board oversight is board size (Chebbi and Ammer, 2022). Board size usually refers to the number of directors on the board. Previous literature offers two conflicting arguments about board size: on the one hand,

according to the corporate governance literature, small corporate boards are more effective monitors than big boards because they have a higher level of membership coordination, fewer communication issues, and a lower frequency of serious free-rider concerns (Ahmed et al., 2006). However, the smaller size means lower diversity on the board; based on Bear et al. (2010), the lack of diversity results in a lower likelihood that the board will focus on ESG policies. On the other hand, according to Husted and De Sousa Filho (2019), larger boards enable the inclusion of more diverse opinions in decision-making processes. A larger number of directors must negotiate more to establish agreements and are less likely to make choices that depart much from a more centrist position, reducing the variability of organizational performance. Moreover, larger boards are more likely to strengthen the impact of CSR on financial performance by effectively addressing CSR and providing more instruments for consulting and measuring responsibilities (Rossi et al., 2021).

The literature provides several theories to determine the relationship between board size and ESG disclosures. In line with resource dependence theory (RDT), assessing boards emphasized board size and composition as markers of the board's capacity to offer essential resources to the organization. Under Zahra and Pearce (1989), directors can extract resources for effective organizational operations due to their status in their professions and communities. Furthermore, according to the RDT, directors facilitate the firm's interaction with its general and competitive surroundings. According to stakeholder theories, large boards represent a diverse range of interests and can enhance a firm's engagement in corporate social responsibility (CSR) investments. Large boards may represent a particular type of social capital, resulting in more balanced decision-making (Hillman and Keim, 2001). Additionally, large boards offer greater access to their organization's external environment, thereby reducing uncertainty and facilitating the acquisition of essential resources (Ntim et al., 2013). However, according to legitimation theory, smaller boards may have a lower level of diversity in gender,

expertise, education, and stakeholder representation, reducing their efficacy in controlling the organization's operations (Menicucci and Paolucci, 2022).

Several studies have examined the correlation between board size and ESG disclosures, specifically how the composition of a company's board of directors influences its ESG reporting practices. Overall, the research evidence indicating the link between board size and ESG disclosure is mixed. For instance, Jizi et al. (2014) report that board size has a positive effect on CSR disclosure in US banks. Akbas (2016) analyses the relationship between board characteristics and the degree of environmental disclosure in the 2011 annual reports of non-financial companies in Turkey. The study findings show that board size has a significant and positive association with the level of environmental disclosure. The above findings support the argument that the increased number of members may enhance the board's monitoring efficacy and have a beneficial impact on the degree of environmental disclosure, as larger boards are likely to possess a broader range of knowledge, skills, and abilities. Husted and De Sousa Filho (2019) point out that board size has a positive impact on ESG disclosure. They argue that large boards increase ESG disclosures; they suggest the range of board sizes be from 5 to 20 directors. Kumari et al. (2022) investigate the impact of board size on environmental disclosure practices in Indian sensitive and non-sensitive industries, reporting a positive and significant association between board size and environmental disclosure. They argued that larger boards may have more diverse perspectives and resources, enabling them to be more engaged in environmental disclosure practices. However, Miranda et al. (2023) demonstrate that a larger board size has a substantial and adverse impact on ESG performance in the European banking sector. The justification of the result is the fact that the larger the board, the more complex the supervision and monitoring of banks' decisions and operations may become because of the higher degree of difficulty and limitation in terms of coordination and communication between its members,

which can influence it to become more intricate in economic issues. Based on the above discussion, the first research hypothesis is expressed as follows:

H1: The size of the board of directors is positively associated with the ESG scores of GCC-listed companies.

3.3.2 Board Independence

The board's primary duty is to supervise and monitor senior management to ensure that they are acting in the best interests of shareholders and other stakeholders. It is commonly known that a board with a larger number of independent directors may effectively oversee management (Liao et al., 2015). According to Core et al. (1999), shareholder advocates continually advocate for an increase in the number of independent, outside directors on boards. This is because internal board members are more loyal to management; hence, the CEO may have considerably greater influence over internal board members compared to external (independent) board members. In principle, independent non-executive directors are unaffected by organizational insiders such as managers. As a result, firms with a larger share of independent directors are expected to disclose more about the real condition of the company (Lopes and Rodrigues, 2007; Oliveira et al., 2011). The board independence variable is measured as the percentage of independent board members (Chau and Gray, 2010; Chebbi and Ammer, 2022).

Several theories suggest that board independence affects ESG. Under the agency theory, appointing independent directors is required to prevent financial conflicts between the motivations of insider directors or managers and those of shareholders, particularly minority shareholders. It is expected that a higher number of independent boards results in a more diverse view of how the firm should be operated (Nery and Morales, 2022). Moreover, based on Armstrong et al. (2014), management may intentionally promote openness and transparency to recruit independent directors who would not join the board if the information

environment were transparent. This tends to increase transparency and better disclosures.

On the other hand, according to the resource dependency approach, lay governors become crucial tools for accessing information, networks, and resources, and voluntary disclosure may help eliminate uncertainty and power imbalances between institutions and their external environment. This is because governing boards led by independent directors may enhance access to essential resources, such as contacts, contracts, and competencies, including legal and risk management experience (Ntim et al., 2017). However, based on Khairiddine et al. (2020), the stakeholder theory emphasizes the need for independent directors on boards to defend the interests of investors. Thus, the inclusion of independent outside directors may not only enhance efficiency for shareholders by mitigating agency conflicts but also improve legitimacy by serving as representatives of multiple stakeholder groups. This could enhance the safeguarding of the stakeholders' interests by providing a higher level of ESG disclosures (Halid et al., 2022).

Existing empirical research demonstrates that the inclusion of independent directors has positive impacts on environmental practices. Cucari et al. (2017) investigate the relationship between ESG disclosure and the diversity of the board of directors in Italian-listed companies, finding a significant positive correlation between ESG disclosure and the presence of independent directors. This suggests that the greater the number of independent directors in the firm, the more information is available related to ESG disclosure. Masud et al. (2018) examine the impact of corporate governance (CG) elements on environmental sustainability reporting performance in three South Asian countries— India, Bangladesh, and Pakistan —during 2009–2016, and indicate that environmental sustainability reporting has a positive association with board independence. This supports the premise that more independent directors actively monitor stakeholders' interests and possibilities. At the same time, a larger board size with

more diversified skills and experience puts pressure on and advises management to improve the performance of environmental sustainability reporting. Khaireddine et al. (2020) investigate the impact of board characteristics on the governance, environmental, and ethical disclosures of listed companies on the French stock exchange, finding that board independence has a positive and significant influence on these disclosures. Meanwhile, Gurol and Lagasio (2022) investigate the relationship between board structure and the sustainability performance of European banks, reporting that independent directors are positively and significantly related to ESG scores. They stated that large bank boards, including those with women and independent members, perform better in terms of ESG transparency. Furthermore, Chebbi and Ammer (2022) confirm that the size of a board and its level of independence have a positive and significant influence on ESG disclosure.

On the other hand, previous studies have reported conflicting results. For instance, Birindelli et al. (2018) and Almaqtari et al. (2023) report that board size, independence, and diversity had a negative relationship with ESG and environmental reporting. Based on the above discussion, this study's second hypothesis is as follows:

H2: The independence of the board of directors is positively associated with the ESG scores of GCC-listed companies.

3.3.3 Board Gender Diversity

Diversity can have a positive impact on the board's performance by bringing unique perspectives to the table. Among the various characteristics of the board, gender diversity has received growing attention in recent years in connection with CSR and ESG disclosure, making it one of the most frequently studied variables in recent research. Kansaku et al. (2000) propose that females use both hemispheres more evenly during language processing than males. Therefore, Hillman (2014) suggests that women make judgments that consider many

stakeholders and parties. This variable, board gender diversity, refers to the percentage of women on the company's board of directors, or the number of females on the board as a percentage of the total number of board directors.

Several theories explain the relationship between the presence of women on boards of directors and ESG activities. According to resource dependence theory, increasing the size and diversity of a company's board of directors can enhance the security of its resources and its relationship with the external environment (Nguyen and Locke, 2015). The above supports the view that the number of women directors in the boardroom is also important, confirming the theory that if female board presence influences business performance, the effect becomes more significant as the number of female directors increases.

Nery and Morales (2022) conclude that companies with female directors on their boards will increase awareness of non-financial issues, which is common in ESG disclosures. The presence of female directors is expected to have a positive impact on ESG scores. Based on critical mass theory, Manita et al. (2018) explain that when a subgroup's size reaches a specific level, known as "critical mass," its impact increases significantly. Based on the above argument, when a minority group reaches a critical mass, its relationships with the rest of the group undergo a qualitative shift. However, the situation changes when members of the minority group form a critical mass and personal contacts improve. When the majority members are confronted with at least three viewpoints from the minority group, the group tends to consider and learn from the minority more effectively. As a result, they suggest that having at least two female directors can be sufficient to create significant changes in a board's choices, including those involving ESG issues.

While Konrad et al. (2008) agree that numbers make a difference in experiences, they argue that the presence of multiple women breaks stereotypes, changes an all-male communication dynamic, and fosters change. They believe that having three women can be a "magic number" in group dynamics, suggesting

that this configuration can be particularly beneficial for creating change. This highlights the importance of addressing gender stereotypes and promoting gender equality.

On the other hand, stakeholder theory utilizes integrated reporting to fulfill a variety of stakeholder demands. It addresses the increased requirement for managers to concentrate on nonfinancial external challenges such as ESG, resource shortages, and market and economic developments (Abdelmoneim and El-Deeb, 2024). Harjoto et al. (2014) state that stakeholder theory supports the assumption that more diverse boards are more successful at monitoring social responsibility performance than less diverse boards. However, Ntim et al. (2013) summarize that diverse governing boards can enhance public accountability and transparency by strengthening relationships with internal and external stakeholders (stakeholder theory), providing access to resources like research funds (resource dependence theory), and promoting corporate legitimacy and reputation through wider representation (legitimacy theory).

