



An-Najah National University
Faculty of Graduate Studies

**THE EFFECT OF DIVERSITY IN BOARD CHARACTERISTICS
AND ACTIVITIES ON SUSTAINABLE DEVELOPMENT GOALS
DISCLOSURE: AN EMPIRICAL STUDY ACROSS 19 EUROPEAN
COUNTRIES**

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**This thesis is Submitted in Partial Fulfillment of the Requirements for the Degree
of Master of Accounting, Faculty of Graduate Studies, An-Najah National
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Dedication

﴿وَأَخِرُ دَعْوَاهُمْ أَنِ الْحَمْدُ لِلَّهِ رَبِّ الْعَالَمِينَ﴾ [سورة يونس: 10]

لم تكن الرحلة قصيرة ولا ينبغي لها أن تكون

لم يكن الحلم قريباً ولا الطريق يسيراً

لكن بفضل الله آمنتُ بها وفعلتها

فأنا لها وتلتها وإن أبت أتيتُ بها

فالحمد لله عند البدء وحين الختام،،

إلى وطني، حيثُ الأرضُ والشعب

(فلسطينُ الحبيبة)

إلى من روضوا الصعابَ لأجلي ونفضوا الاثواك عن دربي

إلى من أعطوني دونَ انتظار، وقدموا لي دونَ مَنان

إلى من علموني أنّ الدنيا كفاح وسلاخها العلم

(والدي العزيز، والدتي العزيزة)،

إلى من سقوا ثمرة العلم بداخلي

(أساتذتي ومعلمي)،

إلى أهلي وأخلائتي،

إلى رُفقاء دربي وأعرائي،،

أهديكُم ثمرة عملي،،

وتمُّ إنَّه للحلم بقية،،

Acknowledgement

﴿رَبِّ أَوْزَعْنِي أَنْ أَشْكُرَ نِعْمَتَكَ﴾ [سورة النمل: 19]

الحمد والشكر لله، والصلاة والسلام على رسوله الكريم، الذي علّمنّا قيمة الشكر لمن هم أهل الفضل والتقدير. بدايةً، لا يسعني إلا أن أعبّر عن أسمى آيات الشكر والتقدير لمشرفي العزيزين، "الدكتور علاء الدين دويكات" و"الدكتور معز أبو عليا"، الذين لم يدخروا جهداً في توجيهي وإرشادي منذ انبثاق فكرة هذه الرسالة وحتى بلوغها مرحلة النضج والاكتمال. لقد كان لدعمهم المتواصل ونصائحهم السديدة الأثر الكبير في تحقيق هذا الإنجاز.

كما أتوجه بخالص الشكر وعظيم الامتنان إلى جامعة النجاح الوطنية، هذا الصرح الأكاديمي العريق، وأخص بالذكر أعضاء الهيئة التدريسية الكرام، والقامات العلمية المتميزة في كليتي "الدراسات العليا" و"الأعمال والاتصال"، الذين كان لعطائهم ودعمهم اللامحدود دورٌ بارزٌ في تعزيز مسيرتي الأكاديمية والوصول إلى هذه المحطة الهامة.

ولا يفوتني أن أقدم خالص شكري وتقديري لزملائي الأعزاء في "سلطة النقد الفلسطينية" و"مستشفى النجاح الوطني الجامعي" و"جامعة النجاح الوطنية"، الذين غمروني بلطفهم ودعمهم طوال هذه الرحلة. لقد كنتم خير عون وسند، وأثرتم فيّ روح التعاون والإصرار.

ختاماً، شكري وامتناني لكل من أسهم ومن كان له دور في إنجاز هذه الرسالة.

Declaration

I, the undersigned, declare that I submitted the thesis entitled:

**THE EFFECT OF DIVERSITY IN BOARD CHARACTERISTICS AND
ACTIVITIES ON SUSTAINABLE DEVELOPMENT GOALS DISCLOSURE:
AN EMPIRICAL STUDY ACROSS 19 EUROPEAN COUNTRIES**

I declare that the work provided in this thesis, unless otherwise referenced, is the researcher's own work, and has not been submitted elsewhere for any other degree or qualification.

Student's Name: **Abdulmalik Marwan Taweel**

Signature: **A.taweel**

Date: 29/12/2024

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Abstract

Recognizing the growing responsibility of firms to support economic, environmental, and societal goals, this study aims to investigate the relationship between board characteristics in terms of size, independence, gender diversity, tenure, CEO duality, and the presence of CSR committees—and the level of SDGs disclosures. The study uses a dataset from "Asset4-Refinitiv Eikon" and related Websites of 1,886 firms across 19 European countries, encompassing 5,656 firm-year observations from 2019 to 2022, it employs panel data techniques and includes Pooled OLS regression to test study hypotheses. The study's findings have both theoretical and practical implications, offering valuable insights for enhancing a specified framework of corporate governance to better align with sustainability goals. The results reveal a significant impact of board size, gender diversity, CEO duality, and CSR committees on SDGs disclosures, indicating that larger, more diverse boards, independent chairmen, with dedicated CSR committees are more likely to enhance transparency and meet stakeholder expectations. Conversely, no significant relationship was found between board independence, and tenure regarding SDGs disclosures. These results contribute to the resource dependence, stakeholder, and agency theories by demonstrating how board characteristics and activities as a governance mechanism influence firm transparency and sustainability reporting. Therefore, firms, policymakers, and all stakeholders should take necessary procedures by aligning governance and sustainability practices with firms' strategies, compliance with international standards, and strengthening regulatory and supervisory frameworks to support and enhance SDGs disclosures.

Keywords: Board Characteristics, Sustainable Development Goals (SDGs), Board Diversity, SDGs Disclosure, Europe.

Chapter One

The General Framework of the Study

1.1 Introduction

In recent years, there has been a shift in the perception of firms and their economic influence. The traditional belief that firms exist mainly to maximize shareholder wealth is shifting towards a more socially conscious perspective. Nowadays, businesses perceive as global entities pursuing profit while contributing positively to the environment and society. It is up to the government and business sectors to envision and integrate the Sustainable Development Goals (SDGs) agenda with their directions and strategies, and ensure their effective execution (Ardillah, 2022). The relationship between governance and SDGs has gained attention (Saputri & Ariani, 2024). A growing source interest surrounds how companies can integrate sustainability into governance frameworks to increase transparency and progress toward the SDGs goals (Farida, 2019).

Throughout history, the worldwide economy has encountered financial crises and scandals resulting in several concerns regarding the separation of ownership and management referred to as the "agency problem." Moreover, investors and decision-makers frequently face difficulties in getting information while owners struggle to oversee their resources (Yadav & Jain, 2023). These challenges are exacerbated by the gap of unalignment between the regulatory and supervisory bodies and economic entities leading to financial and administrative corruption. To tackle these issues, the corporate governance concept has evolved to encompass diverse business sectors (Emsake, 2021).

The world economic challenges in the next few decades require all economic actors to work together (Bansal et al., 2021; United Nations, 2015). In response and to address these challenges, in 2015 the United Nations released SDG's, part of an agenda 2030 to promote a more sustainable lifestyle. Recently, companies have become more likely to embed the SDGs into their strategic vision (Alda, 2019). Achieving these goals is very imperative because the corporate sector is supposed to serve not only its shareholders but also a more extensive array of stakeholders (Richardson, 2009). This is shown by the idea of the "blended value

proposition,” which highlights the need to balance economic, social, and environmental dimensions.

The debate against prioritizing stockholder value has gained momentum due to a loss of trust in corporate management and a growing demand for social responsibility. In recent times, companies are expected to be accountable to society, and stakeholders are seeking more comprehensive information (Taglialatela et al., 2023). In order to satisfy those expectations, corporate management communicates social and environmental information through annual reports, as well as separate and complementary reports (Buniamin et al., 2022). The main goal according to mainstream disclosure studies is to meet stakeholders' needs by increasing transparency, reducing agency costs, and addressing information costs in stock markets. In fact, this practice is surrounded with several possible advantages including the lower cost of capital, the better cash flows, the higher value of shares, and offer the visualization for contributing to sustainability and increasing a firm's economic, environmental, and social performance (Godfrey et al., 2009; Jensen & Meckling, 1976).

The argument toward prioritizing the shareholders' value has progressed much, due to decline of trust in the corporation management and rising concern toward social responsibility. Recently, firms are supposed to be accountable to society, and stakeholders' desire more comprehensive information (Taglialatela et al., 2023). Accordingly, corporate management communicates social and environmental information through annual reports and separate and complementary reports (Buniamin et al., 2022). Mainstream disclosure studies provide the main goal which is to meet the needs of stakeholders by the means of enhancing transparency, reducing agency costs, and the cost of resolving information in stock markets. This focus on transparency and stakeholder needs has been associated with several potential benefits as lower cost of capital, improved cash flows, better share values, visualization of how business could contribute to sustainability, and enhancing the economic, environmental, and societal role (Godfrey et al., 2009; Jensen & Meckling, 1976).

In a company's development, the Boards of directors (BoD's) hold a very important position in constituting the company's strategic direction as well as its performance (Aifuwa & Embele, 2019). This implies that the practises and policies of the BoD's drive corporate

behaviours and responsible practises (Terjesen et al., 2015). Moreover, it has been shown in previous research that BoD's characteristics are significant determinants of economic and environmental social performance (Aguilera et al., 2021). To achieve integration of sustainability principles into a company's strategy and operations, a complex balance between sustainability goals and profitability objectives is desired and depends on top management leadership. Still, recent studies have emphasized that firms can only adopt environmental and social practices if they do not negatively impact their economic and financial sustainability (Bianchi & Testa, 2022; Ivory & Brooks, 2018; Slawinski et al., 2017). Therefore, understanding the role of governance in guiding strategic choices is important for policy planning and making informed investment decisions.

In today's world, sustainable development is a critical aspect for organizations looking to secure their success and longevity (Krechovská & Procházková, 2014). It is also a vital necessity in the labour markets in the world especially in developed countries. Financial performance alone is no longer enough to determine an organization's success or predict its ability to survive. Therefore, there are now several aspects that carry equal weight as financial considerations, that should be considered, such as sustainability considerations related to the economy, society, and environment (Swain & Wallentin, 2020).

Many factors may affect companies' commitment in general and SDGs disclosure in particular (Sekarlangit & Wardhani, 2021); From this, the characteristics of BoD's emerge in the context of governance as one of the most influential determinants of companies' disclosure (Farida, 2019). Consequently, this study aims to demonstrate the pivotal role of the board in advancing sustainable development goals through corporate disclosure. Specifically, this study examines how diversity in a set of board characteristic's affects SDG's disclosures.

1.2 Study Problem & Questions

Businesses are critical in achieving the SDGs (Rosati & Faria, 2019; Agarwal et al., 2017). The United Nations Global Compact (UNGC) and Global Reporting Initiative (GRI) advocate for firms to disclose efforts toward these goals (Casciello et al., 2024). Sustainability and CSR reporting bolster credibility, enhance transparency, mitigate risks,

improve reputation, foster growth, and lead to better performance (Jizi, 2017; Milne & Gray, 2013; Scholtens, 2009). Investors prefer companies prioritizing environmental and social responsibility, leveraging this as a marketing advantage (Nunes & Park, 2017). Engaging in governance and sustainability activities strengthens stakeholder acceptance (Sekarlangit & Wardhani, 2021), while the content of sustainability reports reflects organizational commitment (Calabrese et al., 2015). Aligning reports with emerging sustainability practices and stakeholder interests enhances differentiation (Jensen & Berg, 2012), necessitating adherence to regulatory disclosure standards.

Community expectations of companies have evolved, requiring businesses to adopt sustainable strategies benefiting society and the environment while ensuring profitability (Sekarlangit & Wardhani, 2021). The BoD's have a vital role in overseeing social, environmental, and economic responsibilities, including SDG achievement (Jizi, 2017). According to Hambrick and Mason (1984) in upper echelon theory, a company's performance is shaped by management's strategic choices, influenced by its attributes. Studies indicate that BoD's structure and characteristics significantly impact sustainability efforts and policy development (Tavanti, 2023; Buniamin et al., 2022; Nicolò et al., 2022), emphasizing the board's role is more important in determining the company's sustainable strategy.

Corporate BoD's are important in achieving SDGs by developing sustainability strategies, influencing reporting, and providing stakeholders with relevant information (Ardillah, 2022). Research shows that larger, more diverse boards positively impact SDG progress, including gender equality, a key aspect of modern business (Sekarlangit & Wardhani, 2021; Rao & Tilt, 2016). BoD's also support sustainability by shaping economic, environmental, and social agendas, allocating resources, and formulating strategies (Ferrero & Meca, 2020). Previous research also finds that board attributes like board size, independence, gender, tenure, duality, and the presence of CSR committees significantly impact SDGs disclosures (Pizzi et al., 2021; Sekarlangit & Wardhani, 2021; Rosati & Faria, 2019).

Over the decades, various methods have been developed to assess and enhance business sustainability while engaging stakeholders. Since 1999, the GRI has led this effort by issuing guidelines for sustainability reports with indicators addressing economic, environmental, and

social dimensions. In 2016, GRI standards were aligned with UN Goal 12.6, requiring firms to disclose sustainability practices (Monteiro et al., 2022). In today's dynamic economic, social, and environmental landscape, organizations must assess their SDGs impacts, and develop aligned strategies by collecting data and reporting transparently (Zampone et al., 2024). Understanding how BoD's characteristics influence SDGs reporting is essential (Jizi, 2017). As scrutiny grows, sustainability responsibilities increasingly affect investor decisions and reward responsible practices (Rosati & Faria, 2019).

Amid global environmental, economic, and social challenges, sustainable development is essential for mitigating growth deterioration. Disclosing sustainability practices helps companies manage risks, enhance transparency, and control crises. This is also done by the boards' which can promote transparency, minimise risks, and support sustainable development initiatives (Sekarlangit & Wardhani, 2021). It is well-articulated by prior scholars that corporate governance mechanisms are perceived as effective monitoring instruments that can assure the optimal compliance level with SDGs disclosure requirements. However. There is scant cross-countries evidence in investigating the role of firms' boards in SDGs disclosure practices, studies' have emphasized the need for an additional vision on the effect of governance issues, especially the diversity in the characteristics of the BoD's and its activities on sustainability practices. Research indicates that the diversity of characteristics and activities of the board are effective mechanisms in influencing the economy, environment and society and positively impact the market value and opportunities for success (Mazumder, 2024; Weerasinghe et al., 2023; Ardillah, 2022). Accordingly; this study examined the role of the board in disclosing information regarding SDGs. That is, exploring interactions between the characteristics and activity of BoD's and disclosing the SDGs, with a focus on the European context. The study discusses BoD's characteristics in terms of Size, Independence, Gender, Duality, Tenure, and the Presence of CSR committees in the board structure; and its effect on SDGs disclosure. In this context, the following main and sub-question arises:

1. What is the effect of diversity in board characteristics and activities on sustainable development goals disclosure at a sample of European firms?

1.1 What is the effect of board size on sustainable development goals disclosure at a sample of European firms?

1.2 What is the effect of board independence on sustainable development goals disclosure at a sample of European firms?

1.3 What is the effect of board gender on sustainable development goals disclosure at a sample of European firms?

1.4 What is the effect of board tenure on sustainable development goals disclosure at a sample of European firms?

1.5 What is the effect of CEO duality on sustainable development goals disclosure at a sample of European firms?

1.6 What is the effect of CSR committee on sustainable development goals disclosure at a sample of European firms?

1.3 Study Importance

The study emphasizes the importance of sustainable development in achieving progress in the current era. It aims to explore the relationship between the characteristics and activities of the BoD's and sustainability disclosure. Therefore, the present study provides insights that enhance understanding of this relationship. The research posits that its findings' will underscore the significance of corporate governance overall and emphasize board characteristics diversity as a driver for organizational growth and sustainability. Ultimately, the study aims to provide practical evidence of the significant role of BoD's and their activities' in achieving SDGs disclosure.

Extending from the literature, limited evidence has established a clear understanding of how the BoD's affects the implementation and reporting of SDGs. Research on reporting and disclosure of SDGs is still in its emerging stages' and is limited to some studies' (Weerasinghe et al., 2023; Waal & Thijssens, 2020; Rosati et al., 2018). These studies' have looked at different and separate board attributes such as size, age diversity, executive duality, presence of independent managers, and supporting committees to understand the impact of board quality on firms' disclosures. Furthermore, these results' have been inconclusive and many of these studies were carried out within a single country. Therefore, studying a set of

board attributes and SDGs disclosures within several new environments remains a knowledge gap. With the increasing focus on sustainability and expectations on firms to meet the SDGs, the characteristics, and activity of board members may carry more weight. Accordingly, it is important to conduct further research in this field.

This study contributes to highlighting the role of diversity in board characteristics and activity in disclosing SDGs, to accomplish this, First, assessing the level of SDGs disclosure will be relied upon based on GRI index and sustainability and related reports. Where the firm's contribution will be evaluated in achieving SDGs by setting disclosures related to sustainable practices with SDGs. Second, the role of the board will be explored using a more comprehensive measure that includes size, independence, gender, duality, and tenure. In addition to board activity in terms of the presence of CSR Committee in the board structure. Third, the study focuses on a sample of firms operating across 19 European countries to provide a better image of the relationship between board diversity and SDGs through a more comprehensive analysis. This is one of the initial researches that focuses on studying the role of the board in the context of several demographic characteristics in sustainability practices in a significant number of firms. While previous research has focused primarily on some American and European countries (Tagliatalata et al., 2023; Ardillah, 2022; Monteiro et al., 2022; Diaz-Sarachaga, 2021; Musa et al., 2020), as well as some Southeast Asian countries (Buniamin et al., 2022; Sekarlangit & Wardhani, 2021), this study focuses on diverse environments due to the growing emphasis on disclosing sustainability practices across several countries. This shift is driven by increased corporate awareness of sustainability and a stronger commitment to taking responsibility for and reporting these practices.

