An-Najah National University

Faculty of Graduate Studies

THE RELATIONSHIP BETWEEN NATIONAL GOVERNANCE AND SUSTAINABLE DEVELOPMENT GOALS REPORTING: EVIDENCE FROM EUROPE

By

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Dedication

This dissertation is lovingly dedicated

To

my beloved parents,

My devoted wife,

My precious daughters,

My family and relatives,

My dear friends,

In gratitude for their endless love, unwavering support, sincere encouragement, and constant prayers.

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To everyone who contributed, directly or indirectly, to supporting me throughout this journey, I say from the bottom of my heart: thank you, and may God reward you abundant

Declaration

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

THE RELATIONSHIP BETWEEN NATIONAL GOVERNANCE AND SUSTAINABLE DEVELOPMENT GOALS REPORTING: EVIDENCE FROM EUROPE

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

Student's Name: ___ Ammar Zakaria Abdullah Salem__

Signature: _____ *Ammar Salem*_____

Date: _____8/4/2026_____

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THE RELATIONSHIP BETWEEN NATIONAL GOVERNANCE AND SUSTAINABLE DEVELOPMENT GOALS REPORTING: EVIDENCE FROM EUROPE

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Abstract

This dissertation examines the impact of national governance on the level of Sustainable Development Goals (SDGs) disclosure among 1,650 non-financial firms listed firms listed in 21 countries within the European Union for the years 2019 to 2024, amounting to 9,900 firm-year observation, quantitative research is used in this dissertation through a fixed-effects regression to examines the effect of national governance on the disclosure of Sustainable Development Goals (SDGs) in European companies. Financial information was extracted from Refinitiv Eikon, while the governance data was obtained from the Worldwide Governance Indicators (WGI). The results are controlled for six governance dimensions and important firm-level and macroeconomic variables.

According to the empirical findings, national governance determinants have different effects on SDG reporting in Europe-based companies. First, voice and accountability, political stability, and rule of law are positively correlated with SDG reporting, and this can be explained through the impact of such factors as transparency, stability, and legal strength on firms' willingness to provide information related to sustainable development goals. Second, negative correlations have been found between regulatory quality and SDG reporting, as well as between control of corruption and SDG reporting, which confirms the substitution hypothesis. Finally, government effectiveness is not significantly related to SDG reporting. With respect to the control factors, positive relationships with SDG reporting are found for firm size, firm profitability, and CSR committees.

The dissertation will contribute to existing knowledge through offering an elaborate examination of the dimensions of national governance and the varied effects of such governance on the voluntary SDG reporting of companies operating in Europe. In terms of policy implications, the research indicates that enhancing democracy and improving

political stability could improve sustainable development disclosure. On the other hand, a well-developed environment for regulation might discourage voluntary disclosures by organizations, necessitating careful considerations when implementing policies under directives like CSR.

Keywords: National Governance, Sustainable Development Goals reporting (SDGsR), European Union, Worldwide Governance Indicators, Sustainability Reporting.

Chapter One

Introduction and Theoretical Background

1.1 Introduction

Sustainable Development Goals (SDGs) were adopted by the United Nations General Assembly in 2015 as part of the 2030 Agenda for Sustainable Development. They provide a globally recognized framework through which most urgent economic, social, and environmental issues can be resolved in the world. The SDGs are a universal call to action to end poverty, protect the planet, and ensure peace and prosperity for all by 2030. They comprise 17 goals and 169 specific targets (United Nations, 2015b) Nations, 2015). They are an extension of the (MDGs) but larger in scope and ambition, covering an extensive range of sustainability challenges, such as climate action, sustainable consumption and production, gender equality, and strong institutions(Bąk, 2024a), There is a greater emphasis on multi-stakeholder engagement in comparison with previous documents, placing responsibilities not only on governments but also on businesses, civil society, and other international institutions. Specifically, the private sector has been identified as a key driver of SDGs implementation and financing, for example, through innovation, investment, and reporting on sustainability issues (Sachs et al., 2024).

Consequently, it is now more important than ever for the level of corporate transparency with respect to Environment, Social, and Governance factors (ESG) and the inclusion, specifically, of the alignment of reporting indicators with the SDG indicators, to become an increasingly important consideration regarding business efforts in Sustainable Development (KPMG, 2024). As the efforts for the fulfillment of the 2030 Agenda are being constantly assessed globally, including the Sustainable Development Report and the Voluntary National Reviews, the level and intensity of corporate reporting with respect to the SDGs has become an area of concern for academics and the broader community alike. And, certainly, the growing emphasis is even beyond the business efforts being required for fulfilling the SDG Goals, specifically regarding reporting efforts related to business activities and achievements regarding the SDGs, in order to allow for the relevant Governments and stakeholders to have the level and intensity of alignment and progress (UN Global Compact, 2025).

The governance factors highlight the importance of political stability, government effectiveness, rule of law, and corruption control in shaping the disclosure of SDGs. These governance variables, along with company-specific variables like the presence of a CSR committee, company size, and profitability, positively influence the SDGs reporting quality of European companies (Almaqtari et al., 2024).

Europe has become a leader in the world in the achievement of the Sustainable Development Goals (SDGs). Since the adoption of the 2030 Agenda, the EU member states have made significant progress in important areas such as climate action, renewable energy, education, and gender equality (Sachs et al., 2024). This has been facilitated by significant policy agendas, such as the European Green Deal and the Recovery and Resilience Facility, as well as monitoring and regulatory tools, such as the Eurostat SDG reports and the Better Regulation Agenda (Saxena et al., 2022).

Within this institutional setting, European Public Limited Companies are pivotal in promoting the SDGs at the company level. This is because regulatory environments, such as the Non-Financial Reporting Directive (NFRD) and the Corporate Sustainability Reporting Directive (CSRD), oblige large companies to report ESG information in accordance with their strategic plans (European Parliament, 2024). At the same time, companies are encouraged to report ESG information in accordance with global standards such as the Global Reporting Initiative (GRI) and the United Nations Global Compact, largely due to stakeholder demands and reputation management (KPMG, 2024). However, there is evidence of considerable regional and sectoral differences in SDG reporting in Europe (Albu et al., 2025; Hummel & Szekely, 2022; KPMG, 2024).

As noted in previous research, the implementation of the SDGs in Europe is significantly related to the quality of the national governance system. Governance factors such as the effectiveness of regulations, transparency, the rule of law, and public accountability form the basis of the institutional framework that influences the implementation of sustainability policies and the disclosure of corporate information, Notwithstanding the EU's strong regulatory focus on sustainability reporting, there remain significant variations in the level of SDG reporting by European companies (Bąk, 2024b; Pinheiro et al., 2022; Wisniewski et al., 2024). Although the current literature has thoroughly investigated corporate governance and sustainability disclosure, sometimes concentrating on emerging markets recent research concentrating

on Europe has started to cover this topic as well (Abdeljawad et al., 2025; Abdulnaser I. Nour et al., 2025; Achim et al., 2023; Ahmed & Anifowose, 2024; Basumatary & Sar, 2025; Buniamin et al., 2022; Casciello et al., 2025; Nicolò et al., 2022, 2023; Saeed et al., 2025; Susilowati et al., 2022). Nevertheless, evidence on the impact of the governance factors at the national level on the disclosure of SDGs is still scarce.

The purpose of this dissertation is to fill the gap regarding how national governance in Europe affects corporate reporting on SDGs. Based on Stakeholder, Institutional, Legitimacy, and Global Governance theories, it explores the determinants of macro governance towards the corporate transparency perspective. National governance is measured based on six dimensions from the (World Bank, 2025):Voice and Accountability (VA) – participation and freedom of the media for citizens; Political Stability (PS) – likelihood of political instability or politically motivated violence; Government Effectiveness (GE) – quality of public services and policy implementation; Regulatory Quality (RQ) – the ability to enforce sound policies; Rule of Law (RL) – confidence in societal rules and contract enforcement; and Control of Corruption (CC) – the extent of public power misused for private gain. Integrating these dimensions allows gaining an insight into how governance shapes corporate SDG reporting and provides insights for improving sustainability reporting across European firms.

1.1.1 Statement of Research Problem

Despite the formalization and standardization of sustainability reporting practices have been on the rise, the degree of disclosure regarding the SDGs remains diverse among European firms (Hummel & Szekely, 2022; Krasodomska et al., 2023; Pizzi et al., 2024). This diversity indicates that the differences in the degree of SDGs disclosure could be related to a number of factors, with national governance being a significant institutional aspect. Previous research has emphasized the connection between SDGs disclosure practices and corporate governance structures at the company level (Nicolò et al., 2023).

Nevertheless, despite the work of (Achim et al., 2023; Casciello et al., 2025), there is still a lack of empirical evidence on the connection between SDGs disclosure and the robustness of country governance in the European region. This is particularly important, given the importance of governance institutions, such as regulatory systems, rule of law,

and government accountability, in influencing the implementation of policies and business practices. Adrian Bancu & Dascalu, (2024) are one of the few studies that try to connect the national governance indicators with the practices of disclosure of the SDGs. However, the study is geographically limited and does not focus on the European Union, which is a unique institutional context that is characterized by the coordination of regulations.

This situation represents a gap in the context of this study, which seeks comprehension related to the role that national governance factors related to Voice and Accountability, Political Stability and Absence of Violence/Terrorism, Government Effectiveness, Regulatory Framework and Control of Corruption play in a combined manner that defines effectiveness in concern with degree and meaningfulness of disclosures related to SDG indicators offered by firms operating in Europe.

This problem in the area of research, lacking significantly any empirical insight into the relationship of national governance institutions and the disclosure of the SDGs by European companies, necessitates an understanding of the macro-institutional environment in which the current state of sustainability reporting evolves. In filling the gap, the paper answers the questions set out below, all of which are closely aligned directly with the themes of the problem statement:

1.1.2 Research questions:

1.1.2.1 Main Research Question

What is the relationship between national governance and the SDGs Reporting level in publicly listed firms across EU member states between 2019 and 2024?

1.1.2.2 Sub-Questions

1. What is the relationship between voice and accountability and the SDGs Reporting level in publicly listed firms across EU member states between 2019 and 2024?
2. What is the relationship between political stability and the SDGs Reporting level in publicly listed firms across EU member states between 2019 and 2024?
3. What is the relationship between government effectiveness and the SDGs Reporting level in publicly listed firms across EU member states between 2019 and 2024?

4. What is the relationship between regulatory quality and the SDGs Reporting level in publicly listed firms across EU member states between 2019 and 2024?
5. What is the relationship between rule of law and the SDGs Reporting level in publicly listed firms across EU member states between 2019 and 2024?
6. What is the relationship between control of corruption and the SDGs Reporting level in publicly listed firms across EU member states between 2019 and 2024?

1.1.3 Research Objectives

Against the persistence of variation in SDG reporting practices across European publicly traded companies, despite the harmonized regulatory settings, the purpose of this dissertation is to understand how variations in national governance characteristics shape these disclosure patterns (Pizzi et al., 2024). Based on theoretical insights of stakeholder, legitimacy, Global Governance, and institutional theories, the study formulates a set of specific research goals guiding the empirical examination of the relationship between governance arrangements and corporate sustainability transparency within the EU setting.

In light of the above, this dissertation seeks to achieve the following research objectives:

1. To examine the relationship between voice and accountability and the SDGs Reporting level among publicly listed companies in European Union member states.
2. To examine the relationship between political stability and the SDGs Reporting level among publicly listed companies in European Union member states.
3. To examine the relationship between government effectiveness and the SDGs Reporting level among publicly listed companies in European Union member states.
4. To examine the relationship between regulatory quality and the SDGs Reporting level among publicly listed companies in European Union member states.
5. To examine the relationship between rule of law and the SDGs Reporting level among publicly listed companies in European Union member states.
6. To examine the relationship control of corruption and the SDGs Reporting level among publicly listed companies in European Union member states.

1.1.4 Research importance

This dissertation presents a relevant and significant intervention in the current debate on the institutional factors that influence corporate sustainability reporting. The research, with its paradigm based on the national structure and not the firm, presents a gap in the current literature by extending the concept beyond the traditional notion of corporate governance. The research considers the issue of the evaluation of the quality of governance in a multi-dimensional approach, employing the 'World Governance Indicators' and its direct connection with the reporting on goals for the sustainable development of the firm. This dissertation has great relevance within an EU context that has undergone harmonization in terms of sustainability reporting through tools like the CSRD, as it seeks to understand how the idiosyncratic national governance systems within EU countries have impacted the way their enterprises align with greater policy agendas. The research gap that this dissertation intends to fill is theoretical in nature, since it combines insights on institutional theory and stakeholder theory to show how the macro-environment impacts transparency. This is added to by firm-specific data examining the period 2019-2024, which allows the researcher to take a look at evolution and adaptation within a market context. Therefore, this dissertation will be of practical relevance to policymakers and institutional investors aiming to enhance the comparability of SDG reporting.