The selection of female directors is expected to influence the quality of sustainability reporting, as previous studies have found mixed outcomes on the correlation between ESG reporting and/or scoring and female board diversity. Kyaw et al. (2017) suggest that increasing board gender diversity enhances both environmental and social performance, leading to an improvement in overall performance. In Malaysia, Wasiuzzaman and Mohammad (2019) find that the participation of women in the board of Malaysian organizations has a significant positive impact on ESG disclosures. In the GCC region, Arayssi et al. (2020) find that higher female board membership enhances the transfer of a company's favourable image by increasing social responsibility. Khemakhem et al. (2022) reveal a positive and significant correlation between the presence of females on boards and committees and ESG disclosure by Canadian companies.

On the contrary, Shamil et al. (2014) find that female directors have a negative association with sustainability reporting in Sri Lankan 2012 organization annual

reports. Husted and De Sousa Filho (2019) examine how board structure affects ESG disclosure in four Latin American countries (Brazil, Mexico, Colombia, and Chile). They find that women on the board have a negative impact on ESG disclosure. However, Chebbi and Ammer (2022) find that board gender diversity has a positive but insignificant correlation with the ESG disclosure of Saudi companies between 2015 and 2021. Based on the above, the third hypothesis of this study is:

H3: The gender diversity of the board of directors is positively associated with the ESG scores of GCC-listed companies.

3.3.4 Board Culture Diversity

Recent literature highlights the importance of exploring cultural and gender identity as a crucial component of diversity, which fosters the exchange and discussion of varied viewpoints within the board to enhance overall performance (Landaw, 2020). Therefore, diversity on the board and among committee members encourages individuals from varied backgrounds to "fit" into current work cultures rather than attempting to make the culture more inclusive (De Klerk and Singh, 2023). Furthermore, cultural diversity on boards of directors improves by bringing fresh perspectives, perceptions, and interpretations of information. Directors can also be significant sources of information, as they are familiar with the specific market or nation in which the firm operates or intends to expand. This country's cultural variety increases the value of foreign directors by offering varied knowledge sources, communication networks, and language resources (Frijns et al., 2016). Frijns et al. (2016) also define board cultural diversity as the average cultural gap between members.

Several theoretical perspectives explain how board culture diversity may impact ESG disclosure. Abdelgawad (2023) suggested that, according to Stakeholder Theory, board culture diversity plays a crucial role in ESG disclosure, as it incorporates the interests and concerns of various stakeholders. Diverse

boards are perceived as being more aware of the demands and expectations of stakeholders, leading to higher ESG disclosures. This is because a variety of corporate stakeholders have put pressure on companies to exceed the legally required level of ESG practices, thereby enhancing their environmental and societal impact. Management's decision to allocate a portion of a company's financial resources to meet the needs of various corporate stakeholders demonstrates this level of efficiency and transparency (Eliwa et al., 2019).

According to institutional theory, board diversity is a response to institutional demands to implement socially responsible practices, leading to increased ESG disclosure. However, the impact of board diversity on ESG disclosure may vary depending on the institutional environment (Abdelgawad, 2023). Moreover, according to the resource dependence theory, cultural diversity improves the quality of board oversight. These board resources are critical for the organization's survival and success (Al-Hiyari et al., 2022). Cultural diversity provides resources and motivates businesses to meet their social and governance requirements to maintain long-term commitments to internal and external stakeholders (Yilmaz et al., 2022). In line with both agency and legitimacy theories, cultural diversity encourages boards to value diverse perspectives and avoid group-thinking issues when monitoring ESG performance to reduce agency problems, ensure that ESG performance is consistent with societal norms, and reduce the likelihood that management only discloses ESG information that is beneficial to their firms to achieve societal legitimacy (Cheung and Lai, 2023).

Martínez-Ferrero et al. (2020) suggest that board cultural diversity promotes a company's commitment to addressing sustainability challenges, leading to enhanced social and environmental performance in firms based in Argentina, Brazil, Chile, and Mexico. On the other hand, Al-Hiyari et al. (2022) conclude that board cultural diversity reduces the impact of ESG performance on IE for businesses operating in environments prone to overinvestment, implying that when corporate boards include more foreign directors, ESG performance has a

less pronounced effect on reducing managers' proclivity to overinvest. However, Ouyang et al. (2022) find that board members with different cultural backgrounds can boost the company's ESG performance. Bigelli et al. (2023) reveal that cultural diversity has a significant effect on getting higher ESG ratings. Additionally, Cheung and Lai (2023) find that cultural diversity within the board of directors has a positive correlation with ESG performance, suggesting that board cultural diversity is crucial for enhancing social performance, while business ethics are essential for improving both environmental and social performance. Andreas and Chang (2024) report that nationality diversity impacts the disclosure of CSR, suggesting that the participation of foreign nationals on boards of directors might improve CSR transparency. In light of the above discussion, the fourth research hypothesis is as follows:

H4: The cultural diversity of the board of directors is positively associated with the ESG scores of GCC-listed companies.

3.3.5 The Existence of CSR/Sustainability Committee

The efficacy of the board of directors depends not only on its composition but also on its governance structure. Therefore, board committees, such as audit, nomination, and remuneration committees, are a part of the board's governance structure, but environmental committees are relatively new (Tingbani et al., 2020). However, according to Harrison (1987), since the 1960s, an increasing number of board subcommittees have developed, and CSR committees within the board were established in the 1970s. This highlights the crucial role of the CSR/sustainability committee within the board structure. According to Peters and Romi (2013), the environmental committee and audit committee can be equally important to the organization. Establishing a CSR/sustainability committee is a significant way to leverage prospects for a company's long-term success. Also, a CSR/sustainability committee allows a board to plan and implement sustainability programs, increasing shareholder participation and knowledge of the company's ethical

culture (Menicucci and Paolucci, 2022). Environmental problems are also increasingly being discussed in board committees. Such committees can go by a variety of titles, including "environmental committees," "environmental and public affairs committees," "human resources and governance committees," and "environment, health, and safety committees." Still, they all have authority over environmental matters (Rodrigue et al., 2012).

When a company establishes a CSR committee, it demonstrates a commitment to engaging with stakeholders and addressing social responsibility and sustainability concerns. The expertise, insights, and capabilities of the CSR committee play a critical role in integrating social responsibility and sustainability into the organization's strategic management process. By having a dedicated CSR committee, companies fulfil their obligations towards stakeholders and actively work towards meeting their CSR commitments (Mahmood et al., 2018).

According to agency theory, the composition of the board serves as a significant CG mechanism to address and minimize the agency problem and information asymmetry between the principal and agent (Suttipun, 2018). Additionally, the adoption of ESG disclosure and performance can help mitigate conflicts of interest, as it provides shareholders with a broader set of corporate information beyond mandatory disclosures. ESG disclosures, which encompass voluntary information related to ESG factors, allow for a more comprehensive assessment of a company's operations (Cerbioni and Parbonetti, 2007). Moreover, such disclosures contribute to enhancing management accountability and transparency (Suttipun and Dechthanabodin, 2022). The creation of CSR committees and the predicted consequences for CSR outputs can also be explained using legitimacy theory. Given the evolving societal expectations surrounding corporate social responsibility (CSR), it becomes crucial for companies to establish effective mechanisms that enable them to attain legitimacy for their CSR-focused initiatives. At the core of social responsibility lies the organization's commitment to integrating social and environmental factors into its decision-making processes

and taking responsibility for the consequences of its actions on society and the environment. This entails promoting transparency, adhering to ethical principles, fostering sustainable development, complying with relevant laws, and aligning with widely accepted social standards of conduct (Dyllick and Muff, 2016). Furthermore, the tactics employed by ESG experts to convince various stakeholder groups of the validity of organizational practices can be leveraged to significantly improve ESG performance (Levonian, 2022).

Most of the prior empirical research reports an association between CSR committees and ESG disclosure. For instance, Adnan (2012) indicates that the existence of CSR board committees has a substantial positive impact on CSR reporting within companies, suggesting that culture and corporate governance structures interact to influence the extent of CSR reporting. Eberhardt-Toth (2017). His purpose is to discover how to create successful board CSR committees that improve the organization's social performance. Elkington's study (1998) finds that a CSR committee is necessary to impact corporate social performance positively. Furthermore, evidence suggests that higher corporate social performance is more likely in organizations with specific board CSR committee characteristics, including a higher proportion of independent directors, non-membership of the CEO, a higher average age of directors, a female chair, and a smaller size.

Birindelli et al. (2018) report a positive relationship between ESG performance and the inclusion of a CSR committee, indicating that their findings demonstrate that a CSR committee may help banks establish credibility for sustainability concerns and earn the legitimacy of all stakeholders. On the other hand, Martínez-Ferrero et al. (2020) find that the presence of a CSR committee has a positive effect on sustainability performance, possibly due to board cultural diversity. They conclude that cultural diversity and the establishment of a CSR committee are seen as mechanisms that enhance corporate commitment to CSR and consequently lead to improved company performance. The creation of a CSR

committee is considered a positive corporate governance practice by shareholders and managers, as it reinforces the firm's dedication to addressing CSR concerns. On the other hand, few studies show a negative association between CSR committees and CSR disclosure and performance (Michelon and Parbonetti, 2010; Rupley et al., 2012). On these grounds, the following and final research hypothesis is formulated:

H5: The existence of a corporate social responsibility/sustainability committee within the board committees is positively associated with the ESG scores of GCC-listed companies.