1.4 Study Objectives

The objectives of this study are both practical and theoretical, aiming to address significant gaps in the literature and provide robust evidence on the role of board characteristics and activities in SDGs disclosure. Practically, the study seeks to assess the extent of SDGs disclosure among firms to evaluate their contributions to sustainable practices. It also aims to analyse the relationship between board characteristics—specifically size, independence, gender diversity, duality, and tenure—alongside board activities such as the presence of CSR

committees, and SDGs disclosure. By examining a sample of firms across 19 European countries, the study provides a multi-environmental perspective to enhance understanding of board characteristics influence on SDGs. Theoretically, the research explores the alignment of board characteristics with corporate governance theories, offering a framework for understanding its impact on SDGs disclosure. Additionally, it contributes to the literature by examining the relationship between board attributes and sustainability practices in new geographical contexts, addressing conflicting findings from prior studies. The study emphasizes the significance of corporate governance and board characteristics as drivers of organizational sustainability and growth, while highlighting theoretical connections between board activities and SDGs disclosure to advance global sustainability trends.

Chapter Two

Theoretical Background, Literature Review and Hypotheses Development

2.1 Theoretical Framework

The governing focus has moved away from law compliance, it has extended to more of an orientation to transparency and accountability, as well as ethical, social, and environmental conduct. To that effect, such a shift constitutes 'a response to the complexity of contemporary global markets' and stakeholder's expectations' (Yasser et al., 2017). This transformation is powered by the role of the board of directors to provide organizational strategy guidance and the adaptation of governance practice in response to environmental changes. Simultaneously, the importance of board characteristics diversity has risen, it bringing in different views for promoting decision making and contributing to the success of the organization (Weerasinghe et al., 2023). Diversity in board characteristics allows tackling of complicated issues well and encourages innovation as well as strengthening stakeholder confidence (Umukoro et al., 2019). Thus, shifting focus on effective governance and board characteristics underscores the key roles these perform in getting of long-term organizational resilience and performance.

Disclosure is essential to the companies' because it reflects their position and performance to stakeholders including investors, regulators, supervisors, debtors, creditors and others. As it offers a transparent view to information users so they can make sustainable and sound decisions (Casciello et al., 2024; Yu et al., 2018). Adequate and timely disclosures will avoid surprises and build investors' confidence. Having transparency disclosure increases firms market position and shareholder confidence, while a lack of transparency exposes firms to large risks. This concept concerns how organisations manage their activities and how they respond to environmental, economic and social challenges. Since then, this concept has expanded to include disclosure of non-financial items, which in some organizations have sometimes taken precedence over financial items (Qureshi et al., 2020).

In an increasingly complex global business' environment, corporate governance is recognized universally as a key process to promote transparency, accountability and ethical

management in the organizations. Board characteristics diversity is a proven driver of decision making and supporting sustainable development as diverse boards are better able to weave these goals into corporate strategic plans' (Adel et al., 2019). Due to globalization and joint stock companies', and to promote transparency in financial reporting, professional accounting bodies' have developed standards for robust disclosure practices' (Cucari et al., 2018). The governance evolution highlights' the essential function of the board of directors in reconciling stakeholder interests', guiding management, and creating long term value, emphasizing the association between effective governance, board characteristics and sustainability (Aguilera et al., 2021; Yu et al., 2018).

2.1.1 Sustainable Development

Sustainability concept is now becoming widely known by scholars' and specialists as a necessity that will protect life in our world especially after environmental crises and disasters around the world. The term sustainability came up in the 1970s to combat deforestation. According to Filho (2000) it stands for 'long-lasting', 'healthy', 'enduring' or 'curriculum'. Since then, there have been various proposed definitions of sustainability. The International Institute for Environment and Development (IIED) defines sustainability as a business strategy that incorporates economic, environmental, and social factors into corporate governance to achieve long-term goals (Mazumder, 2024; Kocmanova et al., 2021).

According to the United Nations (2015) report, which refers to the 2030 Agenda for Sustainable Development, the dimensions of sustainability can be categorized into three main areas: economic, environmental, and social. While some studies propose the inclusion of additional dimensions like technical and cultural, this study will solely concentrate on the three dimensions emphasized in the UN report. The UN maintains that these three dimensions are fundamental, as every human action invariably affects them (Cucari et al., 2018).

A. The Economic Dimension

The concept of "economic sustainability" pertains to the economic dimension of sustainability. It aims to establish a production system that can maintain present levels of consumption without jeopardizing the needs of future generations. The economic dimension seeks to transform current economic structures to ensure the rights of both current and future

generations. It emphasizes the creation of sustainable economic systems while minimizing the environmental effects of economic activities. The aim is to restructure the economy and highlight the relationship between the economy, environment and society (Perbiyanti, 2023). As per Johnston et al. (2020) study, the economic dimension is closely linked to environmental impacts, with industries like oil and gas being major contributors to environmental pollution. Hence, the economic system must be resolved to enhance environmental situation in general.

The economic dimension focuses on achieving inclusive and sustainable growth through goals like eradicating poverty (Goal 1), promoting decent work and economic growth (Goal 8), developing infrastructure and fostering innovation (Goal 9), and reducing economic and social inequalities (Goal 10). These goals aim to build a stable economic system that supports comprehensive development (United Nations, 2015).

B. The Environmental Dimension

The environment is an essential system that consists of soil, air and water to sustain life on earth. However, this system has suffered increasingly from human activities which, unfortunately, have significant sustainability concerns. Specifically, illegal activity has caused environmental degradation, and it is necessary to stop or contain these activities very quickly (Arslan et al., 2022). Environmental protection today is widely acknowledged as a global issue and is acted upon by international and local communities (Casciello et al., 2024). Sustainable development concept first brought at the Stockholm conference in 1972 and confirmed at the Earth Summit in 1992. Nowadays environment and sustainable development are inseparable and essential. Achieving sustainable development must be done through stringent environmental legislation that should be enacted to avoid ecological damage and address efficiently the pollution problems. In addition, these regulations should make individuals and corporations to be held responsible and accountable for environmental destruction (Emsake, 2021).

The environmental dimension focuses on preserving natural resources and mitigating environmental harm through ensuring clean water and sanitation (Goal 6), providing affordable and clean energy (Goal 7), combating climate change (Goal 13), protecting life

below water (Goal 14), and conserving biodiversity and terrestrial ecosystems (Goal 15). It seeks to balance development with environmental protection (United Nations, 2015).

C. The Social Dimension

As with the previous two, the social dimension is as crucial as any other as it is vital to achieving sustainability goals. Though the economic dimension focuses on achieving a balance, it aims at economic stability and the environmental dimension strives to maintain nature on Earth in the right balance, the social dimension is intended to promote the social welfare for communities and individuals (Yadav & Jain, 2023). The social dimension aims towards maximizing social well-being by attaining of social justice and fighting poverty and famine and also providing social services to people. It is about promoting equity between the various class of whom constitute society with regard to areas such as education and health (Mazumder, 2024). As such, this dimension will primarily focus on ways to improve the quality of the life of individuals and of society as a whole. Its intent is to achieve balance in interactions and relationship between people and the communities so that it leads to a sustainable and equitable future for everyone (Aifuwa et al., 2019).

The social dimension emphasizes improving quality of life through ending hunger (Goal 2), ensuring good health and well-being (Goal 3), providing inclusive and quality education (Goal 4), achieving gender equality (Goal 5), creating sustainable cities (Goal 11), and promoting peace, justice, and strong institutions (Goal 16). This dimension aims to enhance social justice and empower individuals (United Nations, 2015).

Sustainable development is based on sustainability, as a core element which seeks to reach some delicate balance between the economic, environmental and social aspects, at state or institutional level as SDG 17 aims to strengthen global partnerships and cooperation's. Recently, economic entities have been placed under pressure by regulatory bodies and stakeholders to disclose their sustainability (Zamponi et al., 2024). Comprehensive disclosure of both the financial and non-financial items of social, environmental and economic responsibility is essential. The purpose of sustainability disclosure is to provide internal and external stakeholders with measurements and reports to assess performance in the pursuit of SDGs. This trend shows how companies have started to concentrate on

sustainability since the 1990s which led to legislation that promote companies to disclose sustainability (Emsake, 2021).

2.1.1.1 The Historical Evolution of Sustainable Development

Throughout history, humans have normally encountered extensive environmental challenges coming from technological developments as well as the continuously growing interest on mechanism in our daily lives. For instance, the industrial revolution caused to produce unprecedented greenhouse gas emissions by consumption of natural resources. Additionally, the economic growth has also corresponded to increased untreated waste production, that has damaged the land, rivers, and oceans. Thus, sustainability has entered as a guiding principle of economic planning and development on an international level towards those challenges. Several definitions of sustainability have been made through influential works such as Rachel Carson's "Silent Spring" (1962) and the Club of Rome's report, "The Limits to Growth" (1972), as also international conferences such as "Rio de Janeiro" conference in 1992 that have contributed to the promotion of sustainable development practice (Rosati & Faria, 2019). The international community has acknowledged the need to protect the environment and do sustainable development therefore, the Global Charter for Nature and many countries approved to commit interest to environmental protection. Subsequently in 1997, the Cute Protocol was established as a global agreement that calls for nations to decrease greenhouse gas emissions, an expression of the seriousness of the global community to environmental protection as well as sustainable development (Bezemer et al., 2022).

The concept of sustainable development has evolved dramatically during the current century. The emphasis at first was on environmental protection, but it expanded to incorporate also economic and social aspects. The issue of sustainable development is now an international issue, developing new goals that include social challenges and poverty besides environmental challenges. In 2012, the United Nation Summit held in the Rio +20 lead to the adoption of the sustainable development goals, as well as in 2015 the Paris agreement also addresses for the effect of climate change (Gupta & Vegelin, 2016). These conferences and agreements represent important stages in the development of the concept of sustainable development over recent decades (Allen et al., 2018). Also, technology treated and considered as a means

for the achievement of sustainable development. Social interaction as civil society supported for the development became active. The current thinking considers that a sustainable development is achieved with the understanding of the balance of the environmental, economic and social dimensions' (Taglialatela et al., 2023).

2.1.1.2 Sustainable Development Goals (SDGs)

Subsequent to the world conference by the World Commission on Environment and Development (WCED) in 1987, the United Nation's Brundtland Report which known as "Our Common Future" was released. The report provides a comprehensive analysis of the state of the environment and a new vision on how to change the world's view of future lifestyles' (Baker et al., 2019). Sustainable development aim to meet the needs of present generations' without compromising the ability of future generation to meet his needs. This concept is based on three main dimensions': the economic, social, and environmental dimension's (Taglialatela et al., 2023; Aifuwa, 2020).

Based on the foundation of the Brundtland Report, the Rio Summit 1992 is relevant to establish the global integration in sustainable development. In 2015, the United Nation's adopted the 2030 Agenda, which was a comprehensive, integrated and transformative plan, to promoting sustainable development (Álvarez & Rodriguez-Dominguez, 2023; Farida, 2019). This plan represents' a program of action for the planet, people, prosperity, peace, and partnership (Manning et al., 2019).

The 2030 Agenda identifies' the 17 sustainable development goal's and 169 indicator's covering various sustainable development issues', including health, poverty, education, inequality, climate change, environmental degradation and so on. The final goal of the agenda is to address these challenge's and build a more sustainable world for all by encouraging innovation and promoting economic growth, and environmental and social development (Yadav & Jain, 2023; Sachs et al., 2019). The agenda is implementation focused at the national level, by involving member states' in taking the initiative and adapting the plan to their national needs'. While the United Nations' supports the implementation of programs at the regional level, the plan adopts' new methods of partnerships with relevant stakeholders', including giving a greater role to civil society, the private sector, and other partners in the

field of development (Allen et al., 2018; Agarwal et al., 2017). Further, the project also considers' accountability and brings in three levels to evaluate and monitor progress made towards the implementation of the 2030 plan at the global, regional and national levels' (Sustainable Capacity International Institute, 2024; World Business Council for Sustainable Development, 2017).

The SDGs offers a comprehensive and integrated framework to direct global efforts to tackle challenges, and make sustainable progress in all aspects of economic, environmental and social life. The first goal aims to eliminate poverty in all its forms everywhere, achieve decent work and improve living standards. The second is to work toward's elimination of hunger, attainment of food security and improved nutrition by supporting sustainable agriculture and improving food production. The third focuses on the appropriate structural measures to ensure good health and promote well-being for all people –this includes ensuring universal health coverage and increasing investment in healthcare. The fourth goal also involves making sure quality of higher education especially basic and vocational education and ensure equal access to it. Goal 5 wants to endorse gender equality and empower women and girls globally in a variety of areas of life, while the sixth goes into sustainable access to water and to attain universal and sanitation. In addition, the seventh goal concerns the increase of the access to sustainable and effective cost energy while promoting the use of renewable energy sources. The eighth goal seeks as much as inclusive economic growth and the promotion of innovation and decent employment for all, as well as the transition to a more sustainable economy. The focus of the ninth goal is to promote technological to enhance industry and innovation for sustainable development and create employment. The goal ten focuses on the reduction of inequality within and between countries in order to achieve sustainable safe cohesive societies for securing food security and shelter. Moreover, the eleventh goal tries to make cities and settlements more sustainable by making sustainable and safe cities, sustainable urban planning and access to public transportation. In the environmental context, the twelfth goal is aimed at a sustainable consumption and production pattern, through effective resource management and stimulating sustainability in economic practices. The thirteenth goal is to act immediately and take measures to combat climate change and reduce adverse environmental impacts. Goal 14 protects marine life and to achieve environmentally

sound and sustainable use of the oceans and seas. Goal Fifteenth is motivated by safeguarding wildlife, soil, and biodiversity, and sustainable use of natural resources. The sixteenth goal aim at building effective institutions', achieve justice and peace, and increase the public representation and participation. Lastly, the seventeenth goal seeks to strengthen cooperation and coordination and to promote partnerships between the governments', private sector and civil society organizations to advance SDGs (Zampone et al., 2024; Rosati & Faria, 2019; United Nations Global Compact, 2018; United Nations General Assembly, 2015).

Recent advancements in global sustainability and policies related to SDGs highlight substantial progress across diverse fields. Artificial intelligence is emerging as a key tool, driving innovative solutions in health, education, and climate action, which are crucial for achieving SDG targets (Pinheiro et al., 2024). At the same time, the United Nations Environment Programme (UNEP) is advocating for stronger environmental governance by integrating social justice, adopting cutting-edge technologies, and standardizing rule-of-law frameworks to enhance policy coherence (Saputri & Ariani, 2024; Yadav & Jain, 2023). Similarly, the Global Opportunities for Sustainable Development Goals (GO4SDGs) initiative is making strides in promoting sustainable consumption, empowering youth, and providing financial support to SMEs for innovation (United Nations Global Compact, 2018). Political developments are also playing a critical role in shaping sustainable finance, with different regions adopting varying approaches to ESG principles (Zampone et al., 2024). Together, these efforts underscore the increasing global commitment to realizing the SDGs, even as challenges continue to evolve.

The figure below indicates the 17 sustainable development goals:

Figure 2.1
Sustainable development goals



(Sustainable Capacity International Institute, 2024)

2.1.1.3 SDGs Disclosure

A term used to refer to the practice of organizations to report on their activities in terms of economic, environmental and social aspects, to stakeholders. It is a combination of two concepts, sustainability and reporting. Sustainability is defined as meeting the needs of the present generation without compromising the ability of future generations to meet their own needs. On the other hand, reporting involves the full or partial disclosure of an organization's information to stakeholders (Temiz & Acar, 2023: Silva, 2021). The GRI defines sustainability reporting as the practice of measuring internal and external stakeholders for

organizational performance to achieve SDGs. Nowadays, investors, financial analysts, and other stakeholders making demand on information on the financial and non-financial performance of companies to enable informed investment decisions (Aifuwa, 2020). Accordingly, organizations can benefit significantly from disclosing economic, environmental and social issues, including better financial performance, better corporate reputation and attracting investors. Therefore, sustainability reporting is a process by which organizations provide information about the economic, environmental, and social impact resulting from their daily activities. It reveals organizational information about its daily economic, environmental, and social activities as they impact the community and stakeholders where it operates (Muñoz et al., 2017).

While reporting economic, environmental, and social impacts is helpful for organizations to have, there are several issues need to be considered. These include measurement and disclosure, motivation, enforcement and compliance, standardization, comparability, and reliability of reporting (Lewa et al., 2024; Diaz-Sarachaga, 2021). The voluntary nature of reporting may contribute to a low level of sustainability disclosure, particularly since some regulators and the world's capital markets do not require companies to disclose environmental and social issues (Monteiro et al., 2022). Consequently, compliance in disclosing these issues remains low. However, several countries, such as Brazil, China, Denmark, Hong Kong, India, and Malaysia, have mandated that companies report sustainability issues (Musa et al., 2020). Although there are many frameworks and guidelines related to sustainability reporting, including the Carbon Disclosure Project (CDP), the International Standard Organization (ISO), the Greenhouse Gas Protocol, the United Nations Global Compact (UNGC), the Sustainability Accounting Standards Board (SASB), and the International Integrated Reporting Council (IIRC); However, the GRI is the most widely used framework for reporting on sustainability issues (Nicolò et al., 2022; Raimo et al., 2022).