The present dissertation provides practical applications by showing that an improvement in the quality of national governance contributes to improved SDG reporting of firms. Thus, the policies that should be employed by the European Union to foster good sustainability reporting practices include encouraging citizen participation, fostering political stability, and improving the rule of law, which positively contribute to increased transparency in SDG disclosure. Furthermore, the results show that the existing regulatory instruments, such as the CSRD, cannot work effectively on their own because they require a robust institutional environment to support (SDGs) reporting. At the organizational level, organizations can enhance the quality of their SDG reporting by developing good corporate governance processes that include the establishment of CSR committees and increasing board independence.

1.2 Theoretical Background and Literature Review

1.2.1 Introduction to the Theoretical Framework

This dissertation has been grounded on the assumption that there is a certain impact of the regulatory environment and governance pattern of the respective countries on which the firms conduct their operations. The nation-state and its governance style determine decision-making structures and processes, as well as drivers of transparency and accountability, thus influencing the style of non-financial disclosure of organizations regarding their engagement with sustainable activities and achieving the sustainable development goals (Vickneswaran, 2024). Despite the recent harmonization of sustainability reporting standards across Europe, national governance frameworks still lead to sharp variations in how disclosure requirements are interpreted and applied at the firm level (Soyombo et al., 2024). This study, therefore, considers national governance to be a crucial contextual factor in examining the determinants of cross-country variation in SDG reporting practices among European firms.

1.2.2 Background on Sustainability and the Adoption of the Sustainable Development Goals in Europe

Sustainability has come into existence as a reaction to rising environmental pressures, social inequalities, and limitations inherent in growth-oriented economies alone (Ghimire, 2023). It was in the Brundtland Report of 1987 that the modern concept of sustainable development was first articulated, given that sustainable development could be defined as "meeting the needs of the present without compromising the ability of future generations to meet their own needs" (World Commission, 1987). This notion was well articulated on a global platform with the adoption of Agenda 2030 for sustainable development by the United Nations in 2015. The agenda outlined 17 sustainable development goals and 169 targets that can help manage the economic, social, and environmental challenges in an integrated way) (United Nations, 2015a). All European countries endorsed this framework, acknowledging the need for coordinated national and international efforts.

At a European level, the implementation of the SDGs can be found within the European policy framework, where sustainability has become one of the founding principles upon which the Treaty on European Union is based. The European policy framework helps

member states by implementing monitoring and common indicators, with Eurostat evaluating annual performance on the basis of the SDGs (Di & Giuridiche, 2025).

In the following section, the 17 Sustainable Development Goals are presented along with details of how each of these goals is covered in the European region.

- SDG 1: No Poverty: aims to end poverty in all its forms and dimensions by ensuring access to basic resources, social protection, and economic opportunities for all (United Nations, 2015).
- SDG 2: Zero Hunger: SDG 2 is concerned with the eradication of hunger, ensuring food security, improving nutrition, and ensuring sustainability in agriculture
- SDG 3: Good Health and Well-Being: Goal 3: SDG 3 aims to "ensure healthy lives and promote well-being for all at all ages".
- SDG 4: Quality Education: aims to inclusive and equitable quality education and promote lifelong learning opportunities (United Nations, 2015).
- SDG 5: Gender Equality: SDG 5 aims to "Achieve gender equality and empower all women and girls".
- SDG 6: Clean Water and Sanitation: aims to ensure sustainable access to water and sanitation this SDG focuses on ensuring the quality of water usage, as well as effectiveness and accessibility in using sanitation services.
- SDG 7: Affordable and Clean Energy: The goal is to "ensure access to affordable, reliable, and sustainable energy."
- SDG 8: Decent Work and Economic Growth: aims for sustainable economic growth, productive employment, and decent work.
- SDG 9: Industry, Innovation and Infrastructure: SDG 9 focuses on ensuring that there is sustainable and resilient infrastructure, and it also encourages innovative and sustainable industrialization.
- SDG 10: Reduced Inequalities: SDG 10 is concerned with reducing inequality within and among all countries.
- SDG 11: Sustainable Cities and Communities: The SDG 11 goal is to make cities and human settlements inclusive, safe, resilient, and sustainable.
- SDG 12: Responsible Consumption and Production: SDG 12 deals with responsible consumption and production practices.

- SDG 13: Climate Action: SDG 13 promotes urgent action to mitigate climate change and its effects. responds to this goal through its focus on reducing emissions and achieving climate neutrality.
- SDG 14: Life Below Water: Goal 14 involves the conservation and sustainable use of the oceans' resources.
- SDG 15: Life on Land: Protecting land ecosystems and preserving biodiversity. The UN Sustainable Development Goals website states, "Ensure the conservation and restoration of terrestrial ecosystems and stop the destruction of biodiversity.
- SDG 16: Peace, Justice and Strong Institutions:The SDG 16 ensures that societies are peaceful, and justice and institutions are effective.
- SDG 17: Partnerships for the Goals: The targets of the sustainable development goal number 17 are the promotion of global partnerships for sustainable development (United Nations, 2015b).

Figure (1)

SDGs

Source: United Nations, (2015)

1.2.3 Linking National Governance to the 17 Sustainable Development Goals in Europe

National governance is an important factor in the application and realization of the Sustainable Development Goals (SDGs), not only in the region of Europe. A functional institution, appropriate policies, and transparent decision-making processes in governance ensure an appropriate context within which societal institutions, economic, and environmental challenges may be met. The 17 SDGs have considerable linkages with the quality of institutions, as their effectiveness could either enable or hinder the pace towards sustainable development (Eurostat, 2015; United Nations, 2015b).

Social objectives, for example, the elimination of poverty, food security, health, and the empowerment of women, rely on the formulation of good policies and the enforcement of these policies. On the other hand, the achievement of economic and environmental objectives, such as the creation of decent work, innovation, and the promotion of sustainable cities, sustainable development, and responsible consumption, relies on good governance, which entails the enforcement of good policies (OECD, 2023; UN Women., 2022). It is important to note that SDG 16 and SDG 17 highlight the importance of governance through good institutions, justice, transparency, and partnerships as the means and goals of sustainable development. Within the European framework, these instruments are mainstreamed through directives and monitoring frameworks on national strategies to improve the capacity of the national institutions and make their policies align on the basis of global sustainability goals(Ahlström & Sjåfjell, 2023).

Moreover, the attainment of the SDGs in Europe is directly associated with the quality of national governance because good institutions help maximize resource efficiency and achieve sustainable growth in social, economic, and environmental sectors; (Eurostat, 2025; United Nations, 2015b).

1.2.4 Sustainability Reporting and the Adoption of the Sustainable Development Goals in Europe

A. Historical Evolution of Sustainability Reporting in Europe

Within the initial phase of sustainability reporting, many European companies engaged in voluntary disclosure of environmental and social issues, having largely reputational

motivations rather than a regulatory imperative, which are still true even today (Ottenstein et al., 2022). This voluntary disclosure was selective as well as diverse, with a focus on fundamental environmental topics and a few social initiatives, owing to the Paucity of a standardized regulatory framework, although with little uniformity and standardization, which contributed positively towards increasing transparency and served as a stepping stone for more structured sustainability reporting and a further focus on global initiatives such as the Sustainable Development Goals (Soyombo et al., 2024)

B. From Traditional Sustainability Reporting to SDG-Aligned Disclosure

Sustainability reporting in Europe began with voluntary reporting and has progressed to more formalized and harmonized approaches due to stakeholder pressures and EU regulations. A more integrated approach using tools such as GRI and IIRC enhanced transparency, comparability, and governance ESG metrics in reporting, thus enhancing accountability and alignment with Sustainable Development Goals in company reporting (Stefanescu, 2022).

C. Transition to Detailed and SDG-Integrated Sustainability Reporting

Sustainability reports in Europe indicate an increase in integrated and SDG-targeted reporting, tracing business operations to defined objectives, hence towards global sustainability (Urbieta, 2024). The demand for transparency and results-based progress has pushed businesses towards SDG-targeted reportage, from nominal towards fact-based (Stefanescu, 2022). Regulations in the EU, such as NFRD, CSRD, EU Taxonomy, and ESEF, ensure transparency and auditability of reports (Hema Diwan et al., 2024)

D. Linking National Governance to SDG reporting in Europe

The element of governance is ranked among the first building blocks which shapes the breadth, and, in addition, the quality and authenticity of the SDG disclosures of European corporations. Obviously, the institutions will advance appropriate and efficient governance, together with appropriate policy and mechanisms for making sure government accountability. Besides, it is asserted that by easing uncertainties surrounding regulations, a situation where effectiveness in governance and oversight is

achieved will enhance the visibility of the corporation's contribution to all the SDGs (Hummel & Szekely, 2022).

1.2.5 Institutional Actors Responsible for Corporate Sustainability Disclosure in Europe

Corporate sustainability and SDGs disclosure in Europe occur within a multi-level institutional framework, comprising supranational and national governance actors, influencing the scope, consistency, and quality of disclosure. National differences in the European governance environment foster this variation in approaches to reporting on the SDGs (European Commission, 2024).

At the supranational level, it is the European Commission at the heart of harmonization on sustainability reporting through the CSRD, which mandates an expanded reporting requirement aligned with EU sustainability objectives and the SDGs. The EFRAG develops the European Sustainability Reporting Standards, which foster standardization and comparability of sustainability disclosures in the Union. At the national level, domestic regulators—including finance ministries, securities authorities, and stock exchanges—enforce and implement EU directives. Differences in regulatory quality across member states create disparities in the extent and depth of SDG disclosure, highlighting the critical role of national governance in guiding corporate sustainability practices (European Parliament and Council., 2014; Eurostat, 2025).

In addition to these formal rules and regulations, standardization organizations such as the Global Reporting Initiative (GRI) have widely influenced European enterprises to disclose impacts on Sustainable Development Goals, promoting transparent and stakeholder-oriented reporting. (Global Reporting Initiative, 2021) External assurance providers and civil society organizations have also exerted pressure on these practices to ensure conformity to sustainability concerns.

These, together, constitute the governance structure through which institutional quality and stakeholder influence the sustainability of corporations as well as SDG reporting in Europe.

1.2.6 National Governance and Its Role in Shaping Corporate Sustainability Disclosure in Europe

1.2.6.1 Introduction

The national systems of governance have a significant influence on the business environment of a given corporation and is critical for conducting business. In Europe, national systems of governance have a significant influence on non-financial reporting, such as alignment with the SDG and CSRD. This is given the fact that the reporting of non-financial information on SDG is influenced by the national systems of governance, as well as the resilience of Europe on appropriate regulations on SDG reporting (Bąk, 2024b).

1.2.6.2 Concept of National Governance and Its Institutional Dimensions

National governance is described as the organizational, political, and legal frameworks in which power is wielded, and actions are delivered It encompasses government activities, the quality of institutions, enforcement capabilities, and government accountabilities. Good governance ensures favorable and dependable conditions with less opportunism and uncertainty. It clearly defines social expectations in terms of transparency and accountabilities, indirectly influencing corporate social performances in aspects of non-financial disclosures (Batool et al., 2023).

1.2.6.3 National Governance as an Institutional Framework Regulating Disclosure Behavior

National governance represents the broad set of formal and informal institutional structures that influence corporate behavior by setting rules, norms, and implementation mechanisms. Using its political, legal, and administrative institutions, it creates expectations for the degree of transparency, accountability, and responsible behavior expected from business. These governance arrangements entice firms to regard disclosure as the result of societal and regulatory pressure rather than as a voluntary decision. Differences in governance quality thus create a systematic difference in the disclosure behavior, particularly in SDG-related reporting, until now (Sarma et al., 2024).

1.2.6.4 National Governance as a Determinant of the Quality and Depth of CSRD Disclosure

National governance significantly influences the quality and depth of CSRD disclosures by enhancing transparency, accountability, and good corporate performance. Democratic institutions and public accountability increase stakeholder scrutiny that demonstrates reliable and accurate non-financial reporting (Bose et al., 2024). Political stability and good government provide a decline in institutional risks by enabling consistent and voluntary disclosure of SDG-related information. High regulatory quality and rule of law lead to reporting practices that are harmonized, enforceable, and trustworthy (Friday et al., 2024; Michelon et al., 2022). Finally, control of corruption increases corporate legitimacy and encourages proactive sustainability and social responsibility disclosures (Bose et al., 2024).

1.2.7 Theoretical Perspectives: Linking National Governance and SDG Disclosure

Using a theorization model, the study underpinning this dissertation integrates theories, namely: stakeholder theory, institutional theory, legitimacy theory, and, finally, global governance theory to examine the relationship between the national level of governance and the level of SDGs disclosure. Under Stakeholder theory involves the use of voice and accountability in governance, along with political stability and transparency in public institutions, in which firms in such environments are pressured to disclose information to key actors in the corporate landscape, thereby defining SDGs' disclosures as a strategic and ethical imperative (Freeman, 2010). While the institutional theory results in a mitigation strategy from organizational actors in a highly regulated environment against coercive, normative, and mimetic pressures, they implement standardized sustainability reporting practices in order to ensure conformity and legitimacy (DiMaggio & Powell, 1983). The legitimacy theory supplies an acceptable rationale for SDG disclosure, which helps an organization become congruent with societal norms and presumed values embedded in a national system of governance (Suchman, 1995). Lastly, global governance theory places organizational SDG reporting in a wider international context, highlighting the impact of international rules and regulations establishing sustainability regulations in the national system of governance. These perspectives collectively create a cohesive understanding of the influence of the overall environment on sustainability disclosure in Europe.