3.4 Chapter Summary

This chapter presents several previous studies and shows that the literature emphasizes the crucial role of the board of directors in safeguarding stakeholders' interests. In addition, the literature reveals that the board plays a role in companies' value, profitability, and CSR performance, that recently measured by ESG scores. The previous investigations examine the impact of the board of directors' characteristics on ESG score variables in several regions. Previous studies offer a range of results. Some previous research reports positive relationships between certain board characteristics and the existence of a CSR committee with ESG scores, while others find negative relationships. However, this literature review aims to present insights and ideas from previous studies that are relevant to the scope of the current study and support the development of its hypotheses. Finally, five research hypotheses are developed to explore how the board of directors' characteristics affect the ESG scores of GCC-listed companies.

Chapter Four

Methodology

4.1 Introduction

4.2 Sample Selection

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4.4 Measurement of the Variables

4.4.1 Dependent variable

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4.4.3 Control variables

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Chapter Four

Methodology

4.1 Introduction

This chapter presents the methodology used to assess the effect of the board characteristics on the ESG score. The chapter provides further details on the research technique employed in this study, including the study population, sample selection, data-gathering procedure, and statistical analysis. In addition to descriptive statistics, it provides details on correlation analysis and regression models used to achieve the study objectives. It also includes measurement of dependent, independent, and control variables. To achieve the study's main objective, the independent variables are used to investigate the impact of the board characteristics; (board size, board independence, board gender diversity, board culture diversity, and the existence of a CSR/sustainability committee which the board may form) on the ESG score of the listed companies in GCC countries.

4.2 Sample Selection

This research investigation targeted the GCC countries (Bahrain, KSA, Kuwait, Oman, Qatar, and UAE), using a sample of 166 listed companies across the six GCC countries, spanning three years. As shown in Table 4.1, the sample includes financial and non-financial companies. The initial population of the current study consisted of listed companies in the GCC stock market, totaling 729. The research's targeted period is three years (2021-2023), and the necessary data were obtained and collected for the study's dependent, independent, and control variables. However, during the data collection process, it was discovered that some data were missing due to the unavailability of data from some companies during one or more years of the study period, which was caused by the unavailability of annual reports or corporate governance reports (in case they were

presented separately) or ESG scores, which are initially collected from the London Stock Exchange Group (LSEG) database. As a result, 563 companies were excluded, and we ended up with 166 companies as a sample for the study. As presented in the table, there are 65 financial companies, and all the data needed were available, which means that the study sample will be very low. To enhance the study's results, non-financial companies were added to the sample, increasing the total number of companies to 101. In addition, the intention of including non-financial companies in the sample is for more in-depth and further analysis.

The companies included in the sample of this study were selected based on the LSEG database and the availability of ESG scores in the database. The final sample comprises 166 financial and non-financial companies, as all the necessary data and information are available. The sample was then filtered by (1) excluding companies for which no information was available on ESG scores, and (2) eliminating companies for which data for the board characteristics was not available. Table 4.1 provides a detailed breakdown of the number of observations for each country.

Table 4.1: Sample of GCC-listed companies

Country	Number of listed companies	Excluded companies	Included companies	Final firm observations (2021-2023)	
Bahrain	42	25	17	51	10%
KSA	223	185	38	114	23%
Kuwait	155	141	14	42	8%
Oman	112	103	9	27	5%
Qatar	51	11	40	120	24%
UAE	146	98	48	144	29%
Total	729	563	166	498	100%

Note: The above data was collected from GCC stock markets by the end of 2023.

Figure 4.1 shows the distribution of the research sample based on each of the six countries of the GCC. The UAE has the biggest sample size, which is 48, and it represents 29% of the total sample. Then Qatar has 120 firm-year observations, demonstrating a percentage of 24%. Followed by KSA with 114 firm-year observations and 23% of the total sample. Bahrain, Kuwait, and Oman represent the rest of the sample sizes, which are 10%, 8%, and 5% of the total sample, respectively.

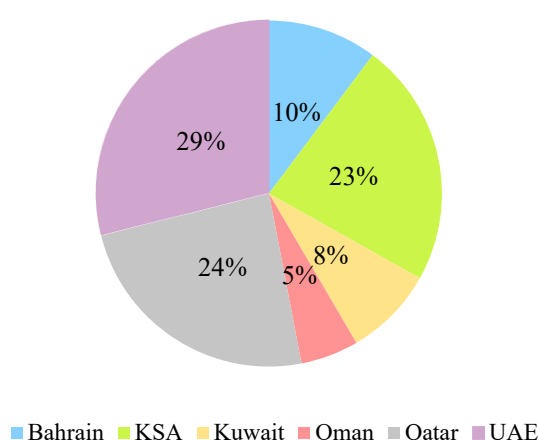


Figure 4.1: Sample based on country

The sample includes all listed companies representing various industries in the GCC countries' markets, such as banks, insurance companies, oil and gas companies, telecommunications, healthcare, etc. However, Table 4.2 below divides the companies into two industry types: financial and non-financial, for each country, because financial companies have their regulations; on the other hand, non-financial industries are similar in their regulations (Pagliari and Young, 2015). As shown in Table 4.2, the Non-financial companies represent 61% of the total sample. On the other hand, the financial companies represent 39% of the sample.

Table 4.2: The Sample by Industry

Country	Industry type				Total			
	Non-Financial	%	Financial	%	Companies total	%	Total observation (2021-2023)	%
Bahrain	5	5%	12	18%	17	10%	51	10%
KSA	30	30%	8	12%	38	23%	114	23%
Kuwait	6	6%	8	12%	14	8%	42	8%
Oman	4	4%	5	8%	9	5%	27	5%
Qatar	29	29%	11	17%	40	24%	120	24%
UAE	27	27%	21	32%	48	29%	144	29%
Total	101	61%	65	39%	166	100%	498	100%

4.3 Data Collection

As previously stated, the current study's examination is based on data collected from the company's annual and CG reports (if given separately) and from the LSEG database. Therefore, data related to independent and control variables are collected from companies' annual reports and CG reports for the selected listed firm on the GCC stock exchange for the current period, spanning three years from 2021 to 2023, through their websites. As for the data related to the dependent variable, they are collected from the LSEG database provided in the UoB labs.

The data is collected using the quantitative method. The method is based on a structured plan that provides guides on what data to collect and how to collect it (Sadan, 2017). Therefore, to acquire the data utilized in the current study. First, the ESG score, the study's dependent variable, is collected as a ready score provided in the LSEG database. For the independent variables, the board characteristics (board size, board independence, board gender diversity, board culture diversity, and the existence of a CSR or sustainability committee formed by the board), are collected manually from the company's annual reports or the corporate governance report when needed to collect information about the board characteristics. On the other hand, the control variables are collected manually from the companies' profiles to determine the company age, in addition, the annual reports mainly (the statement of financial position and the statement of

profit or loss and other comprehensive income) are used to identify company size and to calculate the ROE and debt-to-equity ratios. For other data that is not available from the above source, other third-party websites are used to collect such information (the website of each stock exchange in GCC countries).

4.4 Measurement of the Variables

This section measures the study's variables, which include the dependent variable (ESG scores), the independent variables (BOSIZE, BOINDP, BOGEDI, BOCUDI, and EXCSRC), and the control variables (COMSIZE, COPROE, COLEVE, and COMAGE).

4.4.1 The Dependent Variable

The dependent variable of the current study is the ESG scores. Arayssi et al. (2020) investigate the impact of board composition on ESG reporting in all GCC-listed companies by using Thomson Reuters to identify ESG scores. In contrast, most previous studies conducted in GCC countries have utilized the Bloomberg database to calculate general ESG-related scores, as seen in Buallay and Al-Ajmi (2019), Chebbi and Ammer (2022), and Dempere and Abdalla (2023). However, the ESG Score in this study is intended to, in a transparent way, quantify a company's relative ESG performance, commitment, and effectiveness using company-reported data obtained from LSEG.

LSEG has one of the most extensive ESG datasets in the industry, covering over 90% of global market capitalization across more than 630 ESG measures dating back to 2002 (Refinitiv, August 2024). The category scores are combined into three pillars: environmental, social, and corporate governance. The ESG pillar score is a comparative sum of category weights, which differ by industry for the environmental and social categories. However, the governance category weights are consistent across industries. The pillar weights are standardized to

percentages ranging from 0 to 100. The ESG score was measured using a subset of 186 metrics for the three pillars. The ESG score assesses a company's environmental performance based on factors such as emissions, resource utilization, and innovation. The social considerations included in the ESG score are evaluated based on a company's community, human rights, workforce, and product responsibility. Finally, the ESG score takes into account governance elements, such as corporate social responsibility (CSR) strategy, management, and shareholder engagement (Refinitiv, 2024, August).

4.4.2 Independent Variables

The study includes five independent variables. Each of them is anticipated to significantly influence the dependent variable, the ESG Score, based on previous research. Table 4.3 shows the measurements for each independent variable: board size (BOSIZE), board independence (BOINDP), board gender diversity (BOGEDI), board cultural diversity (BOCUDI), and the existence of a CSR or sustainability committee formed by the board (EXCSRC).