Companies with strong governance structures understand the expectations of stakeholder's and engage with them to address concerns related to achieving SDGs. A firm's participation and success in achieving SDGs can potentially improve the firms' reputation on environmental and societal contexts. SDGs are essential to ensuring corporate sustainability, a concern for all nations' (Anyigbah et al., 2023; Waal & Thijssens, 2020). Both UNCG and

GRI have developed reporting guidelines for SDGs to be included in corporate reports. The "Integrating the Sustainable Development Goals' into Corporate Reporting: A Practical Guide" is a valuable resource for companies' looking to produce more comprehensive report's (United Nations Global Compact, 2019; Huber et al., 2018).

As previously noted, although awareness of the importance of sustainable development is growing, empirical research on corporate disclosure on SDGs is still limited. Recent studies' show that the majority of companies' have not yet been incorporated the SDGs in their reports' (KPMG, 2018).

2.1.2 Diversity of Board Characteristics & Activities

A well-defined control structure is essential for every organization to ensure effective business operations and progress. Corporate governance is the framework of principles, foundations, and systems that govern the relationships between the board, the corporate owners, and other parties to achieve a balance between stakeholder's interest's (Arora & Sharma, 2016). Corporate governance structures establish accountability among governance parties, including the boards' interactions with internal and external stakeholders. Corporate governance plays an important role to improve sustainability performance and increase investor confidence. It is imperative to develop a corporate governance structure that would positively impact economic, social and also environmental fronts as well as offer chances to improve corporate performance (Casciello et al., 2024). The current approach to corporate governance needs to be revamped to promote social accountability and appropriate responsibility among companies (Sekarlangit & Wardhani, 2021).

The Board of Directors is one of the governance pillars, it's a vital component in ensuring the success of a company. It serves to support the interests of all stakeholders, make important decisions, and influence the governance, sustainability, and overall value of the organization. The board has the responsibility of leading sustainability efforts, balancing financial and non-financial objectives, making decisions about environmental and social issues, overseeing management performance, and ensuring effective control and management systems are in place (Jibril & Isa, 2024; Sekarlangit & Wardhani, 2021). Additionally, the board is accountable for managing risks and applying governance optimally to positively impact the

company's performance and disclosures, safeguard its assets, and maximize the wealth of its shareholders (Ingle, 2008). Recently, the board has been increasingly recognized as responsible for sustainability disclosure matters (Rosati & Faria, 2019).

The role of the BoD's in managing the company and the necessity of its formation in a way that allows for effective and independent decision-making is highlighted. The majority of regulatory, supervisory and responsible bodies stress the need for board members to be professional, with sufficient and diverse knowledge, experience and skills (KNKG, 2006). The board is responsible for managing the company to achieve profits and ensure business continuity. There is a high commitment of board members to laws and regulations in a substantial part of countries and institutions (Sari, 2020).

Diversity is defined as the social, cultural, physical, intellectual and environmental differences between individuals. Diversity in top management may result in increased creativity, improved decision-making, and enhanced system flexibility. In addition to other benefits of diversity which include efficient management and usage of environmental resources; Many such studies suggest that diversity increases legitimacy and flexibility, adding that diversity allows for distinct perspectives and creative approaches to managerial decision making (Saputri & Ariani, 2024; Weerasinghe et al., 2023).

Recently, the issue of "diversity of board characteristics " has gained significant attention in corporate governance literature, according to researchers such as (Jibril & Isa, 2024), board diversity is the presence of different dimensions or attributes among board directors. They can be visible attributes such as ethnicity, nationality, gender, and age; as well as less visible differences like educational background, professional experience, industry knowledge, and organizational affiliations (Monteiro et al., 2022).

Having a diverse boardroom cannot be overstated. Research suggests that having a diverse board is likely to give rise to better decision-making and innovation as well as more attraction of resources for organization's (Temiz & Acar, 2023; Aifuwa & Embele, 2019). In addition, according to Rathnayaka, (2018), a diverse board increases the standard of strategic decisions of the firm and enhances a firms' performance, reputation, and global reach.

Several characteristics are determining how the BoD's relate to SDGs disclosure. It includes' board size, independence, gender, CEO duality and its board members' tenure. In addition, the boards activities', particularly the existence of the CSR committee in the board's structure, is also a pivot part in this regard.

2.2 Theories of BoD's & SDGs

As there are recent developments in economic theory, it is suggested that firms' BoD's have a key role in their corporate governance structure. Furthermore, the board can play a major role in dictating the reporting practice and procedures (Keasey & Wright, 1993; Fama & Jensen, 1983). Indeed, several studies' have documented a strong association between the firms BODs composition and quality of sustainable reporting (Rao et al., 2012; Michelon & Parbonetti, 2012; Rupley et al., 2012). Literature uses several theories like stakeholder theory, agency theory, legitimacy theory and resource-dependence theory to explain why firms voluntarily disclose. These theories provide support for a link between board diversity within corporate governance and disclosure behavior. Consequently, it is appropriate to adopt a multi theoretical approach to examine the relationship between board characteristics and SDG disclosures' to better understand the board characteristics and the motivations and mechanisms that drive corporate governance and sustainability reporting.

Stakeholder Theory investigates the effects of diversity in the firms' board on SDGs disclosure. Studies by Denhere (2024), Nicolò et al. (2022), Buniamin et al. (2022), Hossain et al. (2020), Guler et al. (2019), and Rao and Tilt (2016) utilized stakeholder theory to illustrate how the board ensures that the corporate strategy as per the stakeholders' interest is reflected and also making the SDGs disclosures more transparent. According to this theory, corporates have a responsibility that involves the interests beyond shareholders. It is the board's responsibility to consider all parties' expectations and interests (Fama & Jensen, 1983). Additionally, it is useful to be on a diverse board to represent many interests in making informed decisions (Mitchell et al., 2016). By doing this, the SDGs's expectations of all stakeholders can be met and the firms can guarantee sustainability by transparent communication of the SDGs. This is a moral obligation to disclose these goals and a way of satisfying various expectations. A well-designed diverse board with transparency and

accountability has a company impact on the environment and society (Harrison & Van Der Laan, 2015). According to stakeholders' theory, the BoD consisting of many members can help represent the diversity of stakeholder groups that demand inclusion in the sustainability reports. The quality of the reports' is also increased by this inclusivity to highlight SDGs (Tagliatalata et al., 2023). Furthermore, diversity of both genders on the board increases transparency and accountability of the board with sustainable issues towards all stakeholders (Ardillah, 2022). Additionally, a diverse representation of genders, cultures, and backgrounds on board contributes to better understanding multicultural challenges', and designing sustainable strategies' able to address various stakeholders' needs (Sekarlangit & Wardhani, 2021).

As well as, the Agency Theory focuses on the dynamic between managers' and shareholders to foster sustainable development while ensuring contractual parties to preserve a balance (Jensen & Meckling, 1976). This theory emphasizes the importance of directing independent members of the BoD's towards avoiding personal interest of managers to the interest of the firm and its shareholder's (Alvarado et al., 2017). The diversity in the composition of the BoD's reflects the wide diversity of the managers' ideas and opinions necessary for effective representation and participation in making up effective decisions. In addition, the independence of the CEO from the board reduces control of the executive director, minimizes conflicts of interest, promotes sustainable development and enhances transparency and disclosure. According to Galbreath (2010), boards that have a good complement of gender diversity are expected to provide better monitoring of company agents and enforce ethical conduct more effectively. Besides, an independent board tends to make decisions that are enlightened and in line with expectations, thus increasing the opportunities to support SDGs and disclose them in conjunction with the expectations of stakeholders (Ayobami et al., 2021). Moreover, investors rely on certain control mechanisms to monitor and evaluate managers' performance, such as asking managers to report audited information from external parties, or voluntary disclosure of CSR or SDGs in annual or sustainability reports' (Farida, 2019).

The Legitimacy Theory states the reason behind firm's disclose their CSR practices'. According to this theory, top management is responsible for recognizing the legitimacy gap

and developing and disclosing CSR practice's in collaboration with stakeholder's to ensure accountability (Deegan, 2002). The board's composition is crucial in bridging the legitimacy gap through CSR disclosures. Non-financial disclosure enables firm's to legitimize their performance, manage stakeholder's perception's, and maintain their social legitimacy (Cucari et al., 2018). Disclosure of SDGs brings out a firm's commitment to legitimacy and social responsibility. Diversity in the board formation is important to attaining legitimacy and acceptance from diverse stakeholders.

Regarding resource diversity, firms are dependent on resources provided by others to sustain growth, it is an important factor in a firm's ability to compete effectively, as emphasized by Resource-Dependence Theory. Among these resources', the BoD's with tenured and diverse members have a strategic role in providing comprehensive resources', including formulating strategic goals', directing companies' policies and strategies, improving the companies image and offering experiences and advice (Moussa et al., 2020). The theory aims to determine the impact of the firm's operations on stakeholders' and how the board can meet their expectations'. The Board's adoption of social and environmental practices' is crucial, reflecting the firm commitment to sustainable development (Pfeffer & Salancik, 1978).

2.3 Hypotheses Development

The academic exploration of corporate governance mechanisms', particularly BoD's, has been a focal point for researcher's investigating their role in fostering sustainability (Anyigbah et al., 2023; Enciso-Alfaro & García-Sánchez, 2022). There is limited studies' addressing various board characteristics' such as size, existence of sustainability committees, independence, gender diversity and CEO duality to find out the influence on the economic, environmental and social outcomes. However, the results have been mixed, which requiring for further investigations' (Pandey et al., 2022; Lorenzo & Sanchez, 2010).

Research has surged in sustainability and management field focused on how sustainability can be used to benefit businesses. However, there is still a lack of empirical researches specifically focused on SDGs. Today businesses are facing more and more complex economic, environmental and social challenges, and so integrating SDGs into their activity is increasingly necessary (Silva, 2021). Academic research has begun to explore how SDGs

can be incorporated into a companies' strategies and how they relate to different aspects of the business (Pizzi et al., 2021). One area of focus is understanding why firms choose to disclose their contributions ' to SDGs. According to studies', institutional investors and national initiatives encouraging sustainability policy have a key role in persuading firms to do so. In fact, engagement with SDGs can range from mere integration to more ambitious levels (Lewa et al., 2024). Identifying the factors that drive a company's commitment to the goals outlined in Agenda 2030 is significant if we are to accelerate the transition to a sustainable society (Nicolò et al., 2022; Raimo et al., 2022; Rosati & Faria, 2019).

BoD's offer important guidance to companies' on how to navigate a changing regulatory and societal landscape. As the world's efforts to combat climate change and pollution intensify, companies are expected to align with the social expectations' of contributing to resolving these challenges. The BoD's are responsible for providing directions' and prioritizing the implementation of such initiatives. Recent studies' have found that boards characteristics and activities can influence firms practices and disclosures' (Ballesteros et al., 2017). Therefore, it is in the best interests of the board to legitimize the company and highlight its involvement in addressing global challenge's (Chan et al., 2014; Michelon & Parbonetti, 2012).

Research demonstrates' that the adoption of sustainable practices and goals varies among company boards. Evidence suggests that boards that prioritize sustainability tend to have greater gender diversity, which is apparent across financial (Orazalin, 2019) and non-financial institution's (Jibril & Isa, 2024; Nicolò et al., 2022). Furthermore, studies indicate that specific board attributes, such as gender diversity and independence, increase the likelihood of disclosing risks in integrated reporting. However, these findings are often specific to certain countries (Salehnezhad et al., 2023; Sekarlangit & Wardhani, 2021), and most recent international studies are based mainly on GRI reporting data (Zampone et al., 2024; Nicolò et al., 2022; Ferrero & Meca, 2020). Accordingly, the arguments mentioned above generated relevant hypotheses.

2.3.1 Board Size & SDGs Disclosure

The BoD's hold a critical role in corporate governance, managing, overseeing, and achieving strategic objectives. According to Cosma et al. (2021), the size of the board plays a significant factor in determining its effectiveness. There are two contrasting views on the benefits of having a large board. One suggests that having a large board maximizes the company's resources, brings expertise, and improves its image. Li et al. (2021) found that larger boards are more diverse and effective, contributing to better corporate reputation and positive impact. On the other hand, the second view indicates that having a large board increases the likelihood of conflicts within the board, negatively affecting coordination, direction, and oversight. Jensen (1993) notes that small boards are more effective at monitoring the CEO and reducing manipulation. In this context, Jilani & Chouaibi (2021) argue that the board chair has more influence on smaller boards. According to the resource-dependent perspective, the size of a company's board can positively impact its sustainable reporting activities (Pfeffer & Salancik, 2003). That's because every board member is vested with their own set of values, perspectives, and ideas that they bring to the decision making. Further, stakeholder theory states that a larger board of directors represents a wider range of stakeholder groups who can demand inclusiveness from various factors in the company's sustainability reporting activities, which can improve the quality of the corporate sustainability reports (Elsheikh et al., 2024; Rao et al., 2012).

Several studies were written to explore the relationship between board size and SDGs and the impact of board size to SDGs disclosures in this context. Such of these studies have found a positive correlation between larger board size and higher levels of SDGs disclosures (Zampone et al., 2024; Anyigbah et al., 2023; Pizzi et al., 2021; Fuente et al., 2017). As mentioned in a recent study by (Rao et al., 2012) a bigger board size permits more stakeholder participation and representation of their interests. Additionally, a larger board size increases the possibility of having members with sustainable strategy and stakeholder needs knowledge, leading to more sustainable disclosures (Allegrini & Greco, 2013). However, some studies' have found a negative relationship between board size and social and environmental performance and disclosure (Munoz, 2020). As other studies indicate that there is little correlation or no significant relationship between board size and social activities

or SDGs disclosures (Cocari et al., 2018; Rao et al., 2012). Therefore, the following hypothesis can be developed:

Hypothesis 1: Board size has a significant positive effect on SDGs disclosures.

2.3.2 Board Independence & SDGs Disclosure

Executive and non-executive members in the board structure aim to balance the firms' visions and goals. Although all members are treated equally, executives are crucial in protecting the shareholders' interests by monitoring operations and reducing the managerial opportunism. As well as, independent directors have their own incentives since they pursue improvement in the board's decision-making process (Pinheiro et al., 2024; Liao et al., 2019). From agency theory, independent directors have a vital role in monitoring the director's actions' and improving the board's effectiveness (Rao et al., 2012). According to stakeholder theory, board independence has a positive relationship with sustainability performance because the experience of independent directors less pressure, leading to more positive decision-making (Hussain et al., 2018). In addition, independent directors increase governance mechanisms to support long-term economic, environmental, and social sustainability of the company (Anyigbah et al., 2023; Alvarado et al., 2017). In agency theory, the main duty of directors is to reduce agency costs by supervising management in a manner consistent with the shareholders best interest (Hu & Loh, 2018). On the same side, resource-dependence theory proposes that the presence of independent directors in a firm increases its legitimacy and external image, and provides the outside experiences and alternative viewpoints' that insiders may lack. Several studies indicate that firms' with larger numbers of independent directors' are more likely to disclose more transparently and produce better nonfinancial reports' (Raimo et al., 2022; García-Sánchez et al., 2020). In addition, greater independence among directors' is linked with more sustainability related partnerships' (Post et al., 2015). Ferrero & Meca (2020) explored whether the independence of board members' affects a companies' reporting on SDGs in sustainability reports', it was found that a company with a more independent board will make a positive contribution to the 2030 Agenda. likewise, Pizzi et al. (2021) observed a positive relationship between independent boards and SDGs reporting scores. However, Yadav & Jain (2023) and Sekarlangit & Wardhani (2021) reported an

insignificant relationship. Accordingly, there are mixed results in this regard, this led to the following hypothesis:

Hypothesis 2: Board independence has a significant positive effect on SDGs disclosures.

2.3.3 Board Gender & SDGs Disclosure

Gender diversity on boards' is a diverse topic that is seeing increasing interest from researchers' and practitioners. Research showed that having a diverse board with women's and men's representatives can enhance effectiveness, and understand the issues' that companies face (Monteiro et al., 2019). Although some countries' do not require gender diversity on boards, some want gender neutral mix of board members. It is essential to recognize that the composition of gender diverse boards' is a key corporate governance factor that affecting sustainability performance (Temiz & Acar, 2023; Rao & Tilt, 2016). Research indicates' that female directors', with their differing backgrounds', bring in an alternative viewpoint which endears better decision making and better ability to consider sustainability issues' (Shaukat et al., 2016). Moreover, women directors possess unique feminine attributes than their male counterparts; they are affectionate, spontaneous, kind, sympathetic, and interpersonally sensitive. Thus, women are more responsive to meet the needs of different stakeholder parties, contributing to improved corporate social performance (Eagly et al., 2003). According to agency theory, gender diversity serves as an important mechanism for increasing management oversight and more efficient and reliable reports to shareholders. From a stakeholder theory perspective, gender diversity among board members is favored for improving board ability to serve the interests and pursue sustainability concerns of stakeholders (Jensen & Meckling, 1976).