1.2.7.1 Stakeholder theory

Stakeholder theory, developed by Freeman, (1984), describes the firm as a network of relationships among various stakeholder groups - customers, employees, investors, governments, and civil society - whose interests must be managed to ensure corporate legitimacy and sustainable value creation. (Donaldson & Preston, 1995)extended the theory by distinguishing three core dimensions: the normative obligation to consider stakeholder rights, the instrumental benefits of stakeholder involvement, and the descriptive realism of stakeholders' actions in corporate life. Extended to the national level, governments themselves are subject to multiple layers of stakeholder pressure and increasingly must demonstrate accountability through SDGs reporting. National institutions may disclose SDG information for the satisfaction of various domestic stakeholders, such as citizens demanding legitimacy and public value, or civil society and NGOs pushing for justice and transparency.

In the EU, institutional frameworks are well developed, and institutional quality can be considered high. Having voice and accountability, political stability, rule of law, and effective regulation empowers stakeholders (Pinheiro et al., 2022). Through the involvement of both public and private sector actors as key drivers of institutional change, deeper institutional structures and a culture of disclosure are promoted. This empowerment creates normative pressures that drive organizations to conform their reporting behavior to stakeholder expectations, in line with the stakeholder theory perspective (Erbetta & Abrate, 2025; Gold et al., 2022). Enhance the production of more informative and credible SDG reports. Sustainability reporting in corporations can be considered neither just a regulatory compliance task, as often presumed, nor of major importance in terms of its role in reputation management, as required by the institutional needs of major stakeholders. However, as noted by Itan et al., (2025), adopting SDG's reporting, as based on formal presentation and consistent with global best practices, helps corporations in European countries to preserve their legitimacy and boost support from stakeholders. In addition, as based on stakeholder theory, corporate governance environment has been reported to affect sustainability depth, consistency, and authenticity of disclosures in SDG reporting by influencing the level of stakeholder pressure, as noted by (Esposito et al., (2025).

1.2.7.2 Institutional theory

Institutional theory provides a rich conceptual paradigm in studying the practices and processes of sustainability disclosure, and where the legal, political, and institutional frameworks have pervasive effects. Based on the pioneering study by DiMaggio & Powell, (1983), the theory describes how institutions shape the practices and behaviors of organizations by applying institutional forces, termed as coercive, normative, and mimetic. Such forces are very significant, for instance, in countries with strong governance structures, where there are strong precedents and low corruption, thus institutions that are thick. Such countries determine the disclosure practices of the Sustainable Development Goals, with the practices influenced, not just by the corporate strategy, but by institutions as well.

Societies with robust public institutions and economic linkages to the world are more likely to promote open reporting of SDGs. Government regulation, EU directives, or conformity with international sustainability guidelines are coercive pressures. Normative pressure is due to global norms, business practice, and NGO, professional association, and multilateral institution expectations. Cognitive pressure is due to shared social knowledge and mutual cultural norms around sustainability as a basic value in economic and political life (Hummel & Szekely, 2022). For instance, as shown by Cosa, 2024; Petter Gottschalk & Christopher Hamerton, (2024), in profoundly institutionalized environments such as Scandinavia, companies are exposed to intense social and regulatory pressure for detailed disclosure, and thereby normalized and transparent SDG reporting norms.

Furthermore, internalization of such pressuring forces from institutions has continually sustained a culture of compliance and readiness to conform to best global practices, such as through UN VNRs and EU's CSRD regulation, among others. As highlighted by (Dodoo, 2023), logically, one should find corporations in states with superior governance institutions adopting disclosure systems which supersede merely complying with existing regulations. Instead, they tend to be grounded within deep-rooted institutional paradigm bases of accountability, transparency, and performance legitimacy. As argued under institutional theory, national governance quality persists as a basis of structural support for such firms' SDG-related isomorphic processes of

standardizing their reporting manner of their efforts toward sustainability (Huang et al., 2025).

1.2.7.3 Global Governance Theory

The theory of Global Governance is of particular importance in the context of the interaction between national governments and corporate SDGs. The theory of global governance was first conceptualized by Rosenau & Czempiel, (1992), and further elaboration of the theory was done by Held and McGrew (2007). The theory of global governance involves norms, institutions, and processes beyond the nation-state, which implicate the actions of nations and businesses, including their sustainability trends. Countries in Europe are very much integrated with the theory of global governance through their economic ties with the United Nations, the economic agreements of the IMF, and the economic development programs of the World Bank.

Countries that have a well-established means of governance and a high level of alignment to international institutional policies tend to be responsive to global sustainability initiatives. Measures such as the United Nations High-Level Political Forum (HLPF), referred to as Voluntary National Reviews (VNRs), serve as soft law, prompting national governments to align global targets set under the Sustainable Development Goals (SDGs) to their individual policy frameworks, thereby impacting corporate reporting practices (United Nations, 2025), Therefore, it can be asserted that due to proper participation by European countries in international processes within a governance forum, these countries will be able to implement sustainability disclosure practices, which will, in turn, prompt firms to declare their performance with respect to their corporate responsibility towards globalization. Therefore, it can be understood from Global Governance Theory that there is significant pressure on European firms, from both regional and international perspectives, to make standard, transparent, and comprehensive reporting regarding the achievement of SDGs, which also represents national commitment towards globalization.

1.2.7.4 Legitimacy Theory

Legitimacy theory, as an approach for strategic management, helps in the formulation of an interface between national governance and sustainability disclosures. Legitimacy theory, as addressed in the study by Suchman, (1995), has relevance to the subject in

terms of how organizations, such as government and corporate entities, struggle to achieve and nurture legitimacy, and even reconstruct them, through the use of various methods for disclosure. In relation to sustainability disclosures, therefore, this theory offers an interface in terms of how society or an institution responds to concerns by formulating a sense of accountability and commitment to common societal goals as a means of leveraging perceived differences between actual and expected performance as a means to legitimizer.

Regarding the context of Europe, these pressures to enhance legitimacy can be closely related to reports relating to EU standards and regulations, as well as sustainable development. SDG reports serve to show compliance with EU directives and regulations like CSRD and the AGENDA 2030. (Bąk, 2024a)have found that most reports related to SDG have symbolic inclinations, only aimed to satisfy stakeholders and are not entirely related to actual business operations. Firms in lower governance quality countries may therefore adopt extensive SDG reporting as a means of improving external perceptions and reassuring international investors, while those in high-governance countries reinforce legitimacy through the alignment of reporting with robust regulatory and institutional frameworks (Shulin Chen, 2025). Differences in SDG reporting across Europe can thus mainly reflect variation in perceived institutional legitimacy rather than variation in actual corporate performance.

1.2.7.5 Integrative Theoretical Perspective

Based on the theoretical framework outlined above, the following research adopts Stakeholder Theory, Institutional Theory, Legitimacy Theory, and Global Governance approaches in analyzing how different dimensions of national governance affect the level of SDG disclosure. First of all, voice and accountability are related directly to Stakeholder Theory due to the importance of stakeholders' engagement in corporate activities (Freeman, 1984). Political stability and government effectiveness are largely determined by the principles of Institutional Theory, according to which an efficient corporate governance structure depends greatly on a stable institutional environment (Rachid Scott, 2013). As for rule of law, it is related closely to Institutional and Legitimacy theories since efficient legal systems are more likely to improve enforcement mechanisms and provide corporations with additional incentives to preserve their legitimacy in terms of corporate disclosure (Pesaran et al., 2004;

Suchman, 1995)(Suchman, 1995; Scott, 2014). Lastly, regulatory quality and control of corruption could be considered from Institutional and Global Governance angles as corporations with an efficient regulatory system and lower levels of corruption may not require additional SDG disclosures (Basile et al., 2025; Zampone et al., 2024).

Generally speaking, this integrative approach clearly reveals that the SDG's reporting process is not solely based on one specific theory, but is rather a result of interplay between stakeholders' pressure, institutional setting, and legitimacy needs.

1.2.8 The interconnection between national governance dimensions and the level of SDGs disclosure

National governance plays a critical role in shaping in creating an institutional framework that sustains the disclosure of corporate sustainability information. Variables such as voice and accountability, government effectiveness, quality of regulatory framework, political stability, rule of law, and control of corruption affect the degree to which companies report information about the Sustainable Development Goals (SDGs). These six dimensions of governance are critical in determining the environment that is experienced by firms and, as such, can be said to influence the requirements of transparency and accountability that are set by such factors as regulatory and stakeholder transparency and accountability. According to (Pinheiro et al., 2022), they are key factors that are used in measuring the legitimacy and effectiveness of public institutions, based on the implications that they hold for sustainability commitments that are communicated and monitored in such environments. In environments where good governance, regulatory environments are also favorable, and anti-corruption measures are also high, transparency can be achieved, as well as meeting international sustainability requirements, as posit Krivogorsky, (2024).

Furthermore, firms that are governed by a more structured system tend to have a tendency to feel obligated to respond to public demands and follow a strict code of conduct regarding disclosing their commitment to SDG. It is within this scenario that Dodoo, (2023) allegedly proposes that companies move beyond the confines of compliance to make their disclosure more responsive to global demands, thereby satisfying institutional investors as well as other stakeholders. Likewise, Huang et al., (2025)argue that high-quality national governance facilitates institutional isomorphism

whereby firms imitate one another's sustainability practices within normative and coercive fields of pressure. National governance therefore serves not only as the backdrop environment but as an institutional facilitator of disclosure that is more informed within the framework of the European environment, where more developed structures of governance exist.

1.2.9 National governance dimensions:

National governance defines the ability of the country to formulate and enforce its policies effectively and with integrity (Batool et al., 2023), the structures for national governance usually emphasize six areas, including the voice and accountability, political stability, effective governance, effective regulation, rule of law, and control of corruption, as defined by the World Governance Indicators. These areas encompass the normative legitimacy and administrative roles given to public institutions, as considered Pinheiro et al., (2022). Significantly, the performance areas for national governance structures not only include the integrity of the public institution, as explained, but also the culture of the workplace environment for the respective organizations functioning within such a setting. In contexts where political institutions are stable, regulations are high-quality, and corruption is effectively controlled, firms tend to operate under greater transparency pressures and are more likely to adopt sustainability-compatible practices (Dodoo, 2023; Huang et al., 2025). Accordingly, an intensive study of these six dimensions of governance will be conducted with the aim of assessing their role in determining the level and quality of SDG reporting by listed companies in Europe.

1.2.9.1 Voice and Accountability

Voice and Accountability is a basic aspect of a country's governance, especially in the European setting, where there are strong roots of democracy and civic engagement. This aspect captures how far the citizens are able to take part in choosing their government and how they enjoy freedom of expression, association, and access to independent media (World Bank, 2025). In European nations, the presence of robust civil societies and the institutionalization of democratic procedures help to ensure that transparency and participation become the norm rather than the exception (Koliba, 2025). According to Lepenies et al., (2023), nations that have inclusive and participatory governance frameworks are likely to have higher institutional maturity, as decision-making is

influenced by transparency, engagement, and participation. This trait highlights the importance of Voice and Accountability as a crucial component of good governance.

1.2.9.2 Political Stability and Absence of Violence

A stable political environment in Europe, particularly within the EU institutions, has actually encouraged a setting where the long-term planning of corporations has been achieved. Vogt & Pukarinen, (2022) argue that the absence of political instability in a state or the frequent experiences of democratic transitions without the use of violence lower the uncertainties associated with a state's systems. Consequently, corporations in these countries are in a position to formulate a permanent forward-looking disclosure policy. Almaqtari et al., (2024) observe that firms operating in a politically stable environment are highly sensitive towards the signals from the state on matters pertaining to sustainability. Following this idea, Dong Li, (2023) argue that a stable state significantly enhances the transfer of sustainability experiences from the public domain to the private domain. Political Stability and the Absence of Violence refer to the (World Bank, 2025) measurement of the perceptions of the likelihood of a possibility toward the instability and overthrow of the government using unconstitutional and violent methods. It is within these contexts that corporations in Europe operate in a stable setting where the disclosure of SDG has not only been possible but also proven beneficial.

1.2.9.3 Government Effectiveness

Government Effectiveness is one of the most important indicators of governance in a country, which captures the level of effectiveness of public administration, the capacity of the civil services, and the degree to which public institutions are insulated from political interference (World Bank, 2025). This indicator captures the views of the efficiency, credibility, and competence of the policies and institutions of the government. It also includes the capacity of the government to formulate and implement effective policies. In European nations, a high level of government effectiveness is considered to be linked to efficient public institutions, a stable policy environment, and adequate administrative infrastructure (Pizzi et al., 2024). These institutional settings promote confidence in the governance structure, ensure stable enforcement of regulations, and signal institutional stability and continuity in policies. This further

helps to ensure a stable environment where public administration can support strategic and societal objectives (Dimes & Molinari, 2024).