Table 4.3: Independent variables of the study

Independent variable	Acronym	Expected Sign	Measurement	Reference
Board size	BOSIZE	+	The number of board members	Béji et al. (2020). Gürol and Lagasio (2022)
Board independence	BOINDP	+	Percentage of independent board members	Chau and Gray (2010). Chebbi and Ammer (2022)
Board gender diversity	BOGEDI	+	Percentage of women on the board of directors	Cordeiro et al. (2020), Ali and Firmansyah (2023)
Board culture diversity	BOCUDI	+	Percentage of board members who have a cultural background different from the location of the corporate headquarters	Martínez-Ferrero et al. (2020), Ouyang, et al. (2022)
The existence of the CSR committee	EXCSRC	+	A dummy variable is equal to 1 if the company has a CSR committee, and 0 otherwise.	Menicucci and Paolucci (2022). Cucari et al. (2017)

4.4.3 Control variables

In addition to the independent variables, this research incorporated four control variables, that govern how the independent variables affect the dependent variable they were company size (COSIZE), company profitability measured by return on equity (COPROE), company leverage measured by debt to equity (COLEVE), and company age (COMAGE) all are presented below in Table 4.4:

Table 4.4: The control variables of the study

Control variable	Acronym	Measurement	Reference
Company size	COSIZE	Natural logarithm of total assets	Chebbi and Ammer (2022)
Company Profitability	COPROF	The company's ROE, calculated by net income divided by the value of total shareholders' equity	Menicucci and Paolucci (2022)
Company Leverage	COLEVE	Debt-to-Equity ratio, measured by dividing total debt by total shareholders' equity	Wahyuningrum et al. (2022)
Company age	COMAGE	The number of years since the company was established	Arayssi, et al. (2020)

4.5 Data Analysis

To achieve the primary goal of the current study and assess the influence of board characteristics on ESG scores, the data analyzed using descriptive statistics is used to define all variables (dependent, independent, and control). Descriptive statistics determine and provide the maximum, minimum, mean, and standard deviation values for each variable. In addition to the descriptive statistics, Pearson correlation is used to assess the strength of the association between the dependent variable (COESGS) and five independent variables, as well as four control variables. Furthermore, a hierarchical multiple regression (HMR) analysis is used because it allows for the testing of variables in two models. Furthermore, to examine the effect of independent variables (BOSIZE, BOINDP, BOGEDI,

BOCUDI, and EXCSRC) on the dependent variable (COESGS), while controlling for the control variables (COSIZE, COPROE, COLEVE, and COMAGE). The first model uses the ESG scores as the dependent variable and the four control variables model. The second model uses the COESGS as the dependent variable, along with the independent variables of five board characteristics and the four control variables. The regression equations used in the two models are as follows:

Model 1:

$$ESG_{i,t} = \beta_0 + \beta_1 COSIZE + \beta_2 COPROF + \beta_3 COLEVE + \beta_4 COMAGE + \varepsilon$$

Model 2:

$$ESG_{i,t} = \beta_0 + \beta_1 COSIZE + \beta_2 COPROF + \beta_3 COLEVE + \beta_4 COMAGE + \beta_5 BOSIZE + \beta_6 BOINDP + \beta_7 BOGED I + \beta_8 BOCUDI + \beta_9 EXCSRC + \varepsilon$$

Where ESG is the dependent variable (the ESG score). β_0 is the constant, and β_1 - β_4 are the coefficients of control variables. While β_5 - β_9 in model 2 are the coefficients of the independent variables. In addition, i stands for the firm, t stands for the period, and ε is a random error.

4.6 Chapter Summary

This chapter presents the research methodologies utilized to achieve the study's objectives and test the hypotheses. Additionally, the chapter provides a detailed description of the research sample from GCC-listed companies, as well as the data collection for both independent and dependent variables. Data is collected for a period of three years, from 2021 to 2023, resulting in 498 company firm-year observations. The key data sources for the current analysis are the company's annual reports, CG reports for the data related to board characteristics (independent variables), and the LSEG database for the ESG score (dependent variable). The chapter then discusses how dependent, independent, and control

variables are assessed and measured. Finally, it proceeds to the data analysis, which includes two regression models used to test the research hypotheses.

Chapter Five

Findings and Discussions

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5.2 Descriptive statistics

5.2.1 The Dependent Variable

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5.4.2 Regression Analysis (Model 2)

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Chapter Five

Findings and Discussions

5.1 Introduction

This chapter presents and discusses the research findings based on the study sample of 498 firm-year observations from GCC-listed companies. The current study uses the Statistical Package for Social Sciences (SPSS) version 25. Descriptive statistics for each variable used in the study (dependent, independent, and control variables) are presented in detail, followed by the results of Pearson correlation analysis, which investigates the individual correlations among board characteristics as independent variables and control variables on one side and ESG scores as the dependent variable on the other. Finally, the results of the HMR regression analysis (two models) are presented. The first model examines the influence of control variables on ESG scores, while the second model assesses the effect of independent variables while controlling for the same control variables on the same dependent variable, ESG scores.

5.2 Descriptive Statistics

This section shows the descriptive statistics, including the maximum, minimum, mean, and standard deviations of all variables (dependent, independent, and control variables).

5.2.1 The Dependent Variable

The ESG score (COESGS) is the dependent variable of this study. Descriptive statistics of ESG are presented below in Table 5.1. The table shows that 0 out of 100 is the minimum score, which indicates that at least one company in the sample has 0 scores of ESG. On the other hand, the maximum score is 87.75. The average score is 30.82 out of 100, while the standard deviation is 20.58, indicating that the

ESG scores of the sample have a wider range of values. This indicates a gap between listed companies in GCC countries, as some companies (at least one) do not provide any information about their ESG practices, while others achieved an approximately 88 score. Moreover, the average score is considered low, as it is lower than one-third of the ESG score, indicating that the overall ESG score of listed companies in GCC countries is low. This could be because GCC countries have recently focused on ESG and its practices. In addition, ESG disclosure in developing countries is less sophisticated and less organized than in developed countries (Arayssi et al., 2020).

Table 5.1: Dependent Variable Descriptive Statistics

Variable	Observations	Minimum	Maximum	Mean	Std. Deviation
Dependent variable: COESGS	498	0.00	87.75	30.82	20.58

Further descriptive statistics of the dependent variable, which is the ESG score (COESGS), are presented in Tables 5.2, 5.3, and 5.4 below. These tables present descriptive statistics of COESGS by country, year, and industry, providing a better understanding of the ESG score levels within the study sample.

5.2.1.1 ESG Score of GCC Countries

This section provides the descriptive statistics of ESG scores for the six GCC countries (Bahrain, KSA, Kuwait, Oman, Qatar, and UAE) during the period (2021-2023). As shown in Table 5.2 below, Bahrain has 51 firm-year observations, KSA has 114 firm-year observations, 42 firm-year observations for Kuwait, and 27 firm-year observations for Oman. It is considered the lowest country in the total number of companies for information availability. 120 firm-year observations for Qatar, and finally, 144 firm-year observations for the UAE, which represents the highest number of companies in the sample.

As presented in Table 5.2, all GCC countries have a zero value as their minimum COESGS, except for Oman, which has a score of 5.84 as its minimum COESGS. This indicates that Oman is the only country among all GCC countries that has no missing ESG score. On the other hand, Bahrain has the highest maximum COESGS among the countries, 87.75, followed by UAE with 86.72 COESGS, and the KSA with 75.86 COESGS. Then Qatar, Kuwait, and Oman, respectively. However, the average COESGS in Kuwait, which is 37.58, is considered the highest mean. One possible reason is that, starting from 2012, the Kuwaiti government and stakeholders, with the help of the UN, urged the creation of best practice models and the integration of sustainable reporting. Moreover, the average score of KSA is 35.13 COESGS, followed by the UAE at 32.05 and Bahrain at 31.43. The lowest average COESGS scores are 24.31 and 23.40 for Qatar and Oman, respectively. As mentioned above, Bahrain has the highest mean score of 87.75, which emphasizes that increasing ESG can be justified by the nation's 2030 economic objective. Under UN 22 guidelines, the Bahrain Bourse releases yearly sustainability reports detailing the sustainability goals and impacts achieved over the year (Ahmed, 2022).

Table 5.2: ESG score of GCC Countries

Country	Observations	Minimum	Maximum	Mean	Std. Deviation
Bahrain	51	0	87.75	31.43	21.63
KSA	114	0	75.86	35.13	20.93
Kuwait	42	0	70.76	37.58	23.39
Oman	27	5.84	57.12	23.40	12.72
Qatar	120	0	73.25	24.31	16.73
UAE	144	0	86.72	32.05	21.60

5.2.1.2 ESG Score According to Years

This section describes ESG scores for the six GCC countries (Bahrain, KSA, Kuwait, Oman, Qatar, and UAE) from 2021 to 2023. In general, it shows clear improvement in the COESGS scores over the three years.

Table 5.3: ESG Score According to Years

Years	Observations	Minimum	Maximum	Mean	Std. Deviation
2021	166	0.00	79.27	24.45	21.96
2022	166	4.52	81.29	32.75	18.46
2023	166	3.16	87.75	35.27	19.70

As Table 5.3 shows, the minimum COESGS is only 0 in the first year of the study (2021). It is the lowest score, indicating that at least one company in the sample did not disclose any ESG practices during 2021, while the minimum COESGS for the other two years (2022 and 2023) are 4.52 and 3.16, respectively. The maximum COESGS score is from the last year (2023), with a score of 87.75. The average COESGS was 24.45 in 2021. While in 2022, it was 32.75, and 35.27 in 2023.

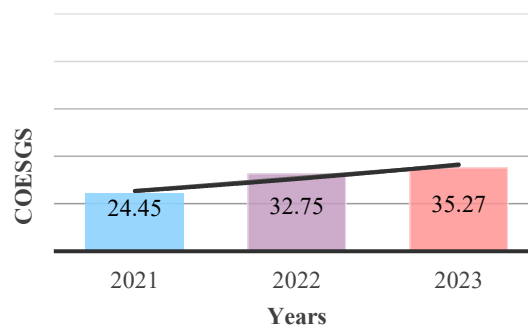


Figure 5.1 ESG score over the years

Graph 5.1 shows the average COESGS over the study period (2021-2023). The graph illustrates that COESGS has shown improvement over the years. This means that ESG practices are continually improved over time. A similar result is

reported by Wasiuzzaman and Mohammad (2019), who find that companies in Malaysia are increasingly promoting their ESG practices. In addition, Chebbi and Ammer's (2022) report that sustainability procedures align with Saudi Vision 2030 and the Saudi Stock Exchange's ESG disclosure criteria, which helps develop ESG practices over time.

5.2.1.3 ESG Score According to Industry

This section discusses how COESGS operates across industries in the six GCC countries (Bahrain, KSA, Kuwait, Oman, Qatar, and UAE) from 2021 to 2023.