Board gender diversity allows to provide more value to the company when the board serves as an advisory board. Isidro and Sobral (2014) point out that female directors are more likely to prioritize social responsibility practices in comparison to their male counterparts. Additionally, increased representation of women on the board could promote and mainstream new sustainability issues into business (Zampone et al., 2024; Rosati & Faria, 2019). These findings support the argument that female directors do focus on the company's legitimacy and sustainability practices. Additionally, researches have revealed positive linkage between

woman members' and disclosure on sustainability, consistent with the upper echelon theory that gender will affect strategic decision-making process (Monteiro et al., 2019; Fuente et al., 2017). Other studies revealed that the companies' boards with gender diversity performs a central role in addressing environmental concerns' such as climate change, and has a positive effect on the support for each specific SDG examined (Taglialatela et al., 2023; Rosati et al., 2018). Those presences on the board support the SDGs and make more transparent reporting on its progress. Therefore, the following hypothesis arises:

Hypothesis 3: The presence of female directors has a significant positive effect on SDGs disclosures.

2.3.4 Board Tenure & SDGs Disclosure

Board tenure is one of essential corporate governance hidden aspects, which balances accumulated knowledge and experience and fresh perspectives. This duration helps to shape member's understanding of the company and its industry, which then influences their strategic and operational decisions, as well as the company's effectiveness in reporting and disclosing matters, in particular with regard to the SDGs (Álvarez & Rodriguez-Dominguez, 2023). By doing so, theoretical frameworks illuminate the impact of board tenure on SDGs disclosure. Under agency theory, long tenure would facilitate members' knowledge of governance and reduce agency problems. But it could also undermine effectiveness of oversight if members get too close with the management. Also, long serving members may not challenge existing practices, or confront any conflicts with management, which could affect corporate policies and the quality of disclosures including sustainability (Jensen & Meckling, 1976). Stakeholder theory suggests that it's essential to meet all stakeholder expectations. The extended board tenures will allow for more understanding of the diverse stakeholder needs that will guide company policies with greater and more comprehensive disclosures (Fama & Jensen, 1983). Meanwhile, Resource Dependence Theory proposes that new members can provide valuable resources and innovation perspective which would enhance SDGs disclosure (Pfeffer & Salancik, 1978). Empirical research present mixed results on the relationship between board tenure and SDGs disclosure. Some argue that long serving board members are able to positively contribute to decision making capabilities and

their economic, social, and environmental practices, resulting in better quality of disclosure (Casciello et al., 2024; Yadav & Jain, 2023; Harjoto et al., 2015). As well as Arslan et al. (2022) underscore that tenure in boards and top management increases the quality of environmental and social disclosure. However, other studies indicates' that long tenure may lead to sticking with outdated practices and lack of new ideas' that may work as barriers towards sustainable disclosure (Alvarez & Dominguez, 2023). Thus, the following hypothesis is proposed:

Hypothesis 4: Board tenure has a significant positive effect on SDGs disclosures.

2.3.5 CEO Duality & SDGs Disclosure

CEO duality is a structural organization where the same person holds the position of board chairman and CEO. This means that the individual is responsible for making strategic decisions for the company as the Chairman of the BoD's, and also manages the day-to-day operations as the CEO (Naushad & Malik, 2015). This type of organization has sparked debates about its effectiveness in corporate management. Some believe that CEO duality has advantages, such as more timely decision-making, improved implementation, cost savings by eliminating information transfer costs, and generating individual power for the CEO that would prevent board control (Lewa et al., 2024; Yang & Zhao, 2014). However, others argue that it can lead to individual control that may be unsustainable and affect the effectiveness of the company's monitoring and governance (Graham et al., 2020; Haniffa and Cooke, 2002). This is because it undermines the efficiency of the BoD's in performing the governance role, as a result of the concentration of authorization, decision-making and oversight powers in the hands of the same person. Combining the two positions can lead to a decrease in supervising and monitoring management by shareholders, which can harm their interests (Ferrero & Meca, 2020). In turn, CEO duality is important to sustainability through it impacts on strategic decisions and a company's commitment to societal responsibility. This can hinder a company's capacity to incorporate sustainability principles in the strategy and performance (Lewa et al., 2024; Jizi et al., 2014). The CEO with more focus on vision and operations may cause a poorer setting of priorities and performance standards (Aktas et al., 2021). Duality may also impact the propensity of a CEO to care about social and environmental

responsibility because of preoccupation with operational issues and hence decrease a CEO's interest in those issues (Peng et al., 2019). Meanwhile, the separation of board chairman and CEO positions can enable communication and innovation between and within the organizations and positively impact their performance and attainment of sustainability goals' (Kang et al., 2021).

From the agency theory perspective, managers' self-interests can influence the level of involvement and reporting of SDGs (Yusoff & Alhaji, 2012; Jensen & Meckling, 1976). Also, resource dependence theory states that an independent chairperson brings knowledge and external advice to a company and gives a positive perception to the company (Bendickson et al., 2016; Pfeffer & Salancik, 1978). Although research exists on the relationship between CEO duality and support for SDGs is limited, there are contradictory findings regarding transparency. Ferrero & Meca (2020) conducted a recent study to explore how CEO duality influences reporting on SDGs in sustainability reports using the GRI. They found that separating the CEO from the board chairperson positively affects a firm's contribution to SDGs. In addition, Chau & Gray (2010) and Donnelly & Mulcahy (2008) suggest that CEO duality leads to lower disclosures. On the other hand, CEO duality can facilitate SDGs reporting to satisfy the demands of powerful stakeholders, reduce supervision costs, or increase tenure and remuneration (Lewa et al., 2024; Buniamin et al., 2022). Thus, the following hypothesis is developed:

Hypothesis 5: CEO Duality has a significant negative effect on SDGs disclosures.

2.3.6 Existence of CSR Committee & SDGs Disclosure

Having committees related to corporate social responsibility within a company's board structures is a strategic decision that prioritizes sustainability in the core decision making processes (Casciello et al., 2024; Sekarlangit & Wardhani, 2021). The committee is responsible for overseeing environmental impact, and social responsibility. They are responsible for evaluating company performance in these regards, establishing goals and ensuring the company operates by sustainable business practices. By doing so, the CSR committee strengthens corporate governance transparency and accountability (Lu & Wang, 2021).

The CSR committee align the company operations with broader CSR objectives', reducing risks associated with environmental and social issues, and enhancing long-term value creation. Its also reinforces the board's role in managing stakeholders besides addressing concerns beyond financial performance (Weerasinghe et al., 2023; Lu & Wang, 2021). Further, companies with a CSR committee have a proactive approach on mitigating the environmental impact, promoting social responsibility and upholding high governance practice (Amran et al., 2014). The proactive stance this takes also lines up with the world's growing sustainability trend, and puts the company in the role of a responsible and ethical corporate citizen. Thus, the existence of a CSR committees in the board's structures indicates the commitment of the firms to sustainable practices', responsible business conduct, and the firms' wide alignment of environmental and social factors into the firms' overall strategies' and operations' (Al Lawati & Alshabibi, 2023; Adel et al., 2019). This commitment is consistent with sustainable development and its goals' (Abreu et al., 2022; Elsayih et al., 2021). According to agency theory, there are conflicts of interest within organizations between management and the shareholders of companies' (Jensen & Meckling, 1976). To minimize these conflicts, having such a committee can be useful, especially that, a CSR committee can enhance the levels of transparency through disclosing adequate information's. As a result, it can reduce agency problems and costs' which may arise (Arayssi et al., 2020). CSR committees are responsible for overseeing companies' sustainability strategies' and reporting process. A recent study has found that firms', which are more committed to sustainability by forming the CSR committees are more likely to disclose their progress about SDGs (Sekarlangit & Wardhani, 2021). This finding is consistent with previous researches' (Weerasinghe et al., 2023; Fuente et al., 2017; Mahmood & Orazalin, 2017), which revealed positive correlation between CSR committee and sustainability reporting. Therefore, the following hypothesis is generated:

Hypothesis 6: The presence of the CSR committee has a significant positive effect on SDGs disclosures.

Chapter Three

Research Methodology

3.1 Study Sample & Data Collection

To test study hypotheses. The population of this study consist of all European Financial and Non-Financial firms from several countries and sectors. The study sample was determined by purposive sampling with criteria such as data availability about firms' board characteristics and SDGs disclosures in relevant databases (Asset4-Refinitiv Eikon). The samples used in this study after we used criteria amounted to 5,656 year-observations from 1,886 firms in four years 2019-2022.

Table 3.1

Tabulation of the study sample by country

Country	Observations	Percentage
Austria	90	1.6%
Belgium	129	2.3%
Cyprus	24	0.4%
Denmark	162	2.9%
Finland	222	3.9%
France	525	9.3%
Germany	750	13.3%
Greece	60	1.1%
Hungary	15	0.3%
Ireland	57	1.0%
Italy	297	5.3%
Luxembourg	81	1.4%
Netherlands	183	3.2%
Poland	84	1.5%
Portugal	39	0.7%
Spain	196	3.4%
Sweden	897	15.9%
Switzerland	453	8.0%
United Kingdom	1,392	24.6%
Total	5,656	100%

The table above includes the distribution of study sample firms by country, which reflects the extent of the geographical representation of firms participating in the study. The table shows that the United Kingdom has the highest percentage of participating firms and observations by 24.6% (1,392 observations), indicating their prominent role in the study. Sweden is followed by 15.9% (897 observations), and Germany with 13.3% (750

observations). This high focus in some countries can be due to the economic size of these countries or their greatest commitment to public reporting and disclosure.

On the other hand, countries such as Hungary, Cyprus and Portugal appear very low (0.3, 0.4, and 0.7%, respectively), this reflects the lack of firms participating in these countries, which is constrained by data availability. These gaps can indicate differences in the size of the market or the level of engagement in international initiatives.

Table 3.2 provides the industries in which firms in the sample operate. The study depends on the industry classification employed by the Refinitiv Eikon database; the Refinitiv Eikon "Thomson Reuters Business" Classification (TRBC) is an industry classification of global firms.

Table 3.2

Tabulation of the study sample by industry

Industry Name	Observations	Percentage
Basic Materials	421	7.4%
Consumer Discretionary	1,018	18.0%
Consumer Staples	448	7.9%
Energy	327	5.8%
Health Care	527	9.3%
Industrials	1,410	24.9%
Real Estate	462	8.2%
Technology	563	10.0%
Telecommunications	216	3.8%
Utilities	264	4.7%
Total	5,656	100%

The sectors with the most representation are industrial, consumer discretionary, and technology, with 24.9, 18, and 10%, respectively; telecommunications have the lowest representation at 3.8%. This data in the table reflects the diversity of economic sectors and the contribution of each sector to forming a study sample. The most representative sectors (industrial, consumer discretionary, and technology) are vital elements for analyzing economic and investment patterns. These results enhance a comprehensive understanding of sectoral distributions, which is essential for shaping and directing future economic, social, and environmental legislations, instructions, policies and strategies.

In addition to previous research and studies, the sources of data and information on which the study depends are represented mainly on a set of specialized databases, including Asset4-Refinitiv Eikon, WorldScope, and GRI Website, where data obtained on board characteristics and SDGs disclosure. Where a qualitative methodology was adopted through the content analysis of those reports. This approach allows for greater inclusion in practical application, testing the relationship between the study variables, and not limiting them to a specific country or environment as previous research contains (Taglialatela et al., 2023; Ardillah, 2022; Diaz-Sarachaga, 2021; Musa et al., 2020). This enhances the possibility of generalizing study results and recommendations. Therefore, unlike several previous studies which only focused on cross-sectional data analysis (Taglialatela et al., 2023; Sekarlangit & Wardhani, 2021); the Panel Data Analysis considered over the period 2019-2022, which represents the subsequent period for adopting the SDGs by the United Nations in 2015, where the firms are increasing their focus on inclusion and reporting relevant information, and the availability of data on a wider range.

3.2 Research Variables & Measurement

This section defines the variables of the study (dependent and independent), in addition to the controlling variables. It also identifies the appropriate methods for measuring each one of them. The dependent variable is the SDGs disclosure, which means the practice that organizations publicly disclose their initiatives', impacts, and contributions towards the SDGs (Aifuwa, 2020). In essence, it involves organizations publishing information about their efforts toward achieving a sustainable future and contributing to the SDGs (Taglialatela et al., 2023; Farida, 2019). The primary objective of this practice is to improve transparency, accountability, and stakeholder engagement by providing information on sustainability performance and alignment with global development goals (Agarwal et al., 2017). Thus, the idea arose to identify the extent to which companies disclose SDGs in their reports.

The SDGs disclosure variable in this study was measured as a proportion, expressed as a percentage constructed for this study's purposes. This percentage represents the number of SDGs a firm disclosed during each reporting period to the total 17 SDGs.

On the other hand, the study examines the impact of one of the internal corporate governance mechanisms based on the board characteristics and activity which consists of size, independence, gender, tenure, CEO duality and the presence of CSR committee.

The control variables in this study include financial performance, financial leverage and firm size. Return on assets is used to control a firm's financial performance which is expressed as the ratio of net income to total assets (Taglialatela et al., 2023). Financial leverage is used to measure a firm's financial risk, calculated as total debt over total equity. While the natural logarithm of total assets measures firm size (Ardillah, 2022). Previous research has shown that profitable and larger firms with greater resources, capabilities, expertise, and stakeholder pressure for transparency are more likely to invest in sustainability initiatives and reporting, and therefore, tend to disclose more information about their SDGs-related activities (Shin et al., 2021; Ferrero & Meca, 2020). In addition, these companies have a desire to enhance their reputation comply with regulatory requirements, and have stronger governance structures and organizational cultures that prioritize long-term sustainability goals (Alnajjar, 2020; Miller et al., 2018; Chen & Green, 2017). On the other hand, high levels of leverage have been found to negatively affect CSR and SDGs (Karim et al., 2019; Sanan, 2016).

Table 3.3 below presents variables, their types, measurements and literature sources.

Table 3.3*Study variables and measurements*

Variable	Label	Measurement	Ref
Dependent			
SDGs Disclosure	SDGs_D	Percentage of SDGs disclosed by the firm to total SDGs (17).	This ratio has been constructed for this study purpose.
Independent			
Board Size	B_Size	Total number of firm board members.	(Sekarlangit & Wardhani, 2021)
Board Independence	B_Ind	Proportion of independent directors to the total number of board members.	(Ardillah, 2022)
Board Gender	B_Gen	Proportion of female members to the total number of board members.	(Tagliatela et al., 2023)
Board Tenure	B_Ten	The number of years each member has been on the board.	(Alvarez & Dominguez, 2023)
CEO Duality	CEO_Du	Dummy variable equal to 1 if CEO is also chairman, 0 otherwise.	(Jizi, 2017)
Existence of CSR Committee	CSR_Comm	Dummy variable equal to 1 if the firm has CSR committee, 0 otherwise.	(Michelon & Parbonetti, 2012)
Control			
Return On Assets	ROA	Net income divided by total assets.	(Tagliatela et al., 2023)
Leverage	LEV	Total liability divided by total equity.	(Tagliatela et al., 2023)
Firm size	F_Size	Natural logarithm of firm total assets.	(Ardillah, 2022)

3.3 Research Model

This study relies on a model to determine the role of diversity in the characteristics and activity of BoD's in disclosing SDGs. The proposed model is based on several previous methodologies' (Tagliatela et al., 2023; Ardillah, 2022; Oluwatoyin et al., 2021), which were adapted to this study's objectives. In developing the model, the study aims to provide a comprehensive understanding of the role of diversity in board characteristics and activity on corporate SDGs disclosures. This model enables exploration of the impact of one of the governance axes that may affect sustainability disclosure. Therefore, the following model is used:

$$SDGs_D = a + b1 B_Size + b2 B_Ind + b3 B_ Gen + b4 B_ Ten - b5 CEO_Du + b6 CSR_Comm + b7 ROA + b8 LEV + b9 F_Size + e.$$

Where:

SDGs_D = Sustainable Development Goal's Disclosure

a = Constant

B_Size = Board size

B_Ind = Board Independence

B_Gen = Board Gender

B_Ten = Board Tenure

CEO_Du = CEO Duality

CSR_Comm = Existence of CSR Committee

ROA = Return On Assets

LEV = Leverage

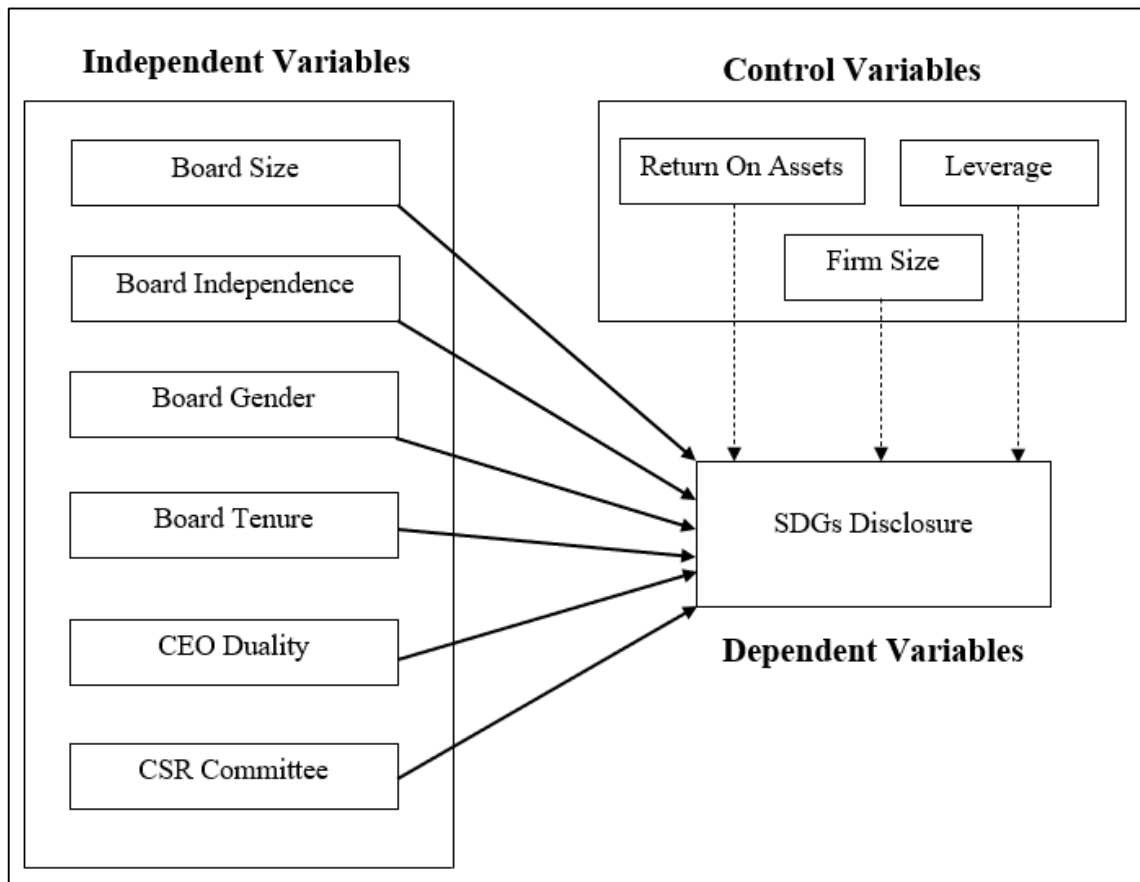
F_Size = Firm size

b1 – b9 = Regression Coefficient

e = Errors

The figure 3.1 below represents the study model and the relationship between variables':

Figure 3.1
Study Model



Chapter Four

Results and Discussion

4.1 Descriptive Statistics

This section displays the descriptive results for the study variables. It shows the mean, standard deviation, minimum, and maximum, for each variable.