1.2.9.4 Regulatory Quality

Regulatory Quality is a measure of how effectively national administrations can develop and implement good policies and regulations to facilitate efficient market operation and ensure stability in institutions (World Bank, 2025). This aspect of governance focuses on the need for consistency, certainty, and effectiveness in the legal and institutional frameworks that govern the operations of both the public and private sectors. It also involves the ability of the government to develop regulations that support economic development. In the European Union, the quality of regulations is often achieved through harmonized regulations, transparent regulation-making, and enforcement (Krasodomska et al., 2023). Well-functioning regulatory institutions are important for ensuring a stable business environment, which in turn promotes the reliability of institutions and improves the credibility of governance structures (Vogt & Pukarinen, 2022). In addition, liberal democratic societies in the EU promote procedural transparency and administrative accountability, which improves the quality of regulatory frameworks (Koliba, 2025).

1.2.9.5 Rule of Law

The Rule of Law is a basic aspect of national administration, which focuses on the independence of the judiciary, equality in the application of the law, and the uniform application of rights and duties under the law (World Bank, 2025). It encompasses the degree to which people trust and comply with the rules that govern society, including the enforceability of contracts, security of property, and the capability of the police and courts, as well as the level of crime and violence. In the European Union, the regulatory and legal systems are generally praised for their procedural transparency, investor protection, and enforceability of laws (Batool et al., 2023). The institutional setting promotes trust in governance, which in turn supports a predictable and stable legal environment. Decentralized and organized legal instruments further enable the integration of legal expectations into institutional practices, which improves the consistency and legitimacy of organizational compliance (Ansell et al., 2022).

1.2.9.6 Control of Corruption

Control of Corruption is an important aspect of governance, which measures the extent to which public power is used for private ends and the extent to which those who are better off can manipulate their power over public institutions (World Bank, 2025). It measures both petty and grand corruption and the overall integrity of public institutions. In European nations, institutional frameworks, like autonomous control of corruption agencies and regulatory agencies, facilitate ethical behavior and enhance accountability (Batool et al., 2023). Such frameworks can minimize opportunistic actions, enhance institutional legitimacy, and promote a governance context marked by transparency and compliance. Sub-national governance structures are also responsible for ensuring ethical behavior and uniform enforcement at different institutional levels (Ansell et al., 2022). As per institutional theory, coercive and normative forces in well-regulated settings promote homogeneity in standardized governance practices (DiMaggio & Powell, 1983).

1.2.10 Sustainability development goals reporting (SDGsR):

The reporting on the Sustainable Development Goals (SDG) is furthermore impacted by legal requirements, but even more so by the progressive expectations set forth by the market, institutional investors, and non-governmental organizations. Thus, within the EU, the establishment of indicator reporting for the Sustainable Development Goals, coupled with the support for the sustainability principles for institutional policies, is a reflection of the enhanced institutional engagement within the corporation for effective and responsible reporting systems. (Lepenies et al., 2023). As a consequence, the reporting on the Sustainable Development Goals among enterprises is moving from voluntary, uncoordinated reporting toward more coordinated, fact-based reporting embedded within the ESG sustainability reporting. As indicated within the study presented by Nicolò et al., (2023), already within the local authorities within the EU, the reporting structure is standardizing and conforming to national and international reporting expectations. The institutional momentum within the EU highlights the progressive challenge toward the attainment of the Sustainable Development Goals within the EU's policies for the development agenda, translating policies within the operational context. (GIRALT, 2024).

This dissertation places the disclosure of the SDGs both as an outcome of business reporting and also as an institutional response. It is on the level of Europe that the integration of reporting relating to the SDGs, national governance, and essential framework reporting within GRI, for example, is essential to the assessment of business sustainable practices. The GRI reporting guide enables business to link their reporting and the targets of the SDGs, although it is the performance of national governance systems that significantly influences their performance (Global Reporting Initiative, 2021). National administrations where regulation exists and rule of law is applicable, and where public accountability exists, are institutions within which reporting is both possible and the norm. Within this regard, it is proposed that this dissertation will empirically examine how differences between six dimensions of national governance affect the extent of disclosure of the SDGs, and hence attain further insight into the influence of public institutions on sustainability performance in the European private sector (Blerita Korca, 2022).

1.2.11 Literature Review and Development of Hypotheses

1.2.11.1 Literature Review: National Governance and SDG reporting in the European Context

The incorporation of Sustainable Development Goals (SDGs) into corporate strategies and reporting practices has emerged as a hallmark of the modern sustainability agenda. SDG reporting enables corporations not only to align with the global development agenda but also to meet the increasing demands of various stakeholders, such as investors, governments, and civil society (Rabaia et al., 2025; Nour et al., 2024; Raed Abdelhaq et al., 2025). The current review synthesizes existing knowledge to form the basis of hypotheses on the influence of national governance on SDG reporting practices in the European context. A large amount of literature has highlighted the importance of the characteristics of national governance systems in shaping sustainability performance. Almaqtari et al., (2024) offer strong evidence from a panel data analysis that good governance, especially with high-quality institutions, rule of law, and political stability, provides favorable conditions for improved sustainability performance. Companies in countries with high-quality governance systems enjoy the benefits of institutional monitoring, rule of law, and stable policy environments. On the other hand, countries with low-quality governance systems tend to have less stable sustainability

performance, reflecting the heterogeneity of SDG adoption and disclosure practices in different countries (Almaqtari et al., 2024).

In the European Union, where regulatory convergence and sustainability governance have been emphasized, the practice of SDG reporting has become more institutionalized. Nicolò et al., (2022) find that there has been a significant rise in the number of large Public Interest Entities (PIEs) mentioning SDGs in their sustainability reports after the adoption of Directive 2014/95/EU. Likewise, Lepenies et al., (2023) show how national SDG indicator strategies have been institutionalized in policy contexts, giving rise to diverse institutional pressures and reporting systems across the member states. The Global Reporting Initiative (Global Reporting Initiative, 2021) is the key framework for credible and quantifiable SDG reporting in Europe.

Adrian Bancu & Dascalu, (2024) emphasize that the country governance factors, such as voice and accountability, political stability, government effectiveness, regulatory quality, rule of law, and control of corruption, act as important facilitators of SDG disclosure. A high level of voice and accountability ensures that citizen participation, a free press, and public participation create normative pressures for transparent business behavior. Political stability improves the predictability of policymaking, which in turn promotes long-term strategic disclosure. Likewise, government effectiveness and regulatory quality create a stable context that favors compliance, transparency, and consistent disclosure practices (Almaqtari et al., 2024; Meuleman, 2022).

The degree and scope of governance influence not only macro-institutional factors but also corporate perceptions of responsibility and legitimacy. The presence of the rule of law and anti-corruption programs enhances public institution legitimacy and reduces the scope for opportunistic behavior, which in turn provides incentives for firms to produce credible and verifiable sustainability reports (Adrian Bancu & Dascalu, 2024; Bhagat & Hubbard, 2022; Bose et al., 2024). With regard to firms, factors such as ESG performance management, stakeholder engagement, and sustainability committee moderate country-level factors to ensure that there is integration with the Sustainable Development Goals (SDGs) (Bhagat & Hubbard, 2022; Bose et al., 2024).

The role of technology and digital infrastructure is significant in enhancing SDG reporting. Data platforms, comparison systems, and e-government solutions increase the

availability and transparency of data within organizations, thus enhancing accountability (Basile et al., 2025). Further, actions by EU regulators, including the EU Taxonomy Regulation, indicate political commitment to a standardized and mandatory sustainability reporting system, thus enhancing comparability and reporting (GIRALT, 2024).

Despite the increased interest in corporate governance and SDG disclosure, there are still significant gaps in the literature. There are only a few studies examining the relationship between various dimensions of corporate governance and SDG reporting in Europe. Furthermore, the impact of using standardized reporting schemes such as GRI on the quality of national governance is still an under-explored issue (Adrian Bancu & Dascalu, 2024; Helfaya et al., 2023).

In an effort to address these issues, the current study aims to empirically investigate the relationship between various dimensions of national governance—voice and accountability, political stability, government effectiveness, regulatory quality, rule of law, and control of corruption—and the quality, integrity, and level of SDG reporting in publicly listed firms in Europe. A detailed discussion of the conceptual background and hypotheses is provided in the next section.

1.2.11.2 Hypotheses Development

Building on the theoretical foundations and empirical insights presented in the literature review, this dissertation develops a set of hypotheses to empirically examine the relationship between national governance characteristics and SDG reporting among European firms. While previous studies have identified the role of institutional quality in corporate sustainability performance, the specific effects of governance dimensions such as voice and accountability, political stability, government effectiveness, regulatory quality, rule of law, and control of corruption on the transparency, consistency, and credibility of SDG reporting have not yet been fully appreciated. These dimensions, using the definition of the World Governance Indicators, cover very essential aspects with the capacity to both enable and hinder corporate disclosure practices in the country. Through the independent assessment of each dimension of governance, the aim of the research is to enhance the influence of the institutional frameworks on corporate actions in regard to the implementation of the 2030 agenda. From the findings, these hypotheses are formulated.

1.2.11.2.1 Voice and Accountability

Some studies also argue that civil liberties, freedom of the press, and participatory systems promote higher levels of openness in business reporting. Adrian Bancu & Dascalu, (2024) argued that in societies with high levels of citizen participation and a free press, businesses are more efficient in responding to the needs of society, especially in terms of sustainable disclosure. According to Stakeholder Theory, in participatory societies, the pressure from various stakeholders, such as civil society, the press, and the general public, to disclose transparent information about the SDGs, increases on businesses. This is because businesses want to satisfy the demands of those who can affect their operations. According to Legitimacy Theory, businesses in democratic societies are driven to ensure that their sustainability reporting is consistent with societal norms and values to gain acceptance and legitimacy. Finally, Institutional Theory argues that companies within strong participatory institutions are subject to coercive and normative pressures to align with the accepted practice; therefore, the presence of local digital communication platforms and public SDG indicators provides structured incentives for organizations to adopt standardized and transparent reporting practices (Dong Li, 2023; Lepenies et al., 2023; Nicolò et al., 2023). In this context, SDG reporting goes beyond a reaction to a regulatory requirement and becomes an action aimed at maintaining legitimacy and meeting stakeholder demands.

It follows from the above that levels of civic freedom and societal participation serve as fundamental motivators of transparency in the disclosure of SDGs, developing the foundation for the following hypothesis:

H1: There is a positive and significant association between voice and accountability and the SDGs reporting level.

1.2.11.2.2 Political Stability

Political stability minimizes institutional uncertainty and allows companies to plan for the future in corporate matters, especially in sustainability-related projects. According to Almaqtari et al., (2024) demonstrate that when the political environment is stable, businesses feel empowered to plan ahead and align sustainable environmental and social practices with their strategies. Therefore, it is more likely for SDG reporting to be integrated into corporate planning. Based on Stakeholder Theory, when the political

environment is stable, it provides a platform where different actors, such as regulators, investors, and society, can observe corporate actions and encourage responsible and transparent reporting. In line with Legitimacy Theory, businesses in politically stable environments perceive SDG reporting as a social obligation and, as such, become less risk-averse because it enhances their legitimacy and credibility (Dong Li, 2023; Shawoo et al., 2023). In essence, political stability not only facilitates corporate foresight but also enhances the pressure on businesses to demonstrate their legitimacy and credibility by reporting SDG information in an honest and transparent manner.

Building on the above discussion, political stability creates a conducive environment for political actors to engage in SDG reporting, hence the formulation of the hypothesis that:

H2: There is a positive and significant association between political stability and the SDGs reporting level−.

1.2.11.2.3 Government Effectiveness

High-effective governance, which is marked by efficiency in public service delivery, stable public policies, and effective institutions, creates a trust-based institutional setting that encourages companies to participate in national sustainability agendas. According to Meuleman, (2022), effective governance helps to eliminate ambiguity in public policies, which in turn helps to create a clear understanding of sustainability goals and practices. In the context of Institutional Theory, companies operating in well-structured governance settings are exposed to coercive and normative isomorphic pressures that influence corporate actions, such as the implementation of comprehensive SDG reporting practices. According to Legitimacy Theory, companies believe that alignment with well-structured and effective governance settings helps to ensure societal approval and credibility; comprehensive SDG reporting practices serve as a tool to ensure that companies are in line with socially accepted norms (Dong Li, 2023). In the European setting, high government effectiveness helps to create institutional settings that align SDG goals with corporate strategies, which in turn promotes higher-quality sustainability disclosures.

By the discussion above, good government institutions provide the way for better enforcement and regulatory oversight, which secures a conducive framework for credible and comprehensive disclosure on SDGs. Based on the above assertion, our hypothesis is:

H3: There is a positive and significant association between government effectiveness and the SDGs reporting level.