Table 5.4: ESG score According to Industry

Industry	Observations	Minimum	Maximum	Mean	Std. Deviation
Non-Fin	303	0	86.72	28.97	20.53
Banking	114	0	87.75	40.16	20.53
Insurance	48	0	56.50	25.47	16.43
Fin-Com	33	0	56.55	23.36	16.49

Table 5.4 presents the minimum, maximum, mean, and standard deviation of COESGS across industries included in this study. The study contains four industries, which are shown in the table. The non-financial industry comprises 303 firm-year observations, representing the most significant number of observations across all industries. It has a range of COESGS between 0 and 86.72. The second industry is banking, which has 144 firm-year observations with a range of COESGS between 0 and 87.75. The banking industry has the highest COESGS as the maximum value over other industries. On the other hand, the insurance industry has 48 firm-year observations. While the financial companies' industry, the last industry, has 33 firm-year observations, both have a similar range of COESGS between 0 and 56.5.

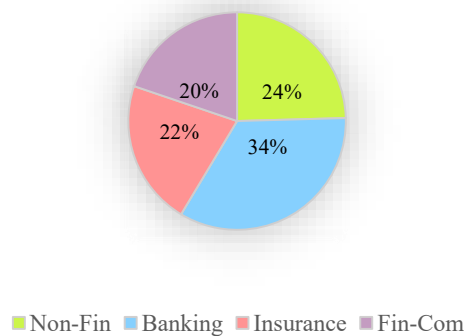


Figure 5.2 ESG Score According to Industry

Graph 5.2 demonstrates the average COESGS from 2021 to 2023, as a percentage for each industry. According to Menicucci and Paolucci (2022), ESG activities are now becoming a key performance indicator for stakeholders (especially investors), and including ESG aspects in financial reporting is probably the most effective way to increase the market share of socially responsible bank commitments. Given the increased interest of institutional stakeholders in ESG operations, an optimal ranking of ESG scores may help banks improve their reputation, market appeal, and economic success. As a result, the banking sector's incorporation of environmental activities, socially responsible behavior, and governance regulations is viewed as an opportunity to enhance societal trust and thereby improve ESG performance (Miranda et al., 2023).

5.2.2 Independent Variables

This section presents descriptive statistics for the independent variables: board size (BOSIZE), board independence (BOINDP), board gender diversity (BOGEDI), board cultural diversity (BOCUDI), and the existence of a CSR or

sustainability committee formed by the board (EXCSRC). Table 5.5 provides complete descriptive data for these variables.

The first independent variable is the BOSIZE, which represents the number of board members of the sampled companies. The CG codes in the GCC countries do not specify a number for the board of directors. However, the number of members should be proportionate to the size and nature of the company's activities. As shown in Table 5.5, the minimum number of board directors is 5, and the maximum number is 12. This result is consistent with what Sahraoui and Alfadli (2024) reported. The average BOSIZE is 9 members. The standard deviation of BOSIZE is 1.74.

Table 5.5: Independent Variables Descriptive Statistics

Independent variable	Observations	Minimum	Maximum	Mean	Std. Deviation
BOSIZE No.	498	5	12	9	1.74
BOINDP %	498	0	100	47	21.52
BOGEDI %	498	0	40	5	7.09
BOCUDI %	498	0	55	6	10.77
	N	Exist	Not exist	Exist %	Not exist %
EXCSRC	498	34	464	6.8	93.2

BOINDP, which is the second independent variable, is measured as a percentage of independent directors on the board. The corporate governance code of each GCC country recommends having some independent directors on the board of each listed company. However, as shown in Table 5.5, the minimum of board independence is 0%, while the maximum is 100%. The average is 47%, which aligns with the recommendations of the CG codes of GCC countries. The standard deviation is 21.52%, indicating that the BOINDP percentage varies within the research sample.

The third independent variable is BOGEDI, which is the percentage of women directors on the board of directors. According to Wasiuzzaman and Mohammad (2019), gender diversity has garnered increased attention in recent years in terms of CSR and ESG disclosure. This is because women in leadership roles could influence organizations' ESG disclosure levels (Shakil, 2021). As presented in the table above, the minimum percentage is 0, while the maximum is 40%. On the other hand, the average BOGEDI is 5%. The standard deviation of 7.09% indicates that gender diversity in GCC countries is considered low. This might be because cultural and customary constraints prevent women from fully participating and having equal chances for leadership at all levels of decision-making in economic and public life (Issa and Fang, 2019).

The fourth independent variable, BOCUDI, represents the percentage of board directors with a cultural background that differs from the culture of the company's location. Table 5.5 shows that the minimum percentage of BOCUDI is 0%, while the maximum is 55%. The mean score of BOCUDI is 5%, with a standard deviation of 10.77%. This means that the average of board members in the sample is from different cultural origins than the company headquarters location, which is only 5% of 498 firm-year observations. The percentiles show that most GCC companies do not present foreign directors on their boards.

The last independent variable is the existence of a CSR, or sustainability committee, formed by the board. It is measured by identifying the presence of a CSR or sustainability committee within GCC companies. As shown in Table 5.5 above, among the 498 firm-year observations, only 34 companies have a CSR or sustainability committee (6.8%) from 2021 to 2023. On the other hand, the CSR, or sustainability committee, does not exist in 464 companies for the period (2021-2023) by 93.2%.

5.2.3 Control Variables

Descriptive statistics of control variables (company size - COSIZE, company profitability measured by return on equity - COPROE, company leverage measured by debt to equity - COLEVE, and company age - COMAGE) are presented below in Table 5.6 shows central tendency measures including the minimum, maximum, mean, and standard deviation for each variable during 2021 to 2023.

Table 5.6: Control Variables Descriptive Statistics

Control variable	Observations	Minimum	Maximum	Mean	Std. Deviation
COSIZE (\$)	498	4 million	664 million	21 million	62 million
COPROE (%)	498	-6.16	82	7	54
COLEVE (%)	498	0	28.02	2.42	2.86
COMAGE (No. of years)	498	3	90	35	17

Table 5.6 above reveals that the total assets of the GCC companies' sample range between \$4.77 million and \$664 billion. The average total assets is \$21.50 billion with a standard deviation of \$62.57 billion, which means that the values varied among GCC companies from 2021 to 2023.

The second control variable in this study is the company's profitability, measured by the return on equity (ROE) ratio. As shown in Table 5.6, the minimum COPROE is -6.16%, while the maximum COPROE is 82%. The mean of COPROE is 7% with a standard deviation of 54%.

The third control variable is company leverage, which has been measured using the debt-to-equity ratio based on 498 firm-year observations of GCC companies from 2021 to 2023. The minimum value of COLEVE is 0%. However, the maximum value of COLEVE is 28.02%. The average value of COLEVE is 2.42% with a standard deviation of 2.86%.

The last control variable is company age, represented in Table 5.6 as the number of years the company has been in operation. The range of companies' ages spans from 3 to 90 years. The average age is 35 years, and the standard deviation is 17 years, indicating that the company age has a wide range among GCC companies during the research period (2021-2023).

5.3 Pearson Correlation Findings

Pearson's correlation is used to examine the relationship between two or more variables. The r value determines the strength of the relationship among variables (Turney, 2024). Berman (2016) explains that it is a statistical approach for determining the relationship or correlation between two variables by comparing their properties and assigning a score ranging from -1 to +1. According to Lazar et al. (2017), the r is -1.00, indicating a perfect negative linear connection between the two variables. When the r value for two variables is 1.00, it indicates a perfect positive linear connection between them. Each specific rise in one variable's scores fully predicts a particular increase in the other variable. Finally, when the r value is zero, it indicates no linear relationship between the variables.

Table 5.7 illustrates the results of the correlation between the dependent variable, which is the ESG score, and the independent and control variables. It demonstrates that all associations between variables are less than 0.70, implying that there is no strong correlation between different variables. Furthermore, the table shows that specific correlations have significant relationships while others do not.

Table 5.7 demonstrates a substantial positive, weak correlation of 0.310 between the dependent variable, ESG score, and the independent variable, board size. The results show that board size is positively related to ESG scores, supporting the concept that having more board members leads to higher or better ESG scores. Additionally, board size should be confined to the number of

members specified in each GCC country's Corporate Governance Code (CG code). Paolone et al. (2024) obtain similar results, finding a positively significant relationship at the 0.01 level between the variables, which supports the importance of board size in enhancing ESG scores.

Table 5.7: Pearson correlation analysis

	BOSIZE	BOINDP	BOGEDI	BOCUDI	EXCSRC	COSIZE	COPROE	COLEVE	COMAGE	COESGS
BOSIZE	1									
BOINDP	-.119**	1								
BOGEDI	-0.019	.252**	1							
BOCUDI	.106*	.166**	.210**	1						
EXCSRC	.154**	-.089*	.122**	.208**	1					
COSIZE	.370**	-0.086	0.065	0.079	.212**	1				
COPROE	-0.014	-0.054	0.06	0.025	0.022	.111*	1			
COLEVE	.209**	0.014	-0.018	0.022	-0.018	.368**	-.260**	1		
COMAGE	.301**	0.012	0.057	0.021	.133**	.169**	-0.015	.214**	1	
COESGS	.310**	0.02	.214**	.156**	.257**	.480**	.127**	.186**	.163**	1

* Correlation is significant at the 0.05 level (2-tailed). ** Correlation is significant at the 0.01 level (2-tailed).

The table shows a positive and weak correlation of 0.020 between the independent variable, board independence, and the dependent variable ESG score. These results are consistent with those reported by Menicucci and Paolucci (2022). This suggests that board independence is not connected with ESG ratings, which contradicts the notion that the more independent members on the board, the higher the ESG scores.

In Table 5.7, there is a weak positive relationship (0.214) between COESGS and board gender diversity (BOGNDI). Chebbi and Ammer (2022) find similar findings. This suggests that ESG is more likely to be developed within companies with a higher percentage of female directors on their boards. According to Arayssi et al. (2020), female directors are more likely to address environmental and social concerns effectively, resulting in better ESG scores.