Table 4.1
Descriptive Statistics

Variable	Mean	Std. Dev.	Min	Max
SDGs_D	4.93	5.24	0	17
B_Size	8.60	3.42	3	20
B_Ind	0.52	0.27	0	1
B_Gen	0.28	0.15	0	0.6
B_Ten	6	3	1	16
CEO_Du	0.20	0.40	0	1
CSR_Comm	0.61	0.48	0	1
ROA	3.79	8.39	-18.67	18.34
LEV	0.21	0.17	0	3.16
F_Size	13.88	2.00	4.77	20.06

A set of variables related to board diversity and SDGs disclosure were analyzed. The results in Table (4) above reveal that the average disclosure of SDGs was 4.93 with a standard deviation of 5.24, indicating that, on average, firms disclosed 29% of SDGs during the study period. The range of minimum and maximum values (0 and 17) indicates that some firms did not disclose any SDGs, while others disclosed all 17 SDGs, showing a significant disparity in the extent of firms' commitment to SDGs. This discrepancy may be linked to the awareness and understanding of the importance of sustainability and its impact on various aspects' (Ferrero & Meca, 2020). These results are consistent with a study by Jizi (2017), which found an average SDGs disclosure of 30.8% among a sample of firms in the United Kingdom, and similar to a study by Aifuwa (2020), which found an average sustainability disclosure of 34.9%. However, they relatively differ from several other studies' (Buniamin et al., 2022; Sekarlangit & Wardhani, 2021) conducted in different environments', where the average disclosure rates were 37%, 49%, and 51%, respectively.

In this analysis, we examined the data to identify the percentage of SDGs disclosures at the country and sector levels. According to the data presented below in Figure (3), Portugal,

Greece, and Spain demonstrate the highest disclosure percentages of SDGs at 60%, 56%, and 53% respectively, while Germany, the United Kingdom, and Switzerland show the lowest disclosure percentages at 24%, 23%, and 20% respectively. Conversely, Figure (4) below illustrates the average percentages of SDGs disclosure across various economic sectors, with the highest rate in the utilities sector (46%) and the lowest in the technology sector (19%).

For Board Diversity, Board Size (B_Size) was first assessed, which is measured by the total number of directors on the firm board. The average B_Size was approximately 9 members (mean = 8.60), with a standard deviation of 3.42, indicating variability in board sizes, the maximum board size was 20, and the minimum was 3. This may indicate the diverse approaches firms take in determining the board size. Second, Board Independence (B_Ind), which was measured by the proportion of independent directors to the total number of board members. B_Ind has a mean of 0.52, suggesting that, on average, slightly more than half of the board members are independent. The range of 0 to 1 for this variable underscores the diversity in internal governance structures, with some firms having fully independent boards and others lacking independent members entirely. The variation can be attributed to diversity in governance frameworks and regulatory and supervisory requirements in the environments where the firms operate. Third, Board Gender (B_Gen), which is measured by the proportion of female members to the total number of board members. shows that, on average, 28% of board members are female, the maximum and minimum values were (0.6) and (0), respectively. with a moderate standard deviation of 0.15, reflecting the ongoing efforts toward gender diversity in corporate governance. Fourth, Board Tenure (B_Ten) which reflects the number of years that each member has been on the board. The average B_Ten was 6.15 years, with a range from 1.17 to 16.25 years as minimum and maximum values, suggesting varying degrees of board members' stability across sampled firms, which may influence strategic decision-making, including SDGs-related initiatives. Fifth, CEO Duality (CEO_Du), where the CEO also serves as the board chairman, is observed in 20% of the selected firms (mean = 0.20). This also indicates that 80% of our sampled firms made a separation between the CEO and board chair; the variability indicated by the standard deviation of 0.40 reflects differing governance models, which could have implications for the balance of power and oversight within firms. Finally, CSR committees appear to be a

significant focus for many firms, with 61% (mean = 0.61) having a dedicated CSR committee, as indicated by the standard deviation of 0.48. The presence of such committees is likely to be a key driver of SDGs disclosure, as these entities are typically responsible for overseeing sustainability efforts.

In terms of control variables, Return on Assets (ROA), shows an average of 3.79, with Minimum and Maximum values of (-18.67) and (18.34) respectively, indicating a wide variation in the financial performance of the firms in the study sample. This variance may stem from operational efficiency, as well as the diverse environments and sectors in which the firms operate, which could be significant contributors to this contrast. The high standard deviation of 8.39 further suggests that while some firms are highly profitable, others may be struggling, potentially affecting their capacity to engage in sustainability reporting.

Leverage (LEV), with a mean of 0.21 and a standard deviation of 0.17 indicates that several firms maintain moderate debt levels, although the range (0 to 3.16) reveals that some firms are highly leveraged, which can be attributed to their financing policies and structures, and which may constrain their ability to allocate resources to non-core activities such as SDGs reporting.

Firm Size (F_Size) was measured by the logarithm of the total assets of the firm. The mean was 13.88, with a minimum and maximum value of 4.77 and 20.06 respectively. The standard deviation was 2.00, reflecting the inclusion of both smaller and larger firms in the sample. This variation in firm size is significant, as larger firms typically have more resources and face greater scrutiny, potentially driving more comprehensive SDGs disclosure practices.

Figure 4.1

Average percentage of SDGs disclosures for each country

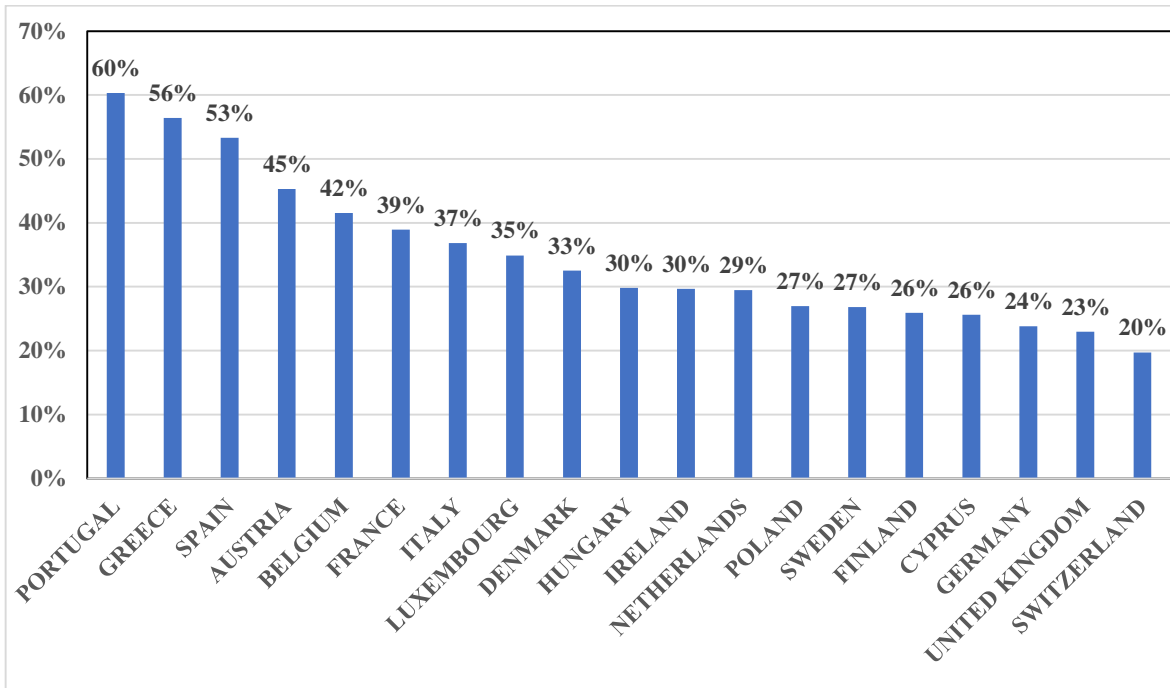
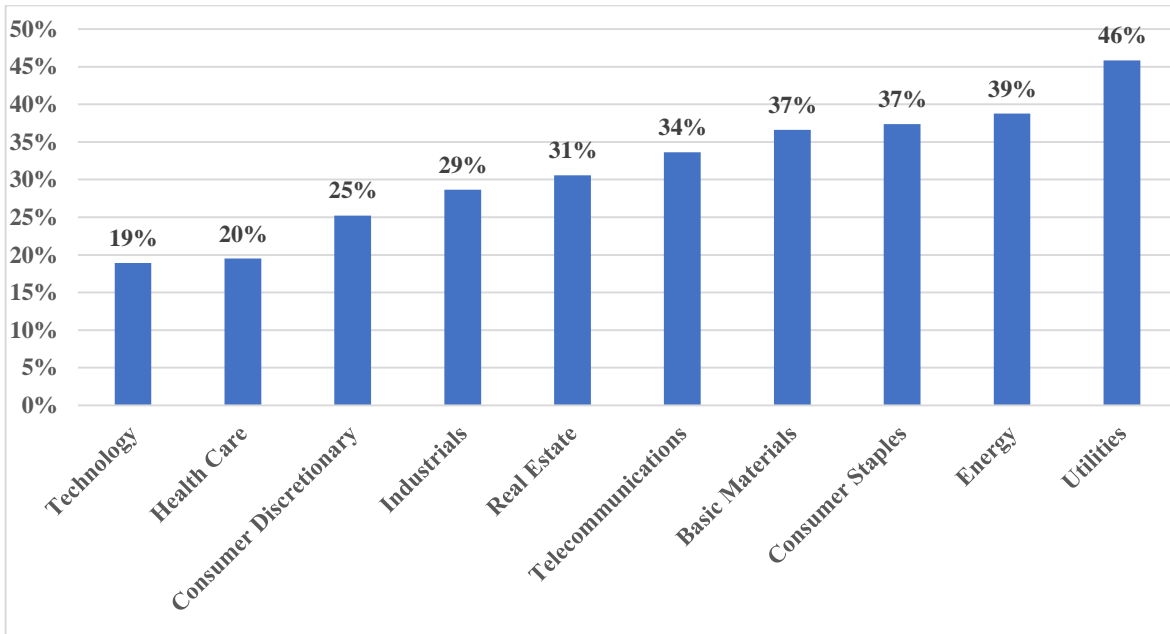


Figure 4.2

Average percentage of SDGs disclosures for each economic sector



4.2 Correlation Analysis

This section displays the level of correlation between study variables.

To check multicollinearity among the study variables, Pearson's correlation coefficients were computed for all variables. The results in Table 4.2 below demonstrate a positive relationship between SDGs_D and all board characteristics and activity (B_Size, B_Ind, B_Gen, B_Ten, CEO_Du and CSR_Comm) as well as control variables (ROA, LEV, and F_Size). Additionally, the correlations matrix below shows that the highest correlation (0.613) was between B_Size and F_Size, signifying a moderate relationship between these two variables. Besides, the SDGs_D significantly correlated with B_Size (0.352), B_Gen (0.190), CSR_Comm (0.387), and F_Size (0.441). Suggesting that firms committed to SDGs tend to have larger boards, increased female representation, a CSR committee, and larger firm sizes. Furthermore, CSR_Comm is significantly correlated with B_Size (0.382), B_Gen (0.228), and F_Size (0.498), suggesting that firms with CSR committees tend to be larger and have greater female representation on the board. Overall, the relationships among the variables are at moderate to low levels, with all correlations between the variables being less than 80%. Consequently, it can be concluded that there are no multicollinearity issues among the proposed variables, thereby enhancing the credibility of the hypotheses to be tested and the validity of the study results.

Table 4.2
Correlations Matrix

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
SDGs_D	1.000									
B_Size	0.352	1.000								
B_Ind	0.080	-0.018	1.000							
B_Gen	0.190	0.242	0.259	1.000						
B_Ten	0.039	0.039	-0.153	-0.072	1.000					
CEO_Du	0.073	0.109	-0.102	0.042	0.200	1.000				
CSR_Comm	0.387	0.382	0.146	0.228	-0.007	0.055	1.000			
ROA	0.113	0.028	0.028	0.030	0.132	0.044	0.125	1.000		
LEV	0.122	0.108	0.034	0.090	-0.111	-0.005	0.117	-0.133	1.000	
F_Size	0.441	0.613	0.124	0.250	0.051	0.060	0.498	0.158	0.232	1.000

4.3 Regression Results & Testing Hypotheses

Before conducting the regression analysis, we undertook preliminary tests to determine the most appropriate model for our data. Initially, we applied Hausman's test to verify whether a fixed or a random effect panel regression was more suitable (Ferrero & Sánchez, 2017). The results of this test showed a p-value greater than 5%, indicating that the random effects model is favoured. Further, to choose between the random effects model and pooled ordinary least squares (OLS), we conducted the Breusch-Pagan Lagrange Multiplier test. The test result revealed that pooled OLS panel regressions were appropriate for use in the study. The regression analysis in Table 4.3 below represented by Pooled OLS model, offers significant insights into the relationship between Board Diversity and Sustainable Development Goals Disclosure. In addition, we controlled for time-invariant country and industry differences using Country fe and Industry fe, and a Year fe to present any variation in the data that occurs over time and show business cycle and macroeconomic differences (Dwekat et al., 2022); While this model employs robust standard errors, it reveals some key findings.

Table 4.3*Regression results regarding board diversity and SDGs disclosure*

VARIABLES	SDGs_D
B_Size	0.124*** (0.025)
B_Ind	0.001 (0.002)
B_Gen	0.013*** (0.004)
B_Ten	0.001 (0.021)
CEO_Du	-0.325** (0.161)
CSR_Comm	1.920*** (0.144)
ROA	0.023*** (0.007)
LEV	-0.977*** (0.342)
F_Size	0.796*** (0.050)
Year Fe	Yes
Country Fe	Yes
Industry Fe	Yes
Constant	-11.95*** (0.665)
Observations	5,656
R-squared	0.364

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

H1: Board size has a significant positive effect on SDGs disclosures.

The findings indicate a highly significant (0.124; $p < 0.01$) positive association between B_Size and SDGs_D. Therefore, our hypothesis (H1) is accepted. This implies that board size positively impacts SDGs disclosures. This finding is in line with the resource dependence theory, as described by Click or tap here to enter text. In recent years, hence the suggest that larger boards provide a wider pool of resources' and diverse perspectives' as well as expertise that may enrich decision making and also facilitate quality and extent disclosures. The result agrees with (Ardillah, 2022) and Fuente et al. (2019) that increased board size leads to positive SDGs disclosure. A larger number of board members increases stakeholder engagement and the level of disclosures on the SDGs (Ardillah, 2022). This finding implies that a large board size results in effective coordination, communication and decision-making

processes, which can significantly affect SDGs disclosure (Sekarlangit & Wardhani, 2021). The larger boards offer firms a broader perspective, necessary for setting up environmental and social strategies' and taking part in globally agreed goals' (Taglialatela et al., 2023; Pizzi et al., 2021). According to Ayobami et al. (2021) in their study on listed firms in Nigeria, board size has an important role in improving sustainability reporting, argument that is larger board tend to be better to monitor and control management decisions on sustainability issues. Furthermore, in FTSE-350 listed firms, larger boards are expected to be more efficient in setting firms' sustainability agendas and encouraging the communication of SDGs information (Jizi, 2017). Nevertheless, this result is not in line with Rao et al. (2012), who do not find that board size affects SDGs disclosure. Furthermore, Aliyu (2019) discovered that board size does not influence sustainability reporting.