1.2.11.2.4 Regulatory Quality

High-quality regulations are critical in influencing both the willingness and ability of corporations to report information on the SDGs. The enforcement of sustainability regulations in Europe ensures that all businesses conform to the Sustainable Development Goals (Hummel & Szekely, 2022). Institutional Theory argues that a well-structured regulatory framework has coercive and normative forces that influence businesses to follow standardized reporting on the SDGs. Legitimacy Theory argues that businesses see the need to comply with well-structured regulations as a means to ensure that they remain legitimate in society, as it is an indication that sustainability reporting is aligned with societal expectations (Dong Li, 2023). Additionally, Global Governance Theory argues that standardized regulations across the globe ensure that there are cross-national legitimacy and consistency in reporting, which enables businesses to incorporate SDG indicators into their sustainability strategies in a globally accepted format (Lnenicka et al., 2022). When regulators ensure that operational rules are aligned with institutional structures, businesses increasingly see the SDG reporting as a means to achieve strategic objectives of improving reputation and competitive advantage rather than just a means to comply with regulations.

Based on the above, the regulation quality promotes organizations to make transparent SDG disclosures; hence, the following hypothesis is formulated:

H4: There is a positive and significant association between regulatory quality and the SDGs reporting level.

1.2.11.2.5 Rule of Law

The rule of law is a critical institutional framework that helps ensure corporate accountability and sets expectations for sustainability disclosures. Under circumstances

of a strong and well-implemented rule of law, companies are more inclined to treat SDG disclosures as a mandate rather than an elective activity because there are clear rules and effective mechanisms for implementation of regulations. Such institutions provide a strong impetus to the systematic integration of sustainability factors into companies' governance and reporting systems. Under Stakeholder Theory, a strong rule of law makes it easier to monitor the activities of regulators, investors, and the public. Similarly, according to Legitimacy Theory, under conditions of strict monitoring and enforcement, companies utilize SDG disclosures as means to enhance their legitimacy and credibility (Dong Li, 2023; Pinheiro et al., 2022; Shawoo et al., 2023). Thus, in addition to fostering systematic approaches to sustainability management, the rule of law reduces the risks of opportunistic reporting. Overall, the existence of a strong rule of law creates strong institutional pressures on firms resulting in greater transparency and high-quality disclosure practices.

Based on the above, a strong rule of law promotes accountability and transparency. The author hereby hypothesizes the following:

H5: There is a positive and significant association between the rule of law and the SDGs reporting level.

1.2.11.2.6 Control of Corruption

In an environment with low levels of corruption, the presence of these institutions is real, making them credible. In such an environment, corporations cannot pretend that they are committed to sustainable growth using vague statements; instead, they are forced to disclose their Sustainable Development Goals (SDG) commitments truthfully. This is in line with the Institutional Theory, which indicates that anti-corruption practices and good governance practices provide the push for corporations to disclose their SDG commitments truthfully. This is because anti-corruption practices and good governance practices are what make these disclosures not only commitments but also truthful ones (Pizzi et al., 2024). In terms of the Legitimacy Theory, in an environment with low levels of corruption, corporations are forced to be legitimate with regard to the demands of society. In other words, if an environment is free of corruption, corporations are forced to be legitimate with regard to the demands of society. This is what makes the Sustainable Development Goals (SDG) disclosures of corporations credible (GIRALT,

2024). In terms of the Stakeholder Theory, anti-corruption practices provide the power for investors, governments, and civil society groups to high-quality governance in this respect eliminates corruption-related barriers and ensures a level playing field, thereby ensuring corporate legitimacy and trust in sustainability reporting.

Based on the above, effective control of corruption contributes to the transparency and reliability of SDG reporting, which in turn leads to the hypothesis that:

H6: There is a positive and significant association between control of corruption and the SDGs reporting level.

Chapter Two

Research Methodology

2.1 Introduction

In this chapter, the methodology framework used in the pursuit of the research goals and the empirical validation of the hypotheses postulated in the study will be documented. This chapter not only describes the research design, but also the study population and data, in addition to the methodology used in the measurement of the variables in the study. Moreover, the chapter introduces the regression model and the conceptual framework study used in the pursuit of the study goals, in the context of the relation between the indicators of national governance, the firm characteristics, and the discharge of the Sustainable Development Goals (SDGs).

In order to investigate the impact of national governance dimensions on the level of the Sustainable Development Goals (SDGs) disclosure, the research applies a systematic and quantitative approach. The study is designed to provide valid and comparable outcomes, which are in accordance with the European institutional framework regarding sustainability reporting. The quantitative analysis employs a panel data research design, which is appropriate for examining firm-level disclosure practices across time and space. This design allows the study to control for potential unobserved heterogeneity while independently assessing the impact of national governance characteristics on SDG disclosure. The research model includes six institutional governance variables—voice and accountability, political stability, government effectiveness, regulatory quality, rule of law, and control of corruption—with SDG reporting as the dependent variable.

2.2 Study Population and Sample, Data Sources, and Timeframe

The population of this dissertation comprises all companies listed on stock exchanges across the European Union. From this population, the sample is drawn based on the availability and completeness of data for non-financial firms for the period 2019–2024. To be included in the sample, a firm must meet the following criteria: (1) it is listed on a European stock exchange during the study period, and (2) it has accessible and complete data for all the variables required for the study within the same period. This

approach ensures that the sample accurately represents the EU listed companies while maintaining the integrity and reliability of the data used in the analysis.

In addition to that, it needs to have access to all data requirements from 2019 to 2024. More importantly, the firm needs to highlight any data relating to sustainability issues in their annual reports, whether in the sustainability report or integrated report, so that an assessment can be made concerning these firms and their approach to disclosing information relating to their SDG disclosures in the annual reports.

From the above, it can be inferred that the final sample consists of 1,650 firms, which are non-financial and publicly listed, from 21 countries that form part of the members of the European Union, with 9,900 firm-year observations from 2019 to 2024 in a balanced panel. No financial firms formed part of the sample, including banks, insurance companies, investments, among others, since these firms operate in a completely different environment due to differences in regulatory framework. While there are 27 member countries forming the European Union, the selected sample consists only of 21 countries due to limitations in data availability for a balanced panel setup.

The period between 2019 and 2024 is chosen for a very important methodological consideration. During this period, sustainability reporting guidelines, especially the Global Reporting Initiative (GRI), have actually developed and progressed to a great extent, whether in comparison to the previous periods or in terms of overall development, to ensure the availability of better data coverage, consistency, and standardization across companies and across nations. Also, this is the period when there have been growing regulations and pressures from various stakeholders for sustainability and SDG reporting in the European Union.

2.3 Distribution of Companies by European Countries

distribution of the firms shown in Table 1 will help identify the number of non-financial publicly listed firms sourced from each country in Europe. This is the representative size of the firms from the countries.

Table (1)

Distribution of non-financial Companies by European Countries

Country	Number of firms
Germany	210
France	180
Italy	160
Spain	145
Sweden	120
Netherlands	115
Poland	100
Denmark	80
Finland	70
Belgium	65
Greece	55
Bulgaria	30
Ireland	50
Austria	50
Czech Republic	40
Romania	40
Hungary	35
Portugal	45
Luxembourg	20
Slovakia	20
Slovenia	20
Total	1650

Source: Constructed by Researcher

The composition of the sampled firms across the member states of the European Union for the years 2019 to 2024 is presented in Table 1. The total sample comprises 1,650 non-financial publicly listed firms, which is a comprehensive representation of the European market. The proportion of firms across the countries is proportionate to the natural variations in the development of capital markets and size across the EU. The highest proportion is from Germany (210 firms), followed closely by France (180

firms), Italy (160 firms), and Spain (145 firms). These countries are not only the largest economies in Europe but also have some of the most developed capital markets, which enable the availability of corporate and financial information from databases such as Refinitiv. Their high proportion in the sample ensures that the study is able to capture the activities of firms operating in the most advanced institutional and regulatory framework in the EU.

The Northern European nations, like Sweden (120), Denmark (80), the Netherlands (115), and Finland (70), also represent important cases. Although these nations have relatively smaller populations and markets compared to the major EU economies, they are known for their high-quality governance frameworks, institutions, and long-standing traditions of transparency and sustainability reporting. These nations add important diversity to the sample, as they illustrate the differences in institutional settings and the role of governance in the practices of SDG disclosure.

The Central and Eastern European nations (CEE), like Poland (100), the Czech Republic (40), Romania (40), Hungary (35), Slovakia (20), Slovenia (20), and Bulgaria (30), also represent modest cases. These nations have relatively smaller and less developed capital markets compared to Western Europe. Moreover, they also have different governance histories and settings that affect corporate actions and sustainability disclosure practices. The inclusion of these nations ensures that the study covers the entire range of institutional differences in the EU, especially concerning differences in governance quality and transparency arrangements.

The Southern European economies, Greece (55) and Portugal (45), are considered to capture the impact of macroeconomic variables, such as sovereign debt crises, on governance structures and financial reporting. These economies are important in understanding the role of economic challenges in relation to regulatory compliance and sustainability practices, and the possible macroeconomic impact on SDG disclosure.

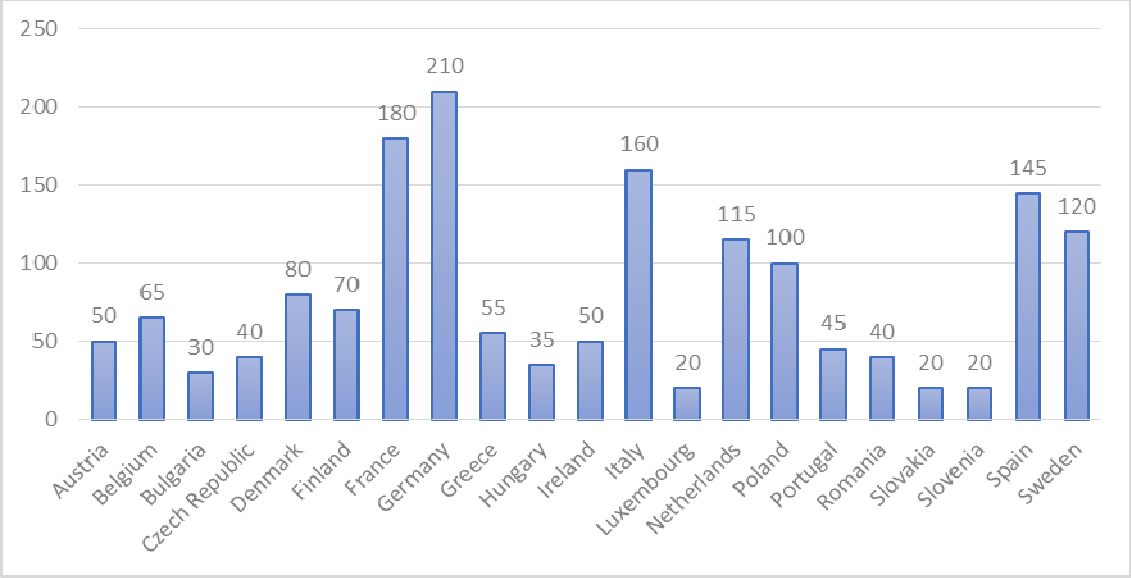
In conclusion, the sample represents a balanced and representative coverage of European companies, covering a broad spectrum of institutional settings, governance quality, and regulatory systems. Although larger economies are overrepresented in the sample in terms of the number of companies, the inclusion of smaller and medium-sized

economies ensures a sufficient level of diversity to investigate differences in national governance and its role in SDG disclosure.

Figure 2 illustrates the distribution of companies included in the study across European countries. The chart clearly shows that the highest number of firms is in Germany, France, and Italy, while the lowest numbers are in Luxembourg, Slovakia, and Slovenia. This distribution reflects the differences in market size and the number of listed companies in each country, providing a general overview of how each country is represented in the sample used for analysis.

Figure (2)

Distribution of Companies by European Countries



Source: Constructed by Researcher

2.4 Data Sources

This dissertation utilizes a comprehensive, company-wide dataset, including financial indicators as firm characteristics, and data related to the level of Sustainable Development Goal (SDG) disclosure assessments. The data was primarily sourced from the Refinitiv Eikon database, which provides standardized, benchmarked, and comparable data for publicly traded companies across Europe. This ensures data consistency and accuracy for analysis, particularly for companies listed on European stock exchanges.

The information regarding Sustainable Development Goals reporting's was retrieved from the Refinitiv Eikon database, which standardizes the Environmental, Social, and Governance (ESG) and sustainability data by collecting information from publicly accessible sources, such as annual reports, sustainability reports, integrated reports, and official corporate websites. The use of the Refinitiv database provides reliable, complete, and comparable data because all the information is analyzed using standardized methods, unlike manually collected data by researchers.