Similarly, Table 5.7 shows a weak positive relationship ($r = 0.156$) between the independent variable, board culture diversity, and the ESG score. Paolone et

al. (2024) reveal a similar correlation between BOCULDI and COESGS. The results suggest that greater diversity within the board, in terms of culture, leads to a higher likelihood of prioritizing and engaging in ESG practices. Consistent with Abdelgawad (2023), the findings also conclude that including more members from diverse cultural backgrounds could help improve the company's ESG score.

The last independent variable is the existence of a CSR/sustainability committee within the board committees. As shown in Table 5.7, the correlation is 0.257, indicating a weak, positive relationship between EXCSRC and COESGS. This suggests that the establishment of a CSR/sustainability committee to oversee the company's social and environmental practices is likely to improve its ESG score (Arayssi et al., 2020).

Table 5.7 shows that the independent variables of this study all have a positive and significant effect on the ESG scores, except for BOINDP, which, although not significant, had a positive impact on the ESG score of GCC companies from 2021 to 2023. That means that if any of the variables increase, that will also lead to an increase in the ESG score, and vice versa.

For control variables, the table demonstrates a significant positive and moderate association between company size and COESGS, with a correlation coefficient (r value) of 0.480. This means that the larger the company, the better its ESG scores tend to be. The second control variable is company profitability, measured through the return on equity (ROE) ratio. It has a positive and weak relationship with COESGS ($r = 0.127$). Wasiuzzaman and Mohammad (2019) report similar results. Therefore, the more profitable the company, the better the ESG scores. The third control variable is company leverage, measured by the debt/equity ratio. It has a weak positive association with COESGS ($r = 0.186$), and Arayssi et al. (2020) reveal similar results. Finally, the relationship between the last control variable, company age, and COESGS is a positive and weak one, indicating that the older the company, the higher its ESG scores ($r = 0.163$). Table

5.7 shows that the study's control variables (COSIZE, COPROE, COLEVE, and COMAGE) are significantly and positively associated with the ESG scores, with different correlation values.

Table 5.8 below shows values of Tolerance and VIF. The VIF is used to test the multicollinearity between the variables. Thompson et al. (2017) define multicollinearity as a high degree of dependency among variables in a regression model. Therefore, the VIF test is used to detect multicollinearity problems, which can result in slope parameter estimates with magnitudes or signs that do not match expectations or the bivariate correlation between a predictor variable and an outcome variable. Additionally, when a model exhibits multicollinearity, even slight changes in the data (e.g., adding or removing instances) can lead to significant alterations in parameter estimations (Thompson et al., 2017). Then, the regression test cannot be performed until the issue is resolved. Tabachnick and Fidell (1996) suggested that when VIF is below 2 and tolerance levels are above 0.6 for all independent variables, it can be determined that there is no multicollinearity between variables.

Table 5.8: Variance Inflation Factor (VIF)

Variables	Model 1		Model 2	
	Tolerance	VIF	Tolerance	VIF
COSIZE	0.81	1.23	0.70	1.43
COPROE	0.88	1.13	0.88	1.14
COLEVE	0.75	1.33	0.74	1.36
COMAGE	0.94	1.06	0.87	1.15
BOSIZE			0.78	1.28
BOINDP			0.88	1.14
BOGEDI			0.89	1.13
BOCUDI			0.89	1.12
EXCSRC			0.87	1.15

Table 5.8 shows the results of the VIF test. This indicates that there is no multicollinearity problem, as the tolerance values in both models are above 0.6.

On the other hand, the VIF values are less than 2, which indicates that there is no multicollinearity as well. The range of VIF in model 1 is 1.06 and 1.33, and the range of VIF in model 2 is 1.12 and 1.43. The above results indicate that there is no multicollinearity among the variables in this study.

5.4 The Hierarchical Multiple Regression (HMR) Analysis

This section presents the regression analysis. The analysis is implemented in this investigation through SPSS to test the impact of the independent variables which are the board of directors' characteristics (BOSIZE, BOINDP, BOGEDI, BOCUDI, EXCSRC), while controlling for control variables (COSIZE, COPROE, COLEVE, and COMAGE) on the dependent variable, the COESGS of GCC companies during 2021 to 2023.

Two regression models were designed to test the research hypotheses. Table 5.9 below presents the regression analysis and provides detailed results of the HMR regression, illustrating the effect of board characteristics (independent variables) on the ESG score. The table shows that both models are significant as their significance value < 0.05 . This means that both models explain the impact of independent and control variables on the dependent variable.

5.4.1 Regression Analysis (Model 1)

Regarding the first model, Table 5.9 presents the findings of the regression analysis, which investigates the impact of the control variables (COSIZE, COPROE, COLEVE, and COMAGE) on the dependent variable, the ESG scores. The P value of the model is 0.00, which indicates that the model is significant because it is less than the level of significance for a two-tailed test, $\alpha = 0.05$; the F -value is 39.68, and R^2 of 0.244, while the adjusted R^2 equals 0.237, which implies 23.7% of variations in ESG scores are explained by control variables. In other words, this study indicates that control variables explain 23.7% of the variance in the dependent variable, ESG scores.

Table 5.9: HMR Regression Models

		Model 1				Model 2			
		B	Beta	t	Sig.	B	Beta	t	Sig.
	(Constant)	-		-7.70	0.00	-		-7.32	0.00
		7025.35				6854.93			
Company size	COSIZE	1018.65	0.45	10.28	0.00	814.97	0.36	7.98	0.00
Company Profitability	COPROE	328.52	0.09	2.05	0.04	348.66	0.09	2.27	0.02
Company Leverage	COLEVE	18.26	0.03	0.56	0.58	32.91	0.05	1.05	0.30
Company age	COMAGE	10.06	0.08	2.06	0.04	2.77	0.02	0.57	0.57
Board size	BOSIZE					172.60	0.15	3.43	0.00
Board independence	BOINDP					3.62	0.04	0.95	0.34
Board gender diversity	BOGEDI					44.45	0.15	3.84	0.00
Board culture diversity	BOCUDI					8.34	0.04	1.10	0.27
The existence of a CSR committee	EXCSRC					1057.62	0.13	3.23	0.00
No. of Obs.				498				498	
R				0.493				0.56	
R²				0.244				0.314	
Adjusted R²				0.237				0.301	
Change R²				0.244				0.071	
F- value				39.68				24.84	
P-value				0.00				0.00	

In consequence, model 1 reveals that control variables; company size, company profitability, and company age, significantly and positively affect the ESG scores of listed firms in the GCC companies from 2021 to 2023; at 0.00, 0.04, and 0.04 respectively, which all are lower than that of a two-tailed test ($\alpha = 0.05$), the threshold of significance. The result is consistent with Arayssi (2020), who reports that company size and company age are positively significant. For company profitability (ROE), Menicucci and Paolucci (2022) find a positive and significant effect on ESG. In contrast, Vitolla et al. (2019) find inconsistent results for company age and ROE, which are not significantly affecting ESG. On the other hand, the company leverage is the only control variable that does not significantly affect the ESG score, with a value of 0.58, which is above that of a two-tailed test ($\alpha = 0.05$), consistent with Pozzoli et al. (2022).

5.4.2 Regression Analysis (Model 2)

Table 5.9 presents Model 2, which includes all variables, including independent variables (BOSIZE, BOINDP, BOGEDI, BOCUDI, and EXCSRC), as well as control variables (COSIZE, COPROE, COLEVE, and COMAGE), and their impact on the dependent variable (COESGS). Model 2 is statistically significant at 0.00 P -value, and the f -value is 24.84, the R^2 The coefficient of model 2 is 0.314, which means that the variables used in the model explain 31.4% of the variation in the dependent variable, the ESG scores. However, the adjusted R^2 is 0.301, which implies that independent and control variables can explain variations in ESG scores by 30.1%. The finding is consistent with other observations in previous research. The adjusted R^2 . The result of the current study looks comparable to the results of (Chouaibi et al., 2021; Miranda et al., 2023; Abdelgawad, 2023), which were adjusted. R^2 results ranged between 29.3% and 37.6%. Table 5.9 also indicates that adding the independent variables to Model 2 increased the R^2 by 0.071 (the value of R^2 Change). This suggests that the independent variables gave more explanatory power to Model 2 by 7.1%.

Model 2 reveals that three independent variables in this study significantly explain the dependent variable. In other words, there is a positive and significant impact on COESGS by BOSIZE, BOGEDI, and EXCSRC, with significance values of 0.00, 0.00, and 0.00, respectively. However, the BOINDP and BOCUDI have insignificant relationships with COESGS ($\alpha = 0.34$ and 0.27), respectively. The results indicate that the ESG score of GCC-listed companies is significantly affected by board size, gender diversity, and the existence of a CSR committee.

Concerning control variables, only company leverage and company age are found to have a positive but insignificant impact on the ESG score, with significant values of 0.3 and 0.57, respectively, which is above the level of significance ($\alpha = 0.05$). While the rest of the control variables are positively significant, affecting the ESG score of GCC-listed companies.

5.5 Summary of the Findings

This section summarizes the regression results and discusses whether the research hypothesis is accepted or rejected. It also compares the current results with previous studies in other countries, as predicted and reported.

The first research hypothesis (H1) is related to the board size variable (BOSIZE), which states: *“The size of the board of directors is positively associated with the ESG scores of GCC-listed companies.”* is accepted based on the regression analysis. This is consistent with Birindelli et al. (2018); Husted and De Sousa Filho (2019); Suttipun (2021); Menicucci and Paolucci (2022); and Güngör and Şeker (2022). On the other hand, Nery and Morales (2022) and Nuhu and Alam (2023) find no relationship between board size and ESG disclosure.