H2: Board independence has a significant positive effect on SDGs disclosures.

The results indicate an insignificant association (0.00185; $p > 0.1$) between B_Ind and SDGs_D. Consequently, our hypothesis (H2) is rejected, suggesting that board independence does not impact SDGs disclosures. This result is inconsistent with stakeholder and agency theories', which predict a positive relationship between board independence and sustainability performance as independent directors' gain less pressure, facilitating effective monitoring, positive decision making, and increased board effectiveness (Hussain et al., 2018; Fama & Jensen, 1983; Jensen & Meckling, 1976). While there are conflicting in studies' findings', this result is aligned with some research which does not find a correlation between board independence and sustainability reporting. Although Buniamin et al. (2022) highlighted the potential of independent directors in facilitating higher corporate stakeholder engagement and greater corporate transparency as independent directors, they did not identify a significant relationship between board independence and corporate SDGs involvement. Similarly, Ardillah (2022), Mahmood & Orazalin (2017), and Amran et al. (2014) all concluded that independent directors have no significant effect on sustainability reporting. This may be explained by the influence of traditional economies, or by the lower importance of nonfinancial reporting in independent board members' considerations. In addition, inadequate regulatory requirements and the absence of supportive regulatory and cultural environments may restrict the contribution to sustainability decisions.

Conversely, several studies' demonstrate that board independence has a positive, significant effect on sustainability and SDGs reporting which suggests that the non-executive directors put forward further corporate governance and in line with stakeholder interests' (Ayobami et al., 2021; Pizzi et al., 2021; Ferrero & Meca, 2020). Additionally, Taglialatela et al. (2023) also find a positive and significant relationship between reporting for SDGs and the proportion of independent directors. This is consistent with the resource dependence theory, that independent directors are more focused on the global initiatives and firm reputation.

H3: The presence of female directors has a significant positive effect on SDGs disclosures.

The finding indicates' a highly significant (0.0133; $p < 0.01$) positive association between B_Gen and SDGs_D. Therefore, our hypothesis (H3) is accepted. This indicates that the firms with higher proportion of female board members tend to be associated with adopting SDGs disclosures. Consistent with resource dependence theory and the stakeholders' theory, these findings indicate that boards with women directors bring diverse perspectives', networks, and orientations to the board and provide crucial contributions to promotion of organization's sustainability efforts as well as the content of SDGs disclosure to meet the expectations of different stakeholders' (Fama & Jensen, 1983; Pfeffer & Salancik, 1978). This result is in line with Zampone et al. (2024), which shows that gender-diverse boards' positively affect SDGs disclosure. Likewise, Rosati & Faria (2019) find that early supporters of the SDGs had boards with a higher share of female directors. In addition, firms with larger gender diverse boards can have broader perspectives, which is an important factor for firms to establish environmental and social strategies' and take part in globally agreed goals' (Taglialatela et al., 2023). Board gender diversity is crucial in improving sustainability reporting as Ayobami et al. (2021) show in their study of listed firms in Nigeria, pointing out that higher proportion of women on the board leads to better stakeholder engagement and better sustainability reporting. On the other hand, a study by Sekarlangit & Wardhani (2021) on companies from five Southeast Asian countries mentioned that gender diversity did not impact SDGs disclosure; this might be explained by cultural and contextual factors of these countries restrict the roles of female directors. Even more, other researchers have discovered that board gender diversity doesn't correlate with sustainability reporting; it is probable that there is not enough support, no sufficient women on the board, or strategic priorities that

don't prioritize strong commitments to sustainability and SDGs (Monteiro et al., 2022; Pizzi et al., 2021; Sekarlangit & Wardhani, 2021).

H4: Board tenure has a significant positive effect on SDGs disclosures.

The finding indicates a positive but statistically insignificant (0.00131; $p > 0.1$) association between B_Ten and SDGs_D, leading to the rejection of hypothesis (H4). This implies that SDGs disclosures are not influenced by board tenure. This finding is consistent with several recent studies that have found no evidence of, or mixed relationship between, board tenure and sustainability reporting. Liao et al., (2015) and Rupley et al. (2012) did not find a significant impact of board tenure on environmental and social disclosures, implying that long-tenured directors may refuse to introduce new ideas and stick to old practices which results in negative impact on sustainability disclosure. Additionally, Wellalage et al. (2018) and Hafsi & Turgut (2013), did not find a significant influence of board tenure on sustainability reporting or CSR disclosure. Despite this, studies have found board members' tenure to be positively related with social and environmental commitment. Harjoto et al. (2015) evidenced that longer tenure leads to increased social and environmental behaviour; while Arslan et al. (2022) highlighted that tenure in boards and top management enhances the quality of environmental disclosure. Moreover, Fuente et al. (2017) found that longer board tenure positively affects CSR reporting, arguing that experienced directors are better positioned to implement long term sustainability strategies. Similarly, Michelin & Parbonetti (2012) also provided evidence that more tenure directors with deep experience and knowledge are more inclined to engage in comprehensive sustainability disclosures.

H5: CEO Duality has a significant negative effect on SDGs disclosures.

The regression analysis results indicate a significant negative correlation between CEO_Du and SDGs_D (-0.325; $p < 0.05$). Therefore, H5 is accepted, suggesting that CEO duality negatively affects SDGs disclosures. This finding is consistent with Ferrero & Meca (2020), who demonstrated that separating the roles of CEO and chairperson positively affects a firms' contribution to SDGs. This implies an independent chairperson with external expertise, effective supervision, and meeting stakeholder needs, can improve SDGs reports. The findings support the agency theory perspective. According to Fama & Jensen (1983), having

an independent chairperson can help reduce agency problems, information asymmetry, and collusion by monitoring management practices', thus increasing emphasis on and reporting sustainability issues. In addition, resource dependence theory supports the idea that an independent chairperson can offer better oversight and transparency (Pfeffer & Salancik, 1978). The existing literature on CEO duality and SDGs disclosure presents mixed results. Our finding aligns with a study by Tagliatalata et al. (2023) on a sample of globally listed firms', which concludes that CEO duality is not a significant determinant of SDGs support and indicates a negative relationship between SDGs and CEO duality. Moreover, Ong and Djajadikerta (2017) discovered that companies without CEO duality have greater disclosure of sustainability information. On the other hand, Lee and Kim (2019) suggested that in specific institutional contexts', CEO duality can lead to enhanced CSR initiatives and improved SDGs disclosure, with the positive impact being attributed to the CEO's ability to align the companies' strategic goals with social and environmental responsibilities. Furthermore, studies' by Michelon & Parbonetti (2012) and Rupley et al. (2012) found no significant relationship between sustainability reporting and CEO duality.

H6: The presence of the CSR committee has a significant positive effect on SDGs disclosures.

The findings indicate a significant positive correlation between CSR_Comm and SDGs_D (1.920; $p < 0.01$), therefore accepting our hypothesis (H6), which implies that the presence of the CSR committee has a significant positive effect on SDGs disclosures. This finding supports the agency theory that the formation of CSR undertakings commits to reducing the conflict of interest between the shareholders and the management since the CSR committee enhances disclosure of information (Aryssi et al., 2020; Jensen & Meckling, 1976). García-Sánchez et al. (2020) have demonstrated that European firms with CSR committees tend to provide more comprehensive SDGs reporting. Similarly, Khan et al. (2013) also found out that, CSR committees increases the capacity of companies in emerging markets to set organizational strategies in compliance with international sustainability directions of the SDGs hence improved SDGs disclosure quality.

Despite these positive outcomes', challenges' do exist. Li et al. (2018) have suggested that CSR committees might sometimes' lead to surface level SDGs reporting, prioritizing symbolic compliance rather than substantial action. Meanwhile, Umukoro et al. (2019) stressed that the dependence on CSR committees may lead to segmenting reporting and failing to use a holistic approach to disclose SDGs. Nevertheless, having a CSR committee is recognised globally as being a clear sign of a company's commitment towards ethical business and the incorporation of environmental as well as social issues into a company's strategic management plan (Elsayih et al., 2021; Lu & Wang, 2021; Adel et al., 2019). This dedication is fundamental in attaining the SDGs as also postulated by Mahmood & Orazalin (2017) and Fuente et al. (2017) in their analysis, which proved that CSR committees enhance sustainability reporting.

Control Variables & SDGs Disclosure

The analysis reveals significant insights into the relationships between the control variables' (ROA, LEV, F_Size) and the dependent variable, all three variables are statistically significant with SDGs_D; ROA has a positive and statistically significant coefficient, which indicates' that more profitable firms tend to disclose more information related to SDGs. This aligns with research showing that profitability drives sustainability reporting, as higher profitability provides firms with the necessary financial resources and increases stakeholder pressure to engage in comprehensive sustainability practices and disclose those practices', therefore meeting stakeholder expectations' and enhancing their corporate reputation (Khan & Muttakin, 2021; García-Sánchez et al., 2020). Regarding LEV, there is a negative significant correlation with SDGs_D, suggesting that firms with higher levels of debt are less likely to engage in comprehensive SDGs disclosure. This finding can be understood through financial constraints and risk management perspectives' (Cheng & Yang, 2020). High leverage implies significant debt obligations', which may limit a firm's ability to allocate resources to non-core activities' such as sustainability initiatives' (Susilawati et al., 2022). Li et al. (2018) indicates' that firms with higher leverage may avoid extensive SDGs disclosure to minimize scrutiny and avoid raising concerns among creditors about the firm's long-term viability. In terms of F_Size, the results illustrate a positive significant association with SDGs_D, where larger firms are more inclined to disclose SDGs related information. This

aligns with prior research indicating that larger firms', due to their extensive resources and increased scrutiny from stakeholders' and regulators, are better equipped and more motivated to provide sustainability reports' (Perbiyanti, 2023). Lee et al. (2022) highlight that larger firms not only face greater pressure to be transparent about their environmental, social and economic impacts but also use SDGs disclosure strategically to enhance their public image and legitimacy. These firms' may operate in more complex environments' and are driven to meet higher expectations for accountability, making SDGs reporting a key component of their strategies' (Wu & Yang, 2023).

The following table represents' the study hypotheses and their results':

Table 4.4

Summary of Hypotheses

	Hypothesis	Result
H1	Board size has a significant positive effect on SDGs disclosures.	Accepted
H2	Board independence has a significant positive effect on SDGs disclosures.	Rejected
H3	The presence of female directors has a significant positive effect on SDGs disclosures.	Accepted
H4	Board tenure has a significant positive effect on SDGs disclosures.	Rejected
H5	CEO Duality has a significant negative effect on SDGs disclosures.	Accepted
H6	The presence of the CSR committee has a significant positive effect on SDGs Disclosures.	Accepted

Chapter Five

Conclusion and Recommendations

5.1 Conclusion

The perception of firm's has evolved, with a growing recognition of their responsibility to support not only the economy but also the environment and society. Given the ongoing and upcoming financial and economic challenges', all stakeholders' need to make a collective effort. To tackle these challenge's, the United Nations introduced the SDGs in 2015 as part of the 2030 agenda, aiming to promote a more sustainable way of life. The relationship between SDGs and governance has become a critical area of focus in todays' business landscape. There is a growing interest in effectively integrating a firm's sustainability initiatives with governance structures to enhance transparency and progress in achieving SDGs. Recent studies' have emphasized the importance of examining the impact of governance issues, particularly board diversity on sustainability reporting. In this research, our focus is on studying the effect of board characteristics on SDGs disclosures'.

The present study makes several noteworthy contributions to the existing literature. First, the study aims to fill existing literature gaps by providing insights' into how board diversity contributes to the achievement of SDGs related transparency. Second, it provides a comprehensive understanding of the interplay between board "characteristics and activity" and SDGs disclosures, while this research extends prior work by examining the relation between several board attributes (board size, independence, gender diversity, tenure, CEO duality, and the presence of CSR committees) and SDGs disclosure, prior studies have primarily focused on assessing specific and limited board attributes. Lastly, this study presents a more comprehensive view of the relationship by analyzing several firms from 19 European countries, while prior studies have had a limited scope, each focusing on a single country. Contextually, this study uses a sample of 1,886 firms from 19 European countries, covering 5,656 firm-year observations during 2019 - 2022. Where data were sourced from Asset4-Refinitiv Eikon and related Website. The analysis employs panel data techniques to assess the relationship between SDGs disclosure and the selected board characteristics, while ROA, leverage, and firm size are used for controlling the main variables.

In conclusion, the study presents evidence of the relationship between board diversity and SDGs reporting issues. The study findings illustrate a significant positive impact of board size, gender, and CSR committee on SDGs disclosure, which can serve as a tool to meet stakeholders' needs by increasing transparency, reducing agency costs, and addressing information asymmetry and related costs. In other words, as predicted, it shows that firms tend to have more sustainable reporting and SDGs disclosure if they have a high board size with a more female presence, non-executive board chair on the board and a CSR committee within the firm organizational structure. Therefore, this study concludes that board diversity is an effective internal corporate governance mechanism in promoting sustainability reporting issues. However, we did not find any significant positive relationship between board independence, tenure and CEO duality towards SDGs disclosure. Where this indicates that firms with lower independent and tenured board members and a lack of separation between board chairman and CEO are more likely to have less sustainable disclosure regarding SDGs.

The findings of this study have both theoretical and practical implications. Theoretically, the results contribute to resource dependence theory and stakeholder theory by highlighting how board diversity and SDGs disclosures serve as vital tools for enhancing a firm's resources. Specifically, larger boards, independent chairpersons, and the inclusion of women improve governance by bringing diverse perspectives, which enhances oversight, transparency, and decision-making, thus aligning with the interests of various stakeholders. Additionally, the study confirms agency theory by demonstrating that board diversity and SDGs disclosures reduce conflicts of interest between management and shareholders. This is evidenced by the role of CEO independence and the presence of CSR committees, which mitigate agency problems, reduce information asymmetry, and prevent collusion, ultimately leading to more robust and transparent reporting, including sustainability issues. Practically, these findings provide valuable insights for organizations aiming to improve their sustainability reporting and governance practices. Firms can enhance their SDGs disclosures by fostering board diversity, particularly through the inclusion of independent members and women, who bring unique perspectives. Companies can also benefit from establishing CSR committees and ensuring the independence of the CEO to further reduce governance-related conflicts and

improve transparency. These practices not only fulfill stakeholders' expectations but also help firms mitigate risks and seize new opportunities by aligning corporate strategies with sustainable development goals. Thus, organizations that adopt these practices can improve both their sustainability performance and their reputation among stakeholders.

In interpreting the findings of this study, several limitations should be acknowledged, as they highlight important areas for future research. Firstly, there was a lack of previous literature supporting the study premises of the impact of board diversity on SDGs disclosures. Second, the study period (2019-2022) includes an extraordinary economic condition due to the COVID-19 pandemic, which may have had a direct impact on addressing sustainability reporting and a true level of SDGs disclosures. Third, while this study focused exclusively on European firms from 19 European countries without differentiating between listed and non-listed companies, future research could use a broader multinational sample, including companies from diverse regions like Asia, America, and Africa, to enhance the reliability and generalizability of the results. Fourth, the study relied on the Refinitiv Asset4 database, which is widely recognized for its high-quality data. However, using a dummy variable to estimate support for the SDGs may introduce measurement errors, leading to potential overestimation or underestimation of firm measures. Fifth, SDGs disclosures were assessed based on information presented in sustainability reports according to the GRI index. The absence of data on the specific type or goal of SDGs addressed by firms is a limitation. The dependent variable only indicates whether a firm discloses SDGs generally, without considering the quality or type of information disclosed across the 17 SDGs. Future research could benefit from developing a specific index to better capture the extent and quality of disclosures for each SDG, considering relevant economic, social, and environmental dimensions. Lastly, this study was constrained by its focus on certain board characteristics (size, independence, gender, CEO duality, tenure and CRS committee), without considering additional board attributes that could offer a more comprehensive view of the relationship between board diversity and SDGs disclosures. Future studies should explore a broader range of demographic factors, such as age, nationality, education level, and background experience, as well as board activities like meeting frequency and attendance rates. Additionally, examining other corporate governance factors, including audit committees, internal control

systems, institutional pressures, government and institutional ownership, regulatory and supervisory authorities and others could deepen the understanding of how corporate governance influences SDGs reporting practices.