In terms of country-level indicators, governance indicators were collected from the Worldwide Governance Indicators (WGI) dataset provided by the World Bank, which provides an annual assessment of governance in countries across six aggregate dimensions: Voice and Accountability, Political Stability and Absence of Violence, Government Effectiveness, Regulatory Quality, Rule of Law, and Control of Corruption. These dimensions of governance serve as independent variables in this study.

Furthermore, country-level economic control variables such as gross domestic product per capita (GDPC) has also been collected from the World Bank's World Development Indicators as well as Eurostat. The integration of firm-level data with country-level variables on governance as well as economic variables from credible international sources adds more rigor to the empirical analysis.

2.5 Variables measurement

2.5.1 Dependent Variable (SDG Disclosure)

Following the measurement methods adopted in the latest and reliable research on SDG reporting (Al Lawati & Hussainey, 2022; Kayed & Meqbel, 2025; Mazumder, 2025; Meqbel et al., 2025), the current research applies an index method to evaluate the extent of SDG reporting (SDG_DISC), defined as the extent to which firms disclose information on the 17 Sustainable Development Goals as established by the United Nations. Each of the SDGs is evaluated on an annual basis through a dichotomous scoring system, where a value of 1 is assigned if the firm makes verifiable disclosure of its policies, actions, and initiatives on a particular SDG and a value of 0 otherwise.

To mitigate the associated concerns with the potential of "SDG Washing" phenomena, the analysis has been limited to those disclosures that have demonstrated substantial

engagement in the SDGs, rather than superficial or general engagement. This essentially means that the analysis has been conducted on the disclosures showing evidence of the implementation of measures, programs, or activities supporting the targets of the SDGs. This is also consistent with the recent empirical studies on the topic. Limiting the analysis to those disclosures that demonstrate substantial engagement in the SDGs has enhanced the reliability, consistency, and comparability of the results across firms and over time. This helped in providing an accurate assessment of the engagement of firms in the SDGs.

Formally, the SDG takes the value of 1 if meaningful disclosure on SDG i is identified during the reporting period and 0 otherwise. The SDG reporting index is obtained by aggregating the scores of the individual SDGs and dividing the result by 17, which provides a normalized index ranging between 0 and 1. A higher value reflects a wider scope of disclosure on the SDGs.

$$SDG\_DISC = (\sum SDG\_i) / 17$$

This standardized metric provides a transparent and robust tool for comparing the extent of SDG integration across firms and over time.

2.5.2 Independent Variables (National Governance Dimensions)

The list of independent variables includes six national dimensions of governance based on Worldwide Governance Indicators (WGI) data from the World Bank: The six indicators of national governance cover different aspects of national institutional environments in each of the countries included in the sample every year on a continuous scale from -2.5 for poor governance to +2.5 for excellent governance (World Bank, 2025):

- Voice and Accountability (VA): This variable captures the degree to which citizens can take part in choosing their government, speech, association, and a free media. This variable captures the level of democracy and civil liberties in a country. Companies in countries with high VA face strong societal forces that make them more transparent and accountable, which can affect disclosures of SDG information (World Bank, 2025).
- Political Stability and Absence of Violence (PS): These variable measures the political stability of a country, including the absence of violence, terrorism, and

civil unrest. Countries with high PS scores enjoy highly stable political systems with low risks of violence, while those with low scores are more unstable and insecure. Companies operating in more stable countries are less exposed to institutional risks and uncertainties, making it easier to plan and develop sustainable business strategies (World Bank, 2025).

- Government Effectiveness (GE): This indicator measures the provision of public services, the quality of the civil service, and the role of governments in developing and implementing policies. Nations with high GE scores have efficient institutions and effective governance, while those with low scores have ineffective governance and inefficient public services. A stable and efficient government environment allows businesses to contribute to the attainment of national sustainability goals, which in turn enhances the quality of SDG reporting (World Bank, 2025).
- Regulatory Quality (RQ): RQ assesses the government's capacity to develop and implement effective and market-supportive regulations, which can help ensure the development of the private sector. High scores on RQ indicate effective and predictable regulations, while low scores indicate ineffective or unpredictable regulations. Efficient regulatory quality allows businesses to align their SDG disclosures with international and national standards (World Bank, 2025).
- Rule of Law (RL): The RL variable evaluates the degree to which a country upholds the rule of law, ensuring that contracts are respected and the judiciary is independent. High scores on RL represent a strong rule of law, while low scores represent a weak rule of law. A strong rule of law enables companies to make their sustainability reports transparent and accurate (World Bank, 2025).
- Control of Corruption (CC): The CC variable captures the perceptions of a country's citizens about corruption, including petty and grand corruption. High scores on CC represent low levels of corruption, while low scores represent high risks of corruption. Good control of corruption enables companies to make their SDG disclosures verifiable (World Bank, 2025).

The dimensions collectively index the structural quality of national system governance and are institutional leading predictors of corporate sustainability action. These dimensions have been widely adopted in governance-performance literature including (Adrian Bancu & Dascalu, 2024; Almaqtari et al., 2024; Lnenicka et al., 2022; Pinheiro et al., 2022).

2.5.3 Control variables

"The study considers control variables at both the country (macro) and firm (micro) levels to incorporate factors that could affect the relationship under study."

Macro- country level

GDPC (Gross Domestic Product per Capita)

GDP per capita, as the country-level control variable for economic development, reflects the economic environment in the country where the company exists as well as the abilities of the country to control business activity and the level of support within the country for the SDGs and ESG Reporting. For the variable GDPC, the formula used is the natural log of the GDP per capita within the year the company exists in the country (Lepenies et al., 2023). Research finds that raising the level of economic development results in the greater disclosure of both the SDGs and ESGs (Batool et al., 2023; Friday et al., 2024).

(Micro)- firm level

FSIZE (Firm Size)

Firm Size is incorporated as a control variable at the individual company level to account for the potential differential impacts of resources and disclosures for different companies. Larger companies might be exposed to a greater level of public and stakeholder pressure related to their activities and performance, as this increases the imperative for them to provide greater disclosures related to sustainability and SDG reporting. Moreover, a superior level of resources might be at the companies' disposal, assisting them in the development and practice of an advanced level in the context of ESG reporting and sustainable reporting. In the context of this study, the variable for the nature and scope in the context of the company's size is defined as the natural log of the assets for each company in a given year, a common transformation method for improving normality and comparability for analysis (Victoria Agbakwuru et al., 2024). Past studies highlighted the relationship between company size and sustainability reporting, a relationship found to be related to a higher level of SDG and Sustainability reporting for larger companies in the context of pressures and imperatives faced in an institutional context (Mariani et al., 2022).

FPROF (Firm Profitability)

Firm profitability is considered a firm-level control to reflect how well a company performs financially and its capability to fund sustainability efforts and stronger disclosure. A more profitable firm could better support the financing of long-term projects in response to the SDGs and bear the costs related to the preparation and assurance of sustainability reports. In this study, firm profitability is proxied by FPROF, expressed as the ratio of net profit to the total assets for each firm-year. This ratio demonstrates how efficiently a firm utilizes its assets to generate earnings (Abdelhaq et al., 2024). Past research has evidenced a positive association between profitability and the extent of disclosure about the SDGs, which indicates that firms in a better financial position also tend to be more open to the public and to provide more intense sustainability disclosure (Abdeljawad et al., 2025; Salem et al., 2025).

FLEV (Financial Leverage)

Financial leverage, as an instrument, is used as a means of control in dealing with the issue of constraint faced by debt obligations. The rationale behind using financial leverage as an instrument is that there is a possibility that pressure from debt obligations may influence the willingness of firms to report sustainability issues. Firms that have high debts may be subject to pressure from financer obligations, which may negatively influence the willingness of firms to forward sustainability concerns. Leverage (FLEV) is used in this paper (Abdeljawad et al., 2025). It represents debt obligations with regard to assets. There were suggestions that financial leverage may negatively influence sustainability reporting, as firms may be inclined towards financial stability as opposed to reporting sustainability concerns (Victoria Agbakwuru et al., 2024).

BINDP (Board Independence)

Board independence is another key factor to consider when it comes to internal controls, which act as a mirror for effectiveness, regulations, laws, and ethics. For instance, the existence of independent board members facilitates direction, judgment, and, above all, checks the exploitation of opportunities or risks by management, hence ensuring transparency and accountability. For this study, board independence, which is normally referred to as BINDP, was measured as a percentage of the independent board members to the total number of board members within the company (Vuppuluri, 2025).

According to previous studies, management teams with high proportions of independent board members make significant contributions to improved sustainability reporting and board transparency, which leads to more effective Sustainable Development Goals proposals, including company disclosures of ESG performance (Victoria Agbakwuru et al., 2024).

CSRC (CSR Committee)

The existence of the CSR committee on the board is an important aspect of internal governance. It reflects the commitment of the company to the obligations we owe to stakeholders and our watchful attention to sustainability issues. When the board has established the CSR/Sustainability committee, the focus on social, environmental, and ethical issues has sharpened, and hence the strategy and the tracking of such initiatives have benefited. To this end, the CSR committee variable is defined as a flag variable, which equals 1 if the firm has a dedicated CSR committee/sustainability committee on the board and equals 0 otherwise (Victoria Agbakwuru et al., 2024). According to previous literature, it has been implied that firms that make use of a separate committee for disclosing sustainability reports as well as SDG reports will be more likely to make detailed, structured, and credible disclosures related to sustainability reports as well as SDG reports, as these committees will assist in ensuring coordination with these reports (Erbetta & Abrate, 2025).

2.5.4 Summary Variables Measurement

This dissertation as included a set of variables which might be of use for the comprehensive analysis of those factors which influence the disclosure of Sustainable Development Goals (SDGs) with regard to various corporations. The research model has revealed a set of dependent, independent, and control variables which might lead to a holistic understanding of this issue, both from one perspective and another. The table in Appendix G2 presents a summary of the whole set of variables, which includes their classification, sources, and methods of measurement, hence promoting transparency with regard to this particular research.

2.6 Data Analysis Procedure and Model Specification

This dissertation adopts a structured and sequential analysis approach to examine the determinants of SDG reporting at the firm level, ensuring data reliability and robustness. The analysis follows these steps:

Step 1: Data Collection

Data on the firms, including financial data, and SDG reporting data, was obtained from the Refinitiv Eikon data source. It offers standardized and comparable data on publicly listed firms in several countries. Such a data source helps to assure the reliability and quality of data of the dataset, especially within the European region. Country-level data on governance was collected from the Worldwide Governance Indicators dataset published by the World Bank. The dataset offers annual data on six critical dimensions of governance: Voice and Accountability, Political Stability, Government Effectiveness, Regulatory Quality, Rule of Law, and Control of Corruption. These are the primary independent variables considered in the present study. Data related to the macroeconomic variables, including variation in GDP per capita, is sourced from the World Bank and Eurostat databases. Such multiple and reliable sources of data help enhance the reliability and comparability of the dataset.

Step 2: Data Preparation and Cleaning

Before analysis, the dataset was properly prepared by:

- Checking for missing values or inconsistencies in the data.
- Checking for outliers in the data, addressing them if any.
- Continuous variables were examined for extreme values, and any anomalies were addressed to ensure robust analysis, without altering the natural scale of the data.
- Checking normality of variables, if required, and transforming them where necessary.

These steps improve the reliability and quality of the data for regression analysis.

Step 3: Descriptive Statistics

Descriptive statistics have been used to understand the nature of the variables. This step is very important to understand the factors at the firm level and at the country level.

Step 4: Variable Measurement and Coding

All the variables have been measured and coded as per the existing literature. SDG reporting is measured using the index method using Refinitiv Eikon data, which represents the extent to which the firm is aligned with the 17 Sustainable Development Goals. The control variables include size, profitability, debt level, industry classification, existence of CSR committees at the board level, and GDP per capita.

Step 5: Preliminary Diagnostic Tests

Before regression estimation, diagnostic tests were carried out to ensure the reliability of the model. In this regard, multicollinearity was tested using Variance Inflation Factors (VIF). In addition, correlation tests were carried out for the independent variables. Moreover, robust standard errors were used for all the regression tests to ensure that heteroscedasticity, autocorrelation, and non-normality are controlled, and accurate results are obtained.

Step 6: Model Specification and Selection

Regression techniques used: In this study, panel data regression techniques were used to account for both time and cross-section variations. In addition, fixed effects and year dummies were used to account for heterogeneity. The Hausman test was used to determine whether to use a fixed effects or a random effects model.

Step 7: Robustness Analysis

To verify the robustness of the results obtained empirically, robustness checks were undertaken. This was achieved by obtaining alternative model specifications by including individual country governance variables using the same set of controls and fixed effects. Robust standard errors were once again used to overcome the problem of heteroskedasticity while maintaining the consistency of the results.

The above methodology provides a comprehensive framework to analyze the relationship between national governance dimensions, firms' characteristics, and SDG reporting of firms across Europe.