The second research hypothesis (H2) is related to board independence (BOINDP), which states: *“The independence of the board of directors is positively associated with the ESG scores of GCC-listed companies.”* is rejected based on the regression analysis. This result is in line with the findings reported by Anders and Hosseinniakani (2022) and Nery and Morales (2022). In contrast, (Haque and Ntim, 2018; Arayssi et al., 2020; Rooh et al., 2021; Chebbi and Ammer, 2022; Almaqtari et. al, 2023; Miranda et al., 2023; Abdelazim and Khalaf, 2024) find a significant relationship between board independence and ESG disclosures.

The third research hypothesis (H3) is related to the gender diversity of the board (BOGEDI), which states: *“The gender diversity of the board of directors is positively associated with the ESG scores of GCC-listed companies”*. is accepted, this is consistent with Issa and Fang, 2019; Menicucci and Paolucci, 2022; Dempere and Abdalla, 2023; Agnese et al., 2024; Abdullah et al., 2024. While Cucari et al. (2017) and Ismail and Latiff (2019) both studies find that there is a negative relationship between board gender diversity and ESG disclosures.

The fourth research hypothesis (H4) predicts that *“The cultural diversity of the board of directors is positively associated with the ESG scores of GCC-listed*

companies,” is rejected. This aligns with some earlier research, such as Yilmaz et al. (2022), Frijns et al. (2016), and Giannetti and Zhao (2018). In contrast, Martínez-Ferrero et al. (2020) and Ouyang et al. (2022) find that board culture diversity has a positive impact on a company's social and environmental commitments.

The fifth research hypothesis (H5) implies that *“The existence of a corporate social responsibility/sustainability committee within the board committees is positively associated with the ESG scores of GCC-listed companies”*. is accepted. The finding is consistent with previous research evidence, such as Cucari et al. (2017), Birindelli et al. (2018), Vitolla et al. (2019), Baraibar-Diez and Odriozola (2019), Chouaibi et al. (2021), and Arayssi et al. (2020). However, Table 5.10 summarises the above results.

Table 5.10: Summary of the study hypotheses

Hypothesis	Accept / Reject	Reason
H1: The size of the board of directors is positively associated with the ESG scores of GCC-listed companies.	Accepted	Positive relationship between board size and ESG scores
H2: The independence of the board of directors is positively associated with the ESG scores of GCC-listed companies.	Rejected	Negative relationship between board independence and ESG scores
H3: The gender diversity of the board of directors is positively associated with the ESG scores of GCC-listed companies.	Accepted	Positive relationship between board gender diversity and ESG scores
H4: The cultural diversity of the board of directors is positively associated with the ESG scores of GCC-listed companies	Rejected	Negative relationship between board cultural diversity and ESG scores
H5: The existence of a corporate social responsibility/sustainability committee within the board committees is positively associated with the ESG scores of GCC-listed companies.	Accepted	Positive relationship between the existence of CSR / sustainability committee and ESG scores

5.6 Chapter Summary

This chapter provides the research findings and discussions. The analysis began with a descriptive examination that included the maximum, minimum, mean, and standard deviations of all variables (dependent, independent, and control variables). However, the descriptive analysis is performed for the dependent variable by country, year, and industry. The result shows that Kuwait has the highest ESG score among countries. The year 2023, along with the Banking industry, also achieved the highest ESG scores. The Pearson correlation findings are presented in Section 5.3, which reveals that board size, gender, cultural diversity, and the presence of CSR committees have a significant impact on ESG scores. The variance inflation factor (VIF) is also used, which shows that there is no multicollinearity between variables. Sections 5.4 discuss the result of the HMR regression analysis, which shows that there is a significant impact on board size, gender diversity, and the existence of CSR committees with ESG scores. At the same time, it finds an insignificant impact on board independence and board cultural diversity on ESG scores. Finally, Section 5.5 presents the acceptance or rejection of the study hypothesis and compares the results with those of previous studies. Table 5.10 summarizes the results, which show that H1, H3, and H5 are accepted, while H2 and H4 are rejected.

Chapter Six

Summary, Implications, Limitations, Recommendations, and Areas for Future Research

6.1 Introduction

6.2 Summary

6.3 Implications

6.4 Limitations

6.5 Recommendations and Areas for Future Research

Chapter Six

Summary, Implications, Limitations, Recommendations, and Areas for Future Research

6.1 Introduction

This chapter provides a summary of the current study, presenting its aim and the methodology used to achieve the findings. The following sections present the implications of the research findings and the limitations that the research encountered. The final section provides some recommendations that are useful for future research.

6.2 Summary

The study aimed to investigate the impact of board characteristics, including board size, board independence, board gender diversity, board culture diversity, and the presence of a CSR/sustainability committee formed by the board, on the ESG score in GCC countries. The study utilized quantitative data from GCC-listed companies to achieve its research goal. The current study spans three years, from 2021 to 2023. The data were collected from 166 listed companies in the six countries of the GCC (Bahrain, KSA, Kuwait, Oman, Qatar, and the UAE). The sampling procedure yielded a total of 498 firm-year observations. Companies' annual or corporate governance reports are used to collect data on independent variables (board characteristics). On the other hand, the LSEG database is used to collect data on the dependent variable (ESG scores). Three statistical types are implemented to achieve the study objective. First, descriptive statistics is used to describe the variables in terms of maximum, minimum, mean, and standard deviation values of all variables. Second, Pearson correlations are used to test the

relationship between variables. Third, multivariate HMR analysis is used to investigate the impact of the independent variables, which are the board of directors' characteristics (BOSIZE, BOINDP, BOGEDI, BOCUDI, EXCSRC), while controlling for control variables (COSIZE, COPROE, COLEVE, and COMAGE) on the dependent variable, the ESG score. Two HMR models are developed: Models 1 and 2 explain the dependent variable ESG scores, and both models are significant at different adjusted R-squared levels.

The findings of the current investigation indicate that Kuwait has the highest ESG score among the six GCC countries, and 2023 has the highest score among the years studied in this study. In addition, the banking sector has the highest score among the other sectors studied in this analysis. Furthermore, the regression analysis reveals that three of the independent variables in this study have a significant impact on the dependent variable, ESG scores, namely BOSIZE, BOGEDI, and EXCSRC. The study reveals that there is a positive relationship between ESG scores and the independent variable (board size). This result supports the argument that a larger board size contributes to the board's monitoring efficacy, leading to improved ESG scores. Similarly, the board's gender has a positive impact on ESG scores, which supports the higher level of diversity within the board, improves the quality of board oversight and operations overall, and leads to improved ESG scores as well. Finally, there is a positive relationship between ESG score and the last independent variable (the existence of the CSR/sustainability committee), the result presents the role of the committee in developing the ESG scores, because the committee may assist the company in creating credibility for sustainability concerns, which leads to a better ESG scores. On the other hand, BOINDP and BOCUDI have an insignificant impact on the ESG scores.

According to the findings of this study, we can conclude that the effectiveness of board characteristics, in which the majority of the characteristics studied in the research have a positive impact on enhancing ESG practice, significantly affects

the ESG scores. In this regard, companies in the GCC should focus on the characteristics and diversity of their board members to improve the quality of the information provided and, consequently, enhance their ESG practices and scores.

6.3 Implications

Regarding ESG scores, the current study makes a significant contribution and enhancement to the accounting literature in emerging stock markets, in general, and in the GCC countries, in particular. Therefore, this study has some practical implications. First, it might give more helpful information about the elements that influence ESG scores. Second, the interpretation of ESG scores can provide valuable insights and knowledge to a wide range of interested stakeholders, including regulators, GCC governments, and other concerned parties. Third, the current findings of the study are of interest (such as investors, shareholders, regulators, and individuals) who are interested in corporate governance issues that are related to board features, and who are interested in social and environmental issues as well. Furthermore, the findings could motivate companies interested in improving their ESG practices to diversify their board members in terms of size and gender. Additionally, findings suggest that they establish a CSR or sustainability committee to enhance ESG practices and scores.

6.4 Limitations

Some limitations may limit this study, which is due to the following reasons:

- Because the research only listed companies in the GCC. This makes it challenging to generalize the results of this study to all listed and unlisted companies in the GCC countries or other countries.
- This study intends to include all listed financial companies, but due to data availability issues, the sample size was limited to only 166 companies from all sectors. This implies that the results may be restricted to the sampled companies rather than all listed companies in GCC countries.

- This research is limited to a relatively short period of three years (2021-2023). This is due to the difficulty in accessing data, especially data related to the dependent variable (ESG score). However, extending this time frame may bring a new dimension to this study and improve its results.
- The data related to the dependent variable is collected from the LSEG database, which contains a limited amount of data on ESG that is related to GCC-listed companies. The availability of other databases could increase the sample size by providing more data about a greater number of companies.
- The current study utilizes only five board characteristics as independent variables (BOSIZE, BOINDP, BOGEDI, BOCUDI, and EXCSRC). We could consider other variables related to board characteristics, such as board expertise, board tenure, and CEO duality, among others.
- Data for independent variables (BOSIZE, BOINDP, BOGEDI, BOCUDI, and EXCSRC) are manually collected from each company's annual and corporate governance reports. Due to the large amount of data required and gathered, there may be some human mistakes.

Despite the above limitations, the researcher made every effort and attempted to achieve the most efficient and effective results possible.

6.5 Recommendations and Areas for Future Research

According to the above limitations of the current research, the researcher suggests the following recommendations:

- The listed companies in GCC countries are recommended to give more attention to their ESG practices. That is by paying more attention to the characteristics of their board of directors.
- Policymakers and governance should ensure and maintain effective corporate governance regulations, specifically in the roles related to board

characteristics, for their effectiveness in enhancing ESG practices. That is by enacting rules and regulations that obligate companies to apply the best corporate governance and sustainability practices.