5.2 Recommendations

1. Firms should implement measures to improve governance by aligning their strategies with the adoption of policies and procedures' that support the achievement of SDGs, as well as promoting transparency and accountability.
2. Firms should prioritize maintaining diverse and competent BoD's, placing specific emphasis on size and gender diversity. Additionally, the inclusion of a CSR committee within the boards' structure.
3. Policymakers and regulators are urged to strengthen regulatory and supervisory frameworks, and issue guidelines, standards, and instructions that seamlessly integrate sustainability initiatives with corporate strategies', which is vital to ensuring compliance, enhancing monitoring, and improving SDGs reporting.
4. Firms should adhere to the principles, standards, and requirements governing the submission of periodic reports, aligning with international standards such as GRI and UNGC, as outlined in the Memorandum of Understanding with the IFRS Foundation in 2022, thus enhancing the achievement and transparency of SDGs.
5. Stakeholders and investors should support sustainability efforts and oversee their implementation, while also creating incentives to encourage corporate investment in sustainability.
6. Stakeholders, investors, and policymakers should focus on enhancing the positive impact of the boards' composition on SDGs by pursuing greater board diversity.
7. Governments should develop and implement policies and regulations' that promote good governance, transparent disclosure, and timely detection of SDGs related issues. Similarly, corporate boards should take a more active role in monitoring and addressing SDGs issues and developing effective sustainability strategies.
8. Lastly, it is crucial to enhance cooperation and coordination and foster a collaborative approach and partnership among all stakeholders', including companies', governmental bodies', NGOs, and international organizations', to effectively achieve and disclose SDGs.

List of Abbreviations

Abbreviations	Stand for
BoD's	Board of Directors
CDP	Carbon Disclosure Project
CSR	Corporate Social Responsibility
IIED	International Institute for Environment and Development
ISO	International Standard Organization
SASB	Sustainability Accounting Standards Board
SDGs	Sustainable Development Goals
UNGA	United Nations General Assembly
UNGC	United Nations Global Compact
WBCSD	World Business Council for Sustainable Development
WCED	World Commission on Environment and Development
GRI	Global Reporting Initiative
IIRC	International Integrated Reporting Council

Reference

- Adel, C., Hussain, M. M., Mohamed, E. K. A., & Basuony, M. A. K. (2019). Is corporate governance relevant to the quality of corporate social responsibility disclosure in large European companies? *International Journal of Accounting & Information Management*, 27(2), 301–332. <https://doi.org/10.1108/IJAIM-10-2017-0118>
- Agarwal, N., Gneiting, U., & Mhlanga, R. (2017). Raising the Bar: Rethinking the role of business in the Sustainable Development Goals. www.oxfam.org
- Aguilera, R. V., Aragón-Correa, J. A., Marano, V., & Tashman, P. A. (2021). The Corporate Governance of Environmental Sustainability: A Review and Proposal for More Integrated Research. *Journal of Management*, 47(6), 1468–1497. <https://doi.org/10.1177/0149206321991212>
- Aifuwa, H., & Embele, K. (2019). Board Characteristics and Financial Reporting Quality. In *Journal of Accounting and Financial Management* (Vol. 5, Issue 1). www.iiardpub.org
- Aifuwa, H. O. (2020). SUSTAINABILITY REPORTING AND FIRM PERFORMANCE IN DEVELOPING CLIMES: A REVIEW OF LITERATURE. *Copernican Journal of Finance & Accounting*, 9(1), 9. <https://doi.org/10.12775/CJFA.2020.001>
- Aifuwa, Musa, S., & Osazevbaru, A. O. (2019). Accounting Information and Lending Decision: Does Sustainability Disclosure Matter? <https://doi.org/10.12775/CJFA.2019.018>
- Al Lawati, H., & Alshabibi, B. (2023). Does board structure drive Sustainable Development Goals disclosure? Evidence from an emerging market. *Journal of Governance and Regulation*, 12(2), 166–175. <https://doi.org/10.22495/jgrv12i2art15>
- Alda, M. (2019). Corporate sustainability and institutional shareholders: The pressure of social responsible pension funds on environmental firm practices. *Business Strategy and the Environment*, 28(6), 1060–1071. <https://doi.org/10.1002/bse.2301>

- Allegrini, M., & Greco, G. (2013). Corporate boards, audit committees and voluntary disclosure: evidence from Italian Listed Companies. *Journal of Management & Governance*, 17(1), 187–216. <https://doi.org/10.1007/s10997-011-9168-3>
- Allen, C., Metternicht, G., & Wiedmann, T. (2018). Initial progress in implementing the Sustainable Development Goals (SDGs): a review of evidence from countries. *Sustainability Science*, 13(5), 1453–1467. <https://doi.org/10.1007/s11625-018-0572-3>
- Alvarado, N., de Fuentes, P., & Laffarga, J. (2017). Does Board Gender Diversity Influence Financial Performance? Evidence from Spain. *Journal of Business Ethics*, 141(2), 337–350. <https://doi.org/10.1007/s10551-015-2735-9>
- Álvarez, I., & Rodriguez-Dominguez, L. (2023). Board of directors and environmental practices: the effect of board experience, culture, and tenure. *Environment, Development and Sustainability*. <https://doi.org/10.1007/s10668-023-03937-z>
- Amran, A., Lee, S. P., & Devi, S. S. (2014). The Influence of Governance Structure and Strategic Corporate Social Responsibility Toward Sustainability Reporting Quality. *Business Strategy and the Environment*, 23(4), 217–235. <https://doi.org/10.1002/bse.1767>
- Anyigbah, E., Kong, Y., Edziah, B. K., Ahoto, A. T., & Ahiaku, W. S. (2023). Board Characteristics and Corporate Sustainability Reporting: Evidence from Chinese Listed Companies. *Sustainability*, 15(4), 3553. <https://doi.org/10.3390/su15043553>
- Ardillah, K. (2022). The Impact of Characteristics, Independence, Diversity, and Activities of the Board of Director on the Sustainable Development Goals Disclosure. *Dinasti International Journal of Education Management And Social Science*, 4(2), 210–222. <https://doi.org/10.31933/dijemss.v4i2.1584>
- Arslan, H. M., Chengang, Y., Komal, B., & Chen, S. (2022). Nexus between environmental disclosures and top management team characteristics: a systematic review. *Environmental Science and Pollution Research*, 30(4), 9763–9781. <https://doi.org/10.1007/s11356-022-22615-7>

- Ayobami, A., Eniola Agbi, S., & Olumide Mustapha, L. (2021). Board Characteristics and Sustainability Reporting of Listed Non-Financial Firms in Nigeria. *Journal of Finance and Accounting*, 9(5), 182. <https://doi.org/10.11648/j.jfa.20210905.11>
- Bansal, P. (Tima), Grewatsch, S., & Sharma, G. (2021). How COVID-19 Informs Business Sustainability Research: It's Time for a Systems Perspective. *Journal of Management Studies*, 58(2), 602–606. <https://doi.org/10.1111/joms.12669>
- Bezemer, P., Pugliese, A., Nicholson, G., & Zattoni, A. (2022). Toward a synthesis of the board-strategy relationship: A literature review and future research agenda. *Corporate Governance: An International Review*, 31(1), 178–197. <https://doi.org/10.1111/corg.12481>
- Bianchi, G., & Testa, F. (2022). How can <scp>SMEs</scp> effectively embed environmental sustainability? Evidence on the relationships between cognitive frames, life cycle management and organizational learning process. *Business Ethics, the Environment & Responsibility*, 31(3), 634–648. <https://doi.org/10.1111/beer.12432>
- Buniamin, S., Jaffar, R., Ahmad, N., & Johari, N. H. (2022). The Role of Corporate Governance in Achieving SDGs among Malaysian Companies. *European Journal of Sustainable Development*, 11(3), 326. <https://doi.org/10.14207/ejsd.2022.v11n3p326>
- Calabrese, A., Costa, R., & Rosati, F. (2015). A feedback-based model for CSR assessment and materiality analysis. *Accounting Forum*, 39(4), 312–327. <https://doi.org/10.1016/j.accfor.2015.06.002>
- Carter, D. A., Simkins, B. J., & Simpson, W. G. (2007). Corporate Governance, Board Diversity, and Firm Value. *Financial Review*, 38(1), 33–53. <https://doi.org/10.1111/1540-6288.00034>
- Casciello, R., Maffei, M., & Meucci, F. (2024). Board characteristics and Sustainable Development Goals disclosure: evidence from European state-owned enterprises. *Journal of Public Budgeting, Accounting & Financial Management*. <https://doi.org/10.1108/JPBAFM-06-2023-0099>

- Chan, M. C., Watson, J., & Woodliff, D. (2014). Corporate Governance Quality and CSR Disclosures. *Journal of Business Ethics*, 125(1), 59–73. <https://doi.org/10.1007/s10551-013-1887-8>
- Cucari, N., Esposito De Falco, S., & Orlando, B. (2018a). Diversity of Board of Directors and Environmental Social Governance: Evidence from Italian Listed Companies. *Corporate Social Responsibility and Environmental Management*, 25(3), 250–266. <https://doi.org/10.1002/csr.1452>
- Cucari, N., Esposito De Falco, S., & Orlando, B. (2018b). Diversity of Board of Directors and Environmental Social Governance: Evidence from Italian Listed Companies. *Corporate Social Responsibility and Environmental Management*, 25(3), 250–266. <https://doi.org/10.1002/csr.1452>
- de Abreu, M. C. S., Soares, R. A., Daniel-Vasconcelos, V., & Crisóstomo, V. L. (2022). Does board diversity encourage an environmental policy focused on resource use, emission reduction and innovation? The case of companies in Latin America. *Corporate Social Responsibility and Environmental Management*, 30(3), 1161–1176. <https://doi.org/10.1002/csr.2411>
- Deegan, C. (2002). Introduction. *Accounting, Auditing & Accountability Journal*, 15(3), 282–311. <https://doi.org/10.1108/09513570210435852>
- Diaz-Sarachaga, J. M. (2021). Shortcomings in reporting contributions towards the sustainable development goals. *Corporate Social Responsibility and Environmental Management*, 28(4), 1299–1312. <https://doi.org/10.1002/csr.2129>
- Donnelly, R., & Mulcahy, M. (2008). Board Structure, Ownership, and Voluntary Disclosure in Ireland. *Corporate Governance: An International Review*, 16(5), 416–429. <https://doi.org/10.1111/j.1467-8683.2008.00692.x>

- Dwekat, A., Meqbel, R., Seguí-Mas, E., & Tormo-Carbó, G. (2022). The role of the audit committee in enhancing the credibility of CSR disclosure: Evidence from STOXX Europe 600 members. *Business Ethics, the Environment & Responsibility*, 31(3), 718–740. <https://doi.org/10.1111/beer.12439>
- Elsayih, J., Datt, R., & Tang, Q. (2021). Corporate governance and carbon emissions performance: empirical evidence from Australia. *Australasian Journal of Environmental Management*, 28(4), 433–459. <https://doi.org/10.1080/14486563.2021.1989066>
- Elsheikh, T., Almaqtari, F. A., Farhan, N. H. S., Mishra, N., & Ettish, A. A. (2024). Governance and sustainability: The role of environmental disclosures and board characteristics in environmental, social, and governance reporting. *Journal of Governance and Regulation*, 13(3), 162–176. <https://doi.org/10.22495/jgrv13i3art14>
- Emsake, A. (2021). The Role of Corporate Governance in Achieving Sustainability Disclosure in Accordance with the Requirements of the Global Reporting Initiative (GRI). <https://www.researchgate.net/publication/365368014>
- Enciso-Alfaro, S., & García-Sánchez, I. (2022). Corporate governance and environmental sustainability: Addressing the dual theme from a bibliometric approach. *Corporate Social Responsibility and Environmental Management*, 30(3), 1025–1041. <https://doi.org/10.1002/csr.2403>
- Fama, E. F., & Jensen, M. C. (1983). Separation of Ownership and Control. *The Journal of Law and Economics*, 26(2), 301–325. <https://doi.org/10.1086/467037>
- Farida, D. N. (2019). JURNAL AKUNTANSI INDONESIA 89 Pengaruh Diversitas Gender Terhadap Pengungkapan Sustainability Development Goals Pengaruh Diversitas Gender Terhadap Pengungkapan Sustainability Development Goals. In *Jurnal Akuntansi Indonesia* (Vol. 8, Issue 2).

- Fuente, J. A., García-Sánchez, I. M., & Lozano, M. B. (2017). The role of the board of directors in the adoption of GRI guidelines for the disclosure of CSR information. *Journal of Cleaner Production*, 141, 737–750. <https://doi.org/10.1016/j.jclepro.2016.09.155>
- Galbreath, J. (2010). Corporate governance practices that address climate change: an exploratory study. *Business Strategy and the Environment*, 19(5), 335–350. <https://doi.org/10.1002/bse.648>
- García-Sánchez, I., Rodríguez-Ariza, L., Aibar-Guzmán, B., & Aibar-Guzmán, C. (2020). Do institutional investors drive corporate transparency regarding business contribution to the sustainable development goals? *Business Strategy and the Environment*, 29(5), 2019–2036. <https://doi.org/10.1002/bse.2485>
- Global Reporting Initiative. (2018). Business Reporting on the SDGs. <https://www.globalreporting.org/information/SDGs/Pages/Reporting>
- Godfrey, P. C., Merrill, C. B., & Hansen, J. M. (2009). The relationship between corporate social responsibility and shareholder value: an empirical test of the risk management hypothesis. *Strategic Management Journal*, 30(4), 425–445. <https://doi.org/10.1002/smj.750>
- Graham, J. R., Kim, H., & Leary, M. (2020). CEO-board dynamics. *Journal of Financial Economics*, 137(3), 612–636. <https://doi.org/10.1016/j.jfineco.2020.04.007>
- Hafsi, T., & Turgut, G. (2013). Boardroom Diversity and its Effect on Social Performance: Conceptualization and Empirical Evidence. *Journal of Business Ethics*, 112(3), 463–479. <https://doi.org/10.1007/s10551-012-1272-z>
- Hambrick, D. C., & Mason, P. A. (1984). Upper Echelons: The Organization as a Reflection of Its Top Managers. *The Academy of Management Review*, 9(2), 193. <https://doi.org/10.2307/258434>

- Harjoto, M., Laksmana, I., & Lee, R. (2015). Board Diversity and Corporate Social Responsibility. *Journal of Business Ethics*, 132(4), 641–660. <https://doi.org/10.1007/s10551-014-2343-0>
- Hussain, N., Rigoni, U., & Orij, R. P. (2018). Corporate Governance and Sustainability Performance: Analysis of Triple Bottom Line Performance. *Journal of Business Ethics*, 149(2), 411–432. <https://doi.org/10.1007/s10551-016-3099-5>
- Ingley, C. B. (2008). Company growth and Board attitudes to corporate social responsibility. *International Journal of Business Governance and Ethics*, 4(1), 17. <https://doi.org/10.1504/IJBGE.2008.017889>
- Jensen, M. C. (1993). The Modern Industrial Revolution, Exit, and the Failure of Internal Control Systems. *The Journal of Finance*, 48(3), 831–880. <https://doi.org/10.1111/j.1540-6261.1993.tb04022.x>
- Jensen, & Meckling. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305–360. [https://doi.org/10.1016/0304-405X\(76\)90026-X](https://doi.org/10.1016/0304-405X(76)90026-X)
- Jibril, R. S., & Isa, M. A. (2024). Corporate board diversity, environmental compliance, and occupational health and safety disclosure for achieving sustainable development goals in an emerging economy. *Sustainable Development*. <https://doi.org/10.1002/sd.3144>
- Jizi, M. (2017). The Influence of Board Composition on Sustainable Development Disclosure. *Business Strategy and the Environment*, 26(5), 640–655. <https://doi.org/10.1002/bse.1943>
- Jizi, M. I., Salama, A., Dixon, R., & Stratling, R. (2014). Corporate Governance and Corporate Social Responsibility Disclosure: Evidence from the US Banking Sector. *Journal of Business Ethics*, 125(4), 601–615. <https://doi.org/10.1007/s10551-013-1929-2>

- Johnston, R. J., Blakemore, R., & Randolph, B. (2020). THE ROLE OF OIL AND GAS COMPANIES IN THE ENERGY TRANSITION. www.AtlanticCouncil.org.
- KNKG. (2006). Pedoman umum good corporate governance Indonesia.
- KPMG. (2018). How to report on the SDGs.
- Krechovská, M., & Procházková, P. T. (2014). Sustainability and its Integration into Corporate Governance Focusing on Corporate Performance Management and Reporting. *Procedia Engineering*, 69, 1144–1151. <https://doi.org/10.1016/j.proeng.2014.03.103>
- Lewa, E. M., Gatimbu, K. K., & Kariuki, P. W. (2024). Board attributes and sustainability reporting of selected listed nonfinancial firms in anglophone Sub-Saharan African countries: A multinomial logistic regression. *Heliyon*, 10(9), e29824. <https://doi.org/10.1016/j.heliyon.2024.e29824>
- Li, Q., Zhou, W., Zhou, H., & Chen, J. (2021). Do Board Characteristics Matter for Growth Firms? Evidence from China. *Journal of Risk and Financial Management*, 14(8), 380. <https://doi.org/10.3390/jrfm14080380>
- Liao, L., Chen, G., & Zheng, D. (2019). Corporate Social Responsibility and Financial Fraud: Evidence from China. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.3472661>
- Lu, J., & Wang, J. (2021). Corporate governance, law, culture, environmental performance and CSR disclosure: A global perspective. *Journal of International Financial Markets, Institutions and Money*, 70, 101264. <https://doi.org/10.1016/j.intfin.2020.101264>
- Mahmood, M., & Orazalin, N. (2017). Green governance and sustainability reporting in Kazakhstan's oil, gas, and mining sector: Evidence from a former USSR emerging economy. *Journal of Cleaner Production*, 164, 389–397. <https://doi.org/10.1016/j.jclepro.2017.06.203>