2.7 Regression Model

This regression equation measures the association between the governance indicators and the level of disclosure on the SDGs, while controlling for both firm and country-level variables. This analysis was carried out using a panel data approach to account for the variations between firms and over time, thus providing a comprehensive assessment of all the factors at play.

$$SDGsR\_it = \beta_0 + \beta_1 VA\_it + \beta_2 PS\_it + \beta_3 GE\_it + \beta_4 RQ\_it + \beta_5 RL\_it + \beta_6 CC\_it + \beta_7 CSRCi,t + \beta_8 FSIZEi,t + \beta_9 FPROFi,t + \beta_{10} FLEVi,t + \beta 11 GDPCc,t + \beta 12\ BINDPi,t + \beta 13 YEAR\_DUMMIESt + \varepsilon\_it$$

Where:

- SDGsR_it = Sustainable Development Goals reporting score for firm *i* at time *t*
- VA = Voice and Accountability
- PS = Political Stability
- GE = Government Effectiveness
- RQ = Regulatory Quality
- RL = Rule of Law
- CC = Control of Corruption
- Controlk = Vector of control variables (firm-level and macro-level)
- εit = Error term

Control Variables:

Micro-Level (Firm-Specific) Controls:

1. FSIZE= Firm Size (lin of total assets)
2. FPROF= Profitability (Return on Assets – ROA)
3. FLEV= Leverage (Total liabilities / Total assets)
4. CSRC=CSR_COM)1 if the firm has a board-level CSR committee, 0 otherwise)
5. BINDP = Board Independence (Percentage of independent directors on the board)

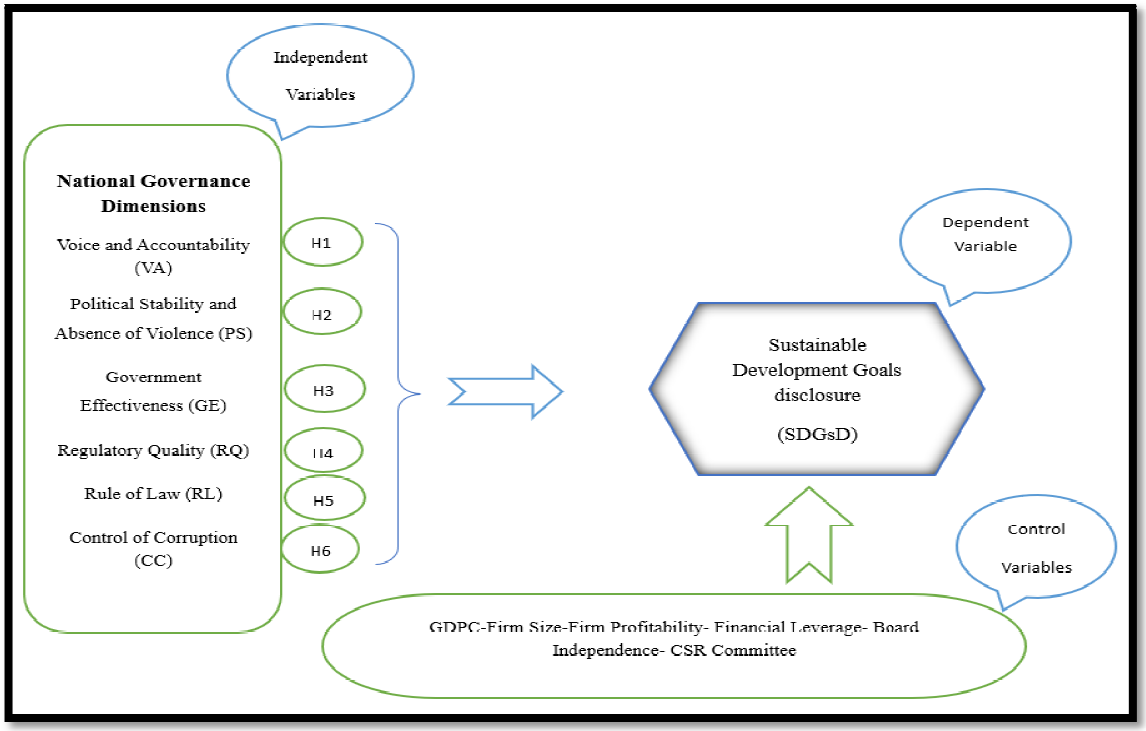
Macro-Level (Country-Specific) Controls:

- GDPC =GDP per capita (ln)

Study model

Figure (3)

Study model



Source: Constructed by Researcher

Chapter Three

Results and Discussions

3.1 Introduction

This chapter introduces the results obtained from the study through the dissemination of Voice and Accountability, Political Stability, Government Effectiveness, Regulatory Quality, Rule of Law, and Control of Corruption on the disclosure index for the listed corporations in Europe, spanning the period from 2019 to 2024. Initially, the distribution and descriptive statistics for the firms in Europe, together with the descriptive statistics for the disclosure index, are explained. Then, the correlation matrices and tests for multicollinearity results are inspected for the accuracy of the regression analysis. Finally, the results for the regression analysis, together with the tests for robustness, consolidate the findings according to the Institutional, Stakeholder, Agency, Legitimacy, and Global Governance paradigms. The results obtained from the study can be collated for positive support and conditional results for governance on the disclosure index for the listed firms in Europe when juxtaposed with other previous research studies.

Finally, this chapter draws the above findings together so that a clear picture is established regarding the influence that different “national governance systems” have on the sustainability behavior of corporations with regard to the greater cause of the SDGs.

3.2 Descriptive Statistics

The descriptive statistics in Table 2 show the description of the key features of all the variables, including the means, standard deviations, and ranges that provide information regarding the distribution and the variability of the SDG reporting and governance indicators.

Table (2)

Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
SDGR	9900	0.34	0.308	0	1
VA	9900	1.207	0.499	-1.13	1.74
PS	9900	0.658	0.447	-1.34	1.69
GE	9900	1.386	0.574	-0.6	2.32
RQ	9900	1.398	0.55	-0.56	2.26
RL	9900	1.428	0.641	-0.86	2.12
CC	9900	1.5	0.757	-1.1	2.4
CSRC	9900	0.622	0.485	0	1
FSIZE	9900	13.929	2.349	1.609	21.69
FPROF	9900	4.976	7.454	-13.17	20.09
FLEV	9900	0.554	0.251	0.004	1.21
GDPC	9900	49643.71	19555.81	0	179458
BINDP	9900	53.813	26.627	0	100

Source: Constructed by Researcher

Descriptive statistics, as shown in table 3, can be used to give a good summary of data and its range, hence providing further information regarding the data Hair et al., (2019). The current research utilizes a sample of 9,900 firm-year observations covering European companies from various countries ranging from 2019 to 2024.

The dependent measure, SDG reporting (SDGRSDGR), has a mean value of 0.34, which means that, on average, European countries disclose about one-third of the total 17 Sustainable Development Goals. The standard deviation for the SDGRSDGR is 0.308, which means that there is much variation with respect to the extent of SDG reporting across European companies/countries. The lowest value for the SDGR is 0, which means that some companies in Europe disclose nothing with respect to the SDGs. Conversely, the highest value for the SDGR is 1, which means that some companies in Europe disclose all 17 SDGs, thereby showing high levels of commitment towards SDG

reporting. This heterogeneous nature of SDG reporting in European counties is well justified with the literature, citing variations in SDG reporting among European companies (Al Lawati & Hussainey, 2022; Kayed & Meqbel, 2025; Meqbel et al., 2025).

The Worldwide Governance Indicators (WGI) data provide information on the six indicators of national governance, which fall on a range between -2.5 and +2.5, with lower numbers indicating weak governance and high numbers indicating strong governance.

- Voice and Accountability (VA): The mean value stands at 1.207, suggesting that most European Union countries score quite high in democracy, civil liberties, and freedom of the media. The standard deviation for voice and accountability stands at 0.499, showing that there is a moderate level of variation among these countries. The lowest value for voice and accountability is -1.13, which means that some European countries have lower levels of civil liberties in comparison with others, with the highest value standing at 1.74, denoting highly participatory systems, which has proved invaluable towards the determination of the impacts of SDG reporting (Sundarasen et al., 2025).
- Political Stability (PS): averages at 0.658, which represents a range of moderate to high levels of political stability in Europe. The SD of 0.447 implies variability in political conditions among European nations. On one end of this scale, the minimum of -1.34 points to nations with political tensions or risks, whereas the maximum of 1.69 represents nations with stable political environments. All this volatility in political stability could influence or affect the willingness or capacity of firms to comply with reporting SDGs (Vickneswaran, 2024).
- Government Effectiveness (GE): has a mean of 1.386, indicating that there is efficient public administration and high policy implementation potential in the region on average. However, the standard deviation of 0.574 represents variability in administrative potential for each country in this region. Given that GE ranges from -0.60 to 2.32, some countries have weaker governance structures, and other countries have very effective governments that have high potential to enact regulations effectively and exert control over transactions to force firms to comply with sustainability disclosure practices (Meqbel et al., 2025).

- Regulatory Quality: The mean for RQ is 1.398, indicating good regulatory frameworks across EU nations as being generally proper and enabling business and market activities to be performed successfully. The standard deviation of 0.55 explains the dispersion that is seen between countries. Further, the lowest value of -0.56 refers to weaker regulatory frameworks, while the highest, at 2.26, refers to stronger and more supportive regulatory frameworks. This refers to the remodeling of SDG reporting of firms based on regulatory quality, whereby better-quality regulatory systems are most likely expected to promote disclosures that are extensive and legitimate(Wisniewski et al., 2024).
- Rule of Law (RL): has an average of 1.428 and implies effective and strong legal systems, strong contract enforcement, strong independence in the EU countries' cases. The standard deviation is 0.641 and implies a wide range of countries included in the research. The overall minimum value for rule of law is -0.86 and implies countries with relatively weaker rule of law, and the maximum value of 2.12 implies countries with a strong commitment towards adhering and abiding within the framework of rule of law concepts, creating a conducive environment for businesses, and thus rendering transparency and reliability of the SDG reports.
- Control of Corruption (CC): appears to have the highest means among the indicators, which is 1.500. This suggests that on average, levels of corruption are low within the EU. However, the standard deviation of 0.757, combined with the minimum and maximum points of -1.10 and 2.40, respectively, suggests that although some countries may face challenges of corruption, others boast extremely high standards of integrity. This is important to note as the level of corruption can directly impact the validity of corporate sustainability disclosure statements (Mazumder, 2025).

From the table above, it is significant to note the firm-level and macroeconomic factors that could potentially affect sustainability reporting. The control variables mentioned above account for the differences among firms and countries that could influence or condition the relationship between governance quality and SDG reporting. At the firm level, the descriptive statistics show a considerable variation among European firms. The size of the firms (FSIZE), measured by the natural logarithm of total assets, shows considerable variation, indicating the presence of small and very large firms. Larger firms are generally under more public scrutiny and have more resources to devote to

extensive SDG reporting (Kayed & Meqbel, 2025). The independence of the board (BINDP) is also highly variable, reflecting the differences in monitoring structures among firms, with more independent boards being associated with higher-quality sustainability disclosure (Al Lawati & Hussainey, 2022).

Firm profitability (FPROF), as measured by ROA, shows considerable variation, ranging from unprofitable to very profitable companies, implying varying financial abilities to engage in sustainability reporting. Similarly, financial leverage (FLEV) also differs among firms, implying varying levels of debt pressure, which may act as a double-edged sword to either promote transparency to debtors or hinder voluntary disclosure practices (Sundarasen et al., 2025). Moreover, the existence of a CSR committee (CSR_COM) in a large number of firms implies varying levels of formal commitment to systematic SDG reporting (Meqbel et al., 2025).

At the macro-level, GDP per capita (GDPC) shows considerable variation among EU member countries, implying varying levels of economic development. More developed countries are likely to have more robust institutional infrastructures and capabilities to facilitate more comprehensive SDG reporting by firms (Sundarasen et al., 2025; Vickneswaran, 2024).

Overall, the descriptive statistics above show the existence of significant variability in the disclosure of SDGs, governance indicators, and firm- and country-level control variables in the European setting. This variability creates a strong empirical environment to study the effect of the quality of national governance on the disclosure of SDGs in corporations, while at the same time properly controlling for firm-level and macroeconomic variables, as has been observed in previous studies on the variability of sustainability practices in Europe (Al Lawati & Hussainey, 2022; Kayed & Meqbel, 2025).

3.3 Diagnostic Tests

In order to guarantee the robustness and validity of the panel regression outcome, a battery of diagnostic tests was performed before proceeding with the estimation of the models. The purpose of these tests is to check the validity of the fundamental econometric assumptions that need to be satisfied when working with panel data, such as the absence of multicollinearity, cross-sectional dependence, autocorrelation,

heteroskedasticity, and non-normality of residuals. In particular, correlation matrix and variance inflation factor tests were used to check for multicollinearity among the regressors, while the Pesaran cross-sectional dependence test was used to check for possible interdependencies among the cross-sectional units. Moreover, the Wooldridge test for autocorrelation and the Modified Wald test for heteroskedasticity were used to check the characteristics of the error term. Finally, the Jarque-Bera test was performed to check the normality of the regression residuals. For ease of reference, the results of all the diagnostic tests are presented in the Appendices, while their interpretation is discussed in this section.