- There is a need for further studies to investigate the impact of board characteristics on ESG scores in other countries, such as those in Africa, due to the scarcity of similar studies.
- Future studies might examine the difference in ESG scores between developed and developing nations. Relative research may be used to compare two categories of countries: developed and developing.
- Future studies might examine a new dependent variable, such as the ESG component separately or ESG controversies, which many researchers have not extensively researched.
- Future studies may include other board characteristics not investigated in this study, such as board frequency of meetings, tenure, age, experience, specific skills, and CEO duality.
- The current study covers three years, but future research should focus on more extended periods, which may indicate more reasonable and accurate results.
- The current study has limited data sources; therefore, future research should seek access to data from multiple sources that provide all the necessary information. Moreover, to avoid a reduction in the sample.

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Appendix

Country	Company Industry	Company name
Bahrain	Non-financial	Bahrain Duty-Free Shop Complex BSC
	Non-financial	Bahrain Telecommunications Company BSC
	Non-financial	Gulf Hotel Group BSC
	Non-financial	Zain Bahrain BSC
	Non-financial	Aluminium Bahrain BSC
	Financial	Bahrain Islamic Bank BSC
	Financial	Bahrain National Holding Company BSC
	Financial	Bahrain Kuwait Insurance Co BSC
	Financial	Bank of Bahrain and Kuwait BSC
	Financial	Esterad Investment Co BSC
	Financial	National Bank of Bahrain BSC
	Financial	GFH Financial Group BSC
	Financial	Al Salam Bank BSC
	Financial	Ithmaar Holding BSC
	Financial	Bahrain Commercial Facilities Co BSC
	Financial	Inovest BSC Public
	Financial	Khaleeji Bank BSC
Kingdom of Saudi Arabia	Non-financial	Saudi Basic Industries Corporation SJSC
	Non-financial	Savola Group Company SJSC
	Non-financial	Saudi Cement Company SJSC
	Non-financial	National Industrialization Company SJSC
	Non-financial	Saudi Electricity Company SJSC
	Non-financial	Saudi Telecom Company SJSC
	Non-financial	Jarir Marketing Company SJSC
	Non-financial	Etihad Etisalat Company SJSC
	Non-financial	Almarai Company SJSC
	Non-financial	Yanbu National Petrochemicals Company SJSC
	Non-financial	Emaar The Economic City SJSC
	Non-financial	Sahara International Petrochemical Co SJSC
	Non-financial	Advanced Petrochemical Co SJSC
	Non-financial	Saudi Kayan Petrochemical Company SJSC
	Non-financial	Mobile Telecommunications Company Saudi Arabia SJSC
	Non-financial	Seera Holding Group SJSC
	Non-financial	Rabigh Refining and Petrochemical Company SJSC
	Non-financial	Dar Al Arkan Real Estate Development Company SJSC
	Non-financial	Saudi Arabian Mining Company SJSC
	Non-financial	Abdullah Al-Othaim Markets Company SJSC
	Non-financial	Mouwasat Medical Services Company SJSC
	Non-financial	Saudi Steel Pipes Company SJSC

Kingdom of Saudi Arabia	Non-financial	CATRION Catering Holding Company SJSC
	Non-financial	Takween Advanced Industries SJSC
	Non-financial	Acwa Power Company SJSC
	Non-financial	Dr Sulaiman Al Habib Medical Services Group Company SJSC
	Non-financial	Saudi Arabian Oil Co
	Non-financial	Leejam Sports Company SJSC
	Non-financial	Amlak International Finance Co
	Non-financial	Al Nahdi Medical Company SJSC
	Financial	Bank Aljazira SJSC
	Financial	Riyad Bank SJSC
	Financial	Arab National Bank
	Financial	Bank Albilad Sjsc
	Financial	Alinma Bank SJSC
	Financial	Walaa Cooperative Insurance Company SJSC
	Financial	Saudi National Bank SJSC
	Financial	Bupa Arabia for Cooperative Insurance Company SJSC
Kuwait	Non-financial	Mobile Telecommunications Company KSCP
	Non-financial	Agility Public Warehousing Company KSCP
	Non-financial	Tamdeen Real Estate Co KPSC
	Non-financial	Mabanee Company KPSC
	Non-financial	ALAFCO Aviation Lease and Finance Co KSCP
	Non-financial	Kuwait Telecommunications Company KSCP
	Financial	Al Ahli Bank of Kuwait KSCP
	Financial	Commercial Bank of Kuwait KPSC
	Financial	Gulf Bank KSCP
	Financial	Kuwait International Bank KSCP
	Financial	National Bank of Kuwait SAKP
	Financial	First Takaful Insurance Company KPSC
	Financial	Ekttitab Holding Company KSCP
	Financial	Boubyan Bank KSCP
Oman	Non-financial	Raysut Cement Company SAOG
	Non-financial	Oman Telecommunications Company SAOG
	Non-financial	Omani Qatari Telecommunications Company SAOG
	Non-financial	Sembcorp Salalah Power and Water Company SAOG
	Financial	National Bank of Oman SAOG
	Financial	Ahli Bank SAOG
	Financial	Bank Dhofar SAOG
	Financial	Bank Muscat SAOG
	Financial	Sohar International Bank SAOG
Qatar	Non-financial	Qatar Cinema and Film Distribution Co QPSC
	Non-financial	Qatar Electricity and Water Company QPSC
	Non-financial	Zad Holding Company QPSC
	Non-financial	Qatar National Cement Company QPSC
	Non-financial	Qatar Navigation QPSC
	Non-financial	Ooredoo QPSC

Qatar	Non-financial	Salam International Investment QPSC
	Non-financial	Qatari German Company for Medical Devices QPSC
	Non-financial	Qatar Fuel Company QPSC
	Non-financial	United Development Company QPSC
	Non-financial	Industries Qatar QPSC
	Non-financial	Aljarah Holding Company QPSC
	Non-financial	Widam Food Company QPSC
	Non-financial	Gulf Warehousing Company QPSC
	Non-financial	Qatar Gas Transport Nakilat Co Ltd QPSC
	Non-financial	Barwa Real Estate Company QPSC
	Non-financial	Qatari Investors Group QPSC
	Non-financial	Mannai Corporation QPSC
	Non-financial	Aamal Company QPSC
	Non-financial	Ezdan Holding Group QPSC
	Non-financial	Gulf International Services QPSC
	Non-financial	Vodafone Qatar PQSC
	Non-financial	Mazaya Real Estate Development QPSC
	Non-financial	Al Meera Consumer Goods Company QPSC
	Non-financial	Mesaieed Petrochemical Holding Company QPSC
	Non-financial	Estithmar Holding QPSC
	Non-financial	Qatar Aluminum Manufacturing Company QPSC
	Non-financial	Baladna QPSC
	Non-financial	Mekdam Holding Group QPSC
	Financial	Qatar Insurance Company QSPC
	Financial	Qatar National Bank QPSC
	Financial	Qatar General Insurance & Reinsurance Company QPSC
	Financial	Qatar Islamic Bank QPSC
	Financial	Al Khaleej Takaful Insurance Company QPSC
	Financial	Doha Bank QPSC
	Financial	Qatar Islamic Insurance Company QPSC
	Financial	Doha Insurance Group QPSC
	Financial	Dlala Brokerage and Investment Holding Co QPSC
	Financial	Inma Holding Co
	Financial	Lesha Bank LLC
United Arab Emirates	Non-financial	Emaar Properties PJSC
	Non-financial	National Central Cooling Co PJSC
	Non-financial	Gulf Cement Co PSC
	Non-financial	Dubai Investments PJSC
	Non-financial	Fujairah Cement Industries
	Non-financial	Sharjah Cement and Industrial Development CompanyPSC
	Non-financial	Abu Dhabi National Hotels Co PJSC
	Non-financial	National Corp for Tourism and Hotels
	Non-financial	Abu Dhabi National for Building Materials Co PJSC
	Non-financial	Hily Holding PJSC
	Non-financial	Abu Dhabi Aviation PJSC

United Arab Emirates	Non-financial	Emirates Telecommunications Group Company PJSC
	Non-financial	Gulf Pharmaceutical Industries PSC
	Non-financial	Aldar Properties PJSC
	Non-financial	Aramex PJSC
	Non-financial	Gulf Medical Projects Co PSC
	Non-financial	Abu Dhabi National Energy Company PJSC
	Non-financial	International Holding Company PJSC
	Non-financial	Emirates Driving Company PJSC
	Non-financial	Dana Gas PJSC
	Non-financial	Emirates Integrated Telecommunications Company PJSC
	Non-financial	Emsteel Building Materials PJSC
	Non-financial	Al Khaleej Investment Company PJSC
	Non-financial	Eshraq Investments PJSC
	Non-financial	Aram Group PJSC
	Non-financial	Abu Dhabi National Oil Company for Distribution PJSC
	Non-financial	Alpha Dhabi Holding PJSC
	Financial	Mashreqbank PSC
	Financial	Dubai Islamic Bank PJSC
	Financial	Abu Dhabi Islamic Bank PJSC
	Financial	Al Wathba National Insurance Company PJSC
	Financial	First Abu Dhabi Bank PJSC
	Financial	Al Dhafra Insurance Company PSC
	Financial	Al Waha Capital PJSC
	Financial	Abu Dhabi Commercial Bank PJSC
	Financial	Emirates Insurance Company PSC
	Financial	Al Ain Ahlia Insurance Company PSC
	Financial	Commercial Bank of Dubai PSC
	Financial	Union Insurance Co PSC
	Financial	Sharjah Islamic Bank PJSC
	Financial	Al Buhaira National Insurance Company PSC
	Financial	Ras Al Khaimah National Insurance Company PSC
	Financial	National Bank of Ras Al Khaimah PSC
	Financial	Sharjah Insurance Co PSC
	Financial	National Bank of Fujairah PJSC
	Financial	Dubai Financial Market PJSC
	Financial	Emirates NBD Bank PJSC
	Financial	Ajman Bank PJSC