- Martínez-Ferrero, J., & García-Meca, E. (2020). Internal corporate governance strength as a mechanism for achieving sustainable development goals. *Sustainable Development*, 28(5), 1189–1198. <https://doi.org/10.1002/sd.2068>
- Martínez-Ferrero, J., & García-Sánchez, I.-M. (2017). Sustainability assurance and assurance providers: Corporate governance determinants in stakeholder-oriented countries. *Journal of Management & Organization*, 23(5), 647–670. <https://doi.org/10.1017/jmo.2016.65>
- Mazumder, M. M. M. (2024). An empirical analysis of SDG disclosure (SDGD) and board gender diversity: insights from the banking sector in an emerging economy. *International Journal of Disclosure and Governance*. <https://doi.org/10.1057/s41310-023-00223-2>
- Michelon, G., & Parbonetti, A. (2012). The effect of corporate governance on sustainability disclosure. *Journal of Management & Governance*, 16(3), 477–509. <https://doi.org/10.1007/s10997-010-9160-3>
- Monteiro, N. B. R., da Silva, E. A., & Moita Neto, J. M. (2019). Sustainable development goals in mining. *Journal of Cleaner Production*, 228, 509–520. <https://doi.org/10.1016/j.jclepro.2019.04.332>
- Monteiro, S., Lemos, K., & Ribeiro, V. (2022). The influence of board gender diversity on the sustainable development goals reporting: evidence from Portuguese companies. *European Conference on Management Leadership and Governance*, 18(1), 329–339. <https://doi.org/10.34190/ecmlg.18.1.848>
- Moussa, T., Allam, A., Elbanna, S., & Bani-Mustafa, A. (2020). Can board environmental orientation improve U.S. firms' carbon performance? The mediating role of carbon strategy. *Business Strategy and the Environment*, 29(1), 72–86. <https://doi.org/10.1002/bse.2351>

- Musa, S., Gold, N., & Aifuwa, H. (2020). Board Diversity and Sustainability Reporting: Evidence from Industrial Goods Firms. *Izvestiya Journal of the University of Economics – Varna*, 64(4), 377–398. <https://doi.org/10.36997/IJUEV2020.64.4.377>
- Nicolò, G., Zanellato, G., Tiron-Tudor, A., & Tartaglia Polcini, P. (2022). Revealing the corporate contribution to sustainable development goals through integrated reporting: a worldwide perspective. *Social Responsibility Journal*, 19(5), 829–857. <https://doi.org/10.1108/SRJ-09-2021-0373>
- Nunes, M., & Park, C. (2017). Self-claimed sustainability: Building social and environmental reputations with words. *Sustainable Production and Consumption*, 11, 46–57. <https://doi.org/10.1016/j.spc.2016.04.002>
- Nwobu, B., & Adaeze, O. (2017). DETERMINANTS OF CORPORATE SUSTAINABILITY REPORTING IN SELECTED COMPANIES IN NIGERIA.
- Pandey, N., Andres, C., & Kumar, S. (2022). Mapping the corporate governance scholarship: Current state and future directions. *Corporate Governance: An International Review*, 31(1), 127–160. <https://doi.org/10.1111/corg.12444>
- Peng, M. W., Sun, S. L., Pinkham, B., & Chen, H. (2009). The Institution-Based View as a Third Leg for a Strategy Tripod. *Academy of Management Perspectives*, 23(3), 63–81. <https://doi.org/10.5465/amp.2009.43479264>
- Perbiyanti, V. (2023). The Effect of Profitability, Company Size, and Good Corporate Governance Sustainability Reports on Disclosure. *Scientia*, 2(1), 127–136. <https://doi.org/10.51773/sssh.v2i1.142>
- Pfeffer, J., & Salancik, G. R. (1978). The External Control of Organizations. A Resource Dependence Perspective. *The Economic Journal*, 89(356), 969. <https://doi.org/10.2307/2231527>

- Pinheiro, A. B., Ribeiro, C. de M. de A., & Bizerra, A. L. V. (2024). Board structure as a mechanism to achieve the UN 2030 Agenda in Latin America. *Cadernos EBAPE.BR*, 22(1). <https://doi.org/10.1590/1679-395120220308x>
- Pizzi, S., Rosati, F., & Venturelli, A. (2021). The determinants of business contribution to the 2030 Agenda: Introducing the SDG Reporting Score. *Business Strategy and the Environment*, 30(1), 404–421. <https://doi.org/10.1002/bse.2628>
- Raimo, N., Nicolò, G., Tartaglia Polcini, P., & Vitolla, F. (2022). Corporate governance and risk disclosure: evidence from integrated reporting adopters. *Corporate Governance: The International Journal of Business in Society*, 22(7), 1462–1490. <https://doi.org/10.1108/CG-07-2021-0260>
- Rao, K., & Tilt, C. (2016). Board Composition and Corporate Social Responsibility: The Role of Diversity, Gender, Strategy and Decision Making. *Journal of Business Ethics*, 138(2), 327–347. <https://doi.org/10.1007/s10551-015-2613-5>
- Rao, K., Tilt, C. A., & Lester, L. H. (2012). Corporate governance and environmental reporting: an Australian study. *Corporate Governance: The International Journal of Business in Society*, 12(2), 143–163. <https://doi.org/10.1108/14720701211214052>
- Rosati, F., Costa, R., Calabrese, A., & Pedersen, E. R. G. (2018). Employee attitudes towards corporate social responsibility: a study on gender, age and educational level differences. *Corporate Social Responsibility and Environmental Management*, 25(6), 1306–1319. <https://doi.org/10.1002/csr.1640>
- Rosati, F., & Faria, L. G. D. (2019). Business contribution to the Sustainable Development Agenda: Organizational factors related to early adoption of SDG reporting. *Corporate Social Responsibility and Environmental Management*, 26(3), 588–597. <https://doi.org/10.1002/csr.1705>
- Rupley, K. H., Brown, D., & Marshall, R. S. (2012). Governance, media and the quality of environmental disclosure. *Journal of Accounting and Public Policy*, 31(6), 610–640. <https://doi.org/10.1016/j.jaccpubpol.2012.09.002>

- Salehnezhad, S. H., Amin, V., & Rezaee, M. (2023). Iranian Journal of Accounting, Auditing & Finance The Effect of Board Independence on the Relationship between Ownership Structure and Corporate Sustainability Performance Disclosure. Serial 24 Iranian Journal of Accounting, Auditing and Finance, 7(3), 87–103. <https://doi.org/10.22067/ijaaf.2023.43459.1243>
- Saputri, I. Y., & Ariani, K. R. (2024). THE INFLUENCE OF GOOD CORPORATE GOVERNANCE, COMPANY CHARACTERISTICS, AND PROFITABILITY ON COMPANY VALUES (Case Study on Non-Financial State-Owned Enterprises listed on the Indonesia Stock Exchange for the 2018-2021 period). International Journal of Economics, Business and Accounting Research (IJEBAR), 8(4). <https://doi.org/10.29040/ijebar.v8i4.15666>
- Sari, T. A. (2020). PENGARUH KOMISARIS ASING DAN DIREKSI ASING TERHADAP STRUKTUR MODAL. EKUITAS (Jurnal Ekonomi Dan Keuangan), 3(4), 484–504. <https://doi.org/10.24034/j25485024.y2019.v3.i4.4196>
- Scholtens, B. (2009). Corporate Social Responsibility in the International Banking Industry. Journal of Business Ethics, 86(2), 159–175. <https://doi.org/10.1007/s10551-008-9841-x>
- Sekarlangit, L. D., & Wardhani, R. (2021). The Effect of the Characteristics and Activities of the Board of Directors on Sustainable Development Goal (SDG) Disclosures: Empirical Evidence from Southeast Asia. Sustainability, 13(14), 8007. <https://doi.org/10.3390/su13148007>
- Silva, S. (2021). Corporate contributions to the Sustainable Development Goals: An empirical analysis informed by legitimacy theory. Journal of Cleaner Production, 292, 125962. <https://doi.org/10.1016/j.jclepro.2021.125962>
- Slawinski, N., Pinkse, J., Busch, T., & Banerjee, S. B. (2017). The Role of Short-Termism and Uncertainty Avoidance in Organizational Inaction on Climate Change. Business & Society, 56(2), 253–282. <https://doi.org/10.1177/0007650315576136>

- Susilawati, Ambarwati, S., & Prakoso, R. (2022). The Effect of Leverage and Good Corporate Governance on Sustainability Report Disclosure. *International Journal of Science and Society*, 4(4), 60–74. <https://doi.org/10.54783/ijssoc.v4i4.553>
- Sustainable Capacity International Institute. (2024). SUSTAINABLE DEVELOPMENT IS ABOUT MAKING THE WORLD A BETTER PLACE FOR ALL. <https://www.sdg.services>.
- Tagliatalata, J., Pirazzi Maffiola, K., Barontini, R., & Testa, F. (2023). Board of Directors' characteristics and environmental SDGs adoption: An international study. *Corporate Social Responsibility and Environmental Management*, 30(5), 2490–2506. <https://doi.org/10.1002/csr.2499>
- Temiz, H., & Acar, M. (2023). Board gender diversity and corporate social responsibility (<sc>CSR</sc>) disclosure in different disclosure environments. *Corporate Social Responsibility and Environmental Management*, 30(5), 2247–2264. <https://doi.org/10.1002/csr.2481>
- Terjesen, S., Aguilera, R. V., & Lorenz, R. (2015). Legislating a Woman's Seat on the Board: Institutional Factors Driving Gender Quotas for Boards of Directors. *Journal of Business Ethics*, 128(2), 233–251. <https://doi.org/10.1007/s10551-014-2083-1>
- Umukoro, O. E., Uwuigbe, O. R., Uwuigbe, U., Adegboye, A., Ajetunmobi, O., & Nwaze, C. (2019). Board Expertise and Sustainability Reporting in Listed Banks in Nigeria. *IOP Conference Series: Earth and Environmental Science*, 331(1), 012048. <https://doi.org/10.1088/1755-1315/331/1/012048>
- United Nations. (2015). 70/1. Transforming our world: the 2030 Agenda for Sustainable Development Transforming our world: the 2030 Agenda for Sustainable Development Preamble.

- United Nations General Assembly. (2015). TRANSFORMING OUR WORLD: THE 2030 AGENDA FOR SUSTAINABLE DEVELOPMENT UNITED NATIONS UNITED NATIONS TRANSFORMING OUR WORLD: THE 2030 AGENDA FOR SUSTAINABLE DEVELOPMENT.
- United Nations Global Compact. (2018). Reporting on the SDGs - Shape the future of corporate reporting on the SDGs. <https://unglobalcompact.org/library/5637>
- van der Waal, J. W. H., & Thijssens, T. (2020). Corporate involvement in Sustainable Development Goals: Exploring the territory. *Journal of Cleaner Production*, 252, 119625. <https://doi.org/10.1016/j.jclepro.2019.119625>
- Weerasinghe, T., Samudrage, D., & Gunarathne, N. (2023). The influence of top management team diversity on <scp>Sustainable Development Goals</scp> (SDG) reporting: Evidence from Sri Lanka. *Business Strategy and the Environment*, 32(8), 5922–5934. <https://doi.org/10.1002/bse.3465>
- World Business Council for Sustainable Development. (2017). In partnership with Reporting matters.
- Yadav, P., & Jain, A. (2023). Sustainability disclosures and corporate boards: a stakeholder approach to decision-making. *Journal of Applied Accounting Research*, 24(5), 1027–1047. <https://doi.org/10.1108/JAAR-10-2022-0279>
- Yang, T., & Zhao, S. (2014). CEO duality and firm performance: Evidence from an exogenous shock to the competitive environment. *Journal of Banking & Finance*, 49, 534–552. <https://doi.org/10.1016/j.jbankfin.2014.04.008>
- Yasser, Q. R., Al Mamun, A., & Ahmed, I. (2017). Corporate Social Responsibility and Gender Diversity: Insights from Asia Pacific. *Corporate Social Responsibility and Environmental Management*, 24(3), 210–221. <https://doi.org/10.1002/csr.1400>
- Yu, E. P., Guo, C. Q., & Luu, B. Van. (2018). Environmental, social and governance transparency and firm value. *Business Strategy and the Environment*, 27(7), 987–1004. <https://doi.org/10.1002/bse.2047>

Zampone, G., Nicolò, G., Sannino, G., & De Iorio, S. (2022). Gender diversity and SDG disclosure: the mediating role of the sustainability committee. *Journal of Applied Accounting Research*, 25(1), 171–193. <https://doi.org/10.1108/JAAR-06-2022-0151>

Zampone, G., Nicolò, G., Sannino, G., & De Iorio, S. (2024). Gender diversity and SDG disclosure: the mediating role of the sustainability committee. *Journal of Applied Accounting Research*, 25(1), 171–193. <https://doi.org/10.1108/JAAR-06-2022-0151>



جامعة النجاح الوطنية
كلية الدراسات العليا

أثر التنوع في خصائص وأنشطة مجلس الإدارة على الإفصاح عن
أهداف التنمية المستدامة: دراسة عملية على 19 دولة أوروبية

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قدمت هذه الرسالة استكمالاً لمتطلبات الحصول على درجة الماجستير في المحاسبة، من كلية
الدراسات العليا، في جامعة النجاح الوطنية، نابلس-فلسطين.

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الملخص

تسعى هذه الدراسة إلى استكشاف دور حوكمة الشركات في تعزيز التنمية المستدامة، مع التركيز بشكل خاص على كيفية تأثير تنوع خصائص وأنشطة مجلس الإدارة على الإفصاح عن أهداف التنمية المستدامة (SDGs Disclosures). وإدراكاً للمسؤولية المتزايدة للشركات لدعم الأهداف الاقتصادية والبيئية والاجتماعية، تبحث هذه الدراسة في العلاقة بين سمات مجلس الإدارة من حيث الحجم (Size)، والاستقلالية (Independence)، والتنوع بين الجنسين (Gender)، ومدة العضوية (Tenure)، وازدواجية المدير التنفيذي (CEO Duality)، ووجود لجان المسؤولية الاجتماعية (CSR Committee) - مع مستوى الإفصاح عن أهداف التنمية المستدامة. استخدمت الدراسة مجموعة بيانات من قاعدة بيانات متخصصة "Asset4-Refinitiv Eikon" والمواقع ذات العلاقة لـ 1,886 شركة في 19 دولة أوروبية، لتشتمل الدراسة على 5,656 مشاهدة خلال الفترة 2019-2022، حيث اعتمدت على البيانات الجدولية (Panel Data) وبالاستناد لأسلوب انحدار المربعات الصغرى المجمعة (Pooled OLS) لاختبار فرضيات الدراسة. نتائج الدراسة لها آثار نظرية وعملية على حد سواء، إذ تقدم رؤية قيّمة لتعزيز إطار محدد لحوكمة الشركات وتحقيق التوافق مع أهداف التنمية المستدامة. تشير النتائج إلى وجود تأثير إيجابي كبير لحجم مجلس الإدارة والتنوع بين الجنسين ولجان المسؤولية الاجتماعية على الإفصاح عن أهداف التنمية المستدامة، مما يشير إلى أن مجالس الإدارة الأكبر حجماً والأكثر اشتمالاً للعنصر النسوي مع وجود

لجان تعنى بالمسؤولية الاجتماعية ضمن الهيكل التنظيمي للشركات من شأنه أن يعزز الشفافية والإفصاح عن أهداف التنمية المستدامة وتلبية توقعات أصحاب المصلحة. في المقابل، لم تحدد الدراسة أي علاقة إيجابية كبيرة بين استقلال أعضاء مجلس الإدارة ومدى عضوية الأعضاء وازدواجية المدير التنفيذي فيما يتعلق بالإفصاح عن أهداف التنمية المستدامة. تساهم هذه النتائج في نظرية الاعتماد على الموارد (Resource Dependency Theory) ونظرية أصحاب المصلحة (Stakeholders Theory) ونظرية الوكالة (Agency Theory) من خلال إظهار كيفية تأثير التنوع في خصائص وأنشطة مجلس الإدارة كإحدى آليات الحوكمة على شفافية الشركات والإبلاغ عن الاستدامة. وعليه، يجب على الشركات وصناع السياسات وكافة أصحاب المصلحة اتخاذ الإجراءات اللازمة من خلال مواءمة ممارسات الحوكمة والاستدامة مع استراتيجيات الشركات، والامتثال للمبادئ والمعايير الدولية، وتعزيز الأطر التنظيمية والإشرافية، والتي من شأنها دعم وتعزيز جهود وإفصاحات التنمية المستدامة. في ذات السياق، واجهت الدراسة العديد من المحددات والقيود، بما في ذلك قلة الأدبيات والمراجع العلمية السابقة حول أثر تنوع مجلس الإدارة على الإفصاح عن أهداف التنمية المستدامة، بالإضافة إلى ذلك، تشمل فترة الدراسة جائحة كوفيد-19، والتي قد تحمل تأثيراً على جهود الاستدامة والإفصاح عن أهداف التنمية المستدامة، علاوة على ذلك، تركز الدراسة على سمات محددة لمجلس الإدارة دون النظر في الخصائص الديموغرافية الإضافية، أو أنشطة مجلس الإدارة أو أبعاد أخرى لحوكمة الشركات.

الكلمات المفتاحية: خصائص مجلس الإدارة، أهداف التنمية المستدامة، تنوع مجلس الإدارة، الإفصاح عن أهداف التنمية المستدامة، أوروبا.