3.3.1 Correlation matrix

Appendix (A) shows a correlation matrix, where all the variables in the analysis, i.e., dependent variable SDG reporting (SDGR), national governance variables (VA, PS, GE, RQ, RL, CC), and control variables, are included. Correlation analysis is used to determine linear interdependencies between variables and to investigate possible multicollinearity problems for regression analysis results (Gujarati & Porter, 2009). If correlations approach either +1 or -1, a strong linear relationship is shown, and correlations close to zero imply a very weak relationship between variables.

Similarly, focusing on independent variables, it can be noted that six dimensions of national governance have a moderate to strong positive relationship among themselves, ranging from.445 to.771 on a value score. Again, this relationship is conceptual and confirms a point highlighted by Vickneswaran, (2024) and Wisniewski et al., (2024). Notably, all the variables related to governance have a mild negative relationship with SDG disclosure, ranging from -0.04 (PS) to -0.215 (RQ). The negative sign does not necessarily point to a level of conflict but simply points to a subtlety associated with being a European context. One would suspect a high level of disclosure related to sustainable development goals because of high and very high values on governance variables. In such cases, regulations have already been featured within the broader aspects of governance and have lesser scope to be variable within corporate contexts. In this respect, firms would strategically plan to disclose more information to a broader universe of stakeholders and magnify their ability to align to societal expectations, as noted by Al Lawati & Hussainey, (2022).

Regarding the dependent variable, SDGR, the calculated correlations confirm a moderate relationship with firm size (0.427) and a limited relationship with board independence (0.071). This suggests that larger firms tend to release more disclosure information while the board structure reveals a minimal level of influence. The financial aspects of leverage (FLEV) and profitability (FPROF) showed very low correlations with the SDGR, thus supporting the absence of influence of the former variables on the sustainability disclosure practices. The GDP per capita (GDPC) showed a negative but low correlation with the SDGR (-0.085), indicating a slight differentiation between more or less developed countries in Europe.

Overall, the correlation matrix in Appendix (A) depicts that although some of the independent variables correlate moderately, none of them achieve levels above the critical point of 0.8, thus indicating that multicollinearity cannot have a serious impact on regression outcomes. Additionally, the weak to moderate correlations existing between the governance indicators and SDGR are explicable in the context of Europe due to the importance of strategic disclosure for firms facing diverse institutional pressures. Moreover, additional tests, namely Variance Inflation Factor (VIF), will be conducted to ensure the soundness of regression outcomes (Nicolò et al., 2023; Pinheiro et al., 2022).

3.3.2 Variance inflation factor

The Variance Inflation Factor (VIF) as presented in Appendix (B) is a commonly employed statistical tool used to identify whether or not a problem of multicollinearity exists in a set of independent variables in regression analysis. In other words, a problem of multicollinearity occurs when two or more independent variables in a regression analysis are highly linearly related to each other, thereby inflating the standard errors of the coefficients of the independent variables, which in turn affects the results of statistical inference drawn from the regression analysis (Gujarati & Porter, 2009). The VIF measures the degree to which the variance of a regression coefficient is inflated by its collinearity with other independent variables in a regression analysis. It has been generally agreed that a VIF greater than or equal to 10 represents severe multicollinearity, whereas a VIF ranging between 5 and 10 represents a moderate level of multicollinearity, which should be treated with caution. Conversely, a VIF of less

than 5 is considered satisfactory and will not affect the results of a regression analysis (Robert M. O'brien, 2007).

The results presented in Table 5 include the VIF values for all the independent and control variables. Government Effectiveness (GE) is the variable that presents the highest VIF value, equal to 7.62. This shows that there is moderate collinearity between Government Effectiveness and other governance factors, especially Regulatory Quality (RQ), where the VIF is equal to 6.84, and Rule of Law (RL), where the VIF is equal to 5.29. The findings are consistent with the expectations, given that all the above factors of national governance are naturally correlated in the context of the countries included in the analysis, reflecting the integrated structures of the institutions. The VIF values for Voice and Accountability (VA) equal 3.72, while the VIF values for Political Stability (PS) equal 4.11, thus supporting the interdependencies between the above factors of national governance (Nicolò et al., 2023; Pinheiro et al., 2022).

At the country level, the GDP per capita (GDPC), with a VIF of 2.54, indicates a low VIF score; thus, although economic development is related to governance quality, it does not create significant multicollinearity in the model. For the firm level variables, control variables such as Firm Size (FSIZE), CSR Committee (CSRC), Financial Leverage (FLEV), Board Independence (BINDP), and Firm Profitability (FPROF) have low VIF values of 1.71, 1.39, 1.33, 1.21, and 1.10, respectively; thus, they do not suffer from multicollinearity issues, confirming that they have independent effects on corporate board structure. Overall, the average VIF for all variables is 3.21, which is significantly less than 5; hence, the reliability of the regression estimates is ensured.

These results imply that, although multicollinearity among national governance indicators is moderate, it is not severe enough to threaten the statistical validity of the model. The moderate level of multicollinearity among the governance indicators is theoretically plausible because, in reality, good governance, regulatory quality, and rule of law are correlated in the EU. In addition, the low VIF values for firm-level controls imply that internal corporate characteristics make unique contributions to the SDG reporting without being too similar to other regressors (Alin, 2010).

To further mitigate the potential concerns, robust regression methods were used in Stata, which can handle heteroskedasticity, autocorrelation, and non-normality in the residuals,

thus providing the stability of the estimates in the presence of potential multicollinearity. This approach, therefore, increases the confidence in the results, as it allows the accurate interpretation of the relationships between the national governance factors, firm-level controls, and the SDG reporting results.

In Conclusion, based on the VIF results, it can be confirmed that the issue of multicollinearity is not a major problem in the regression models that are to be developed. The relatively high correlations between the governance factors are in line with the theoretical expectations and previous empirical evidence, whereas the firm-level controls provide additional explanatory power to the regression models. The results, therefore, provide confidence in the use of regression models to examine the relationships between the factors.

3.3.3 Cross-Sectional Dependence Test

Appendix (C) displays the results of the Cross-Sectional Dependence (CD) test developed by Pesaran et al., (2004). The CD test is used to check the presence of cross-section dependence in the data, which might be present in the panel data under consideration. Cross-section dependence may exist in the data when the residuals of different cross-sections are correlated with each other due to some factors, such as unobservable factors or spillover effects. It is important to address the problem of cross-section dependence in the data, especially in the case of firms that are operating under the same or similar circumstances.

As presented in Appendix (C), the Pesaran CD statistic is equal to 1.21, and its corresponding p-value is equal to 0.226. Given that the p-value is greater than the conventional significance level, the null hypothesis of no cross-sectional dependence is not rejected. This suggests that the residuals for the 1,650 firms included in the sample are independent, implying that there are no spillover or common shocks affecting SDG disclosure.

From an econometric perspective, the lack of cross-sectional dependence indicates that the regression model is properly specified in terms of the control for institutional and firm-level heterogeneity, and that the coefficients can be interpreted without bias due to the presence of unobserved inter-firm correlations. This finding further supports the

validity of the fixed-effects panel regression in modeling the effect of national governance on SDG disclosure.

On the whole, the results of the Pesaran CD test lend support to the robustness and validity of the regression framework, which confirms that the results of the national governance effects on SDG reporting are not subject to any unobserved cross-firm correlations.

3.3.4 Autocorrelation Test (Wooldridge Test)

As reported in Appendix (D) below, the results of the Wooldridge test for autocorrelation in panel data are provided. This test is particularly appropriate to detect serial correlation in the idiosyncratic error term of panel regression model (Wooldridge, 2010; Wooldridge et al., 2016). In fact, serial correlation in panel data violates the assumption of independently distributed error terms and would cause a loss of precision in the computation of standard error and t-statistics.

As indicated in Appendix (D), the F-statistic obtained by Wooldridge test equals 1.17 with degrees of freedom (1, 1,649) and a corresponding p-value of 0.279. In this case, it is evident that since the p-value obtained does not fall below the standard level of significance, the null hypothesis of no first-order autocorrelation cannot be rejected, which shows that there is no serial correlation of residuals over time, implying that the dynamic nature of the panel data has been properly modeled.

From an econometric standpoint, the absence of autocorrelation suggests that the temporal dependence of the firm-year observations is minimal, and hence the regression coefficients and standard errors obtained are statistically significant. This finding also supports the appropriateness of the fixed effects panel model adopted for this study, which has captured temporal variations of SDG reporting appropriately.

Moreover, the results are also consistent with the results of prior empirical studies on sustainability and ESG disclosure practices that employed large European panel datasets. Several studies have found that there is no serial correlation when regression models include both firm-level governance mechanisms and country-level institutional variables. For example, Abdeljawad et al., (2025) and Almaqtari et al., (2024) and Michelon et al., (2022) have found that there is no serial correlation. The results of these

studies suggest that comprehensive governance frameworks have a stabilizing effect on disclosure practices, thereby eliminating serial correlation.

3.3.5 Heteroskedasticity Test (Modified Wald Test)

As reported in Appendix (E), the results of the Modified Wald test for groupwise heteroskedasticity are presented. This test is often used in fixed effects panel data regression to check for the assumption of constant variance of regression residuals across cross-sectional units. Heteroskedasticity violates one of the classical assumptions of linear regression and can result in inefficient estimates of regression coefficients and biased standard errors, which can compromise the entire inference procedure (Greene, 1986; Wooldridge, 2010).

The Chi-square statistic is calculated to be 1,842.55 with a corresponding degree of freedom of 1,650. The probability value is calculated to be 0.218. Given that the probability value is larger than the conventional levels of 1%, 5%, and 10%, the null hypothesis is not rejected, which proves that the variance of error terms is homogeneous across firms that make up the sample. Econometrically speaking, the absence of heteroskedasticity implies that the calculated standard error values are reliable and that there is no distortion in the reported significance levels of the regression coefficient values. This implies higher robustness of the empirical model and further justifies the appropriateness of the fixed effects model adopted to investigate the relationship between national governance dimensions and SDG disclosure.

In addition to this, the findings reported in Appendix (E) are in line with the findings of the existing body of empirical studies on sustainability and SDG disclosures in European panel environments (Michelon et al., 2022; Pizzi et al., 2024), in which well-specified models with the inclusion of firm-level characteristics and country-level governance factors were found to report homoskedastic residuals. Accordingly, the findings reported in the Modified Wald test further reinforce the credibility of the study's findings in terms of the econometric soundness of the model.

3.3.6 Normality of Residuals (Jarque–Bera Test)

Normality of the residuals in the regression analysis as presented in Appendix (F) can be tested using the Jarque-Bera test. This test is the most commonly used test for checking the normal distribution of the residuals. The Jarque-Bera test checks the

normal distribution of the residuals based on the skewness and kurtosis of the residuals. It is expected that the residuals should be normally distributed with a skewness close to zero and a kurtosis close to three (Gujarati & Porter, 2009; Jarque & Bera, 1980). Normally distributed residuals in the regression analysis are essential for the validity of the statistical inferences for hypothesis testing and confidence intervals for large-sample models.

The results provided in Appendix (F) show that the residuals have a skewness of 0.087, which is almost zero. This implies symmetry in the residuals. Moreover, the kurtosis of 2.94 is close to the benchmark kurtosis of 3. This implies that there are no issues of "tail thickness" and "peakedness" in the residuals. The results from the Jarque-Bera test are 2.31, and this implies a p-value of 0.315, which is way above 1%, 5%, and 10%.

Statistically, this means that the null hypothesis that the residuals are normally distributed cannot be rejected. This is an important result because, from a methodological viewpoint, it confirms that there is no violation of the normality assumption for the regression model. This is an important issue from a methodological viewpoint, especially when working with panel data with a large number of firms (9,900 firm-year observations), where normally distributed residuals provide a robustness check for coefficient estimation and associated tests (Wooldridge, 2010).

From an empirical point of view, it can be said that the normal distribution of residuals supports the fact that the model specification has effectively captured the systematic variation of SDG reporting across firms and countries, with random and well-behaved errors remaining. In this context, it can be said that the inference of the regression results can be said to be statistically robust. In conclusion, it can be said that the Jarque-Bera test results offer strong support for the appropriateness of the regression model.

In addition, the findings of the Jarque-Bera test are consistent with the empirical literature on sustainability and SDG reporting in the European context, where normally distributed residuals are reported when jointly incorporating firm-level and country-level governance factors into the regression analysis (Michelon et al., 2022; Pizzi et al., 2024). Indicating the normality of residuals in large panel data sets, where the deviations from normality are less important due to the central limit theorem, particularly in large sample sizes, as suggested by Gujarati & Porter, (2009) and

Wooldridge, (2010). Hence, the normally distributed residuals support the robustness and reliability of the findings of the regression analysis.

3.4 SDGs disclosure over time (2019-2024)

The trends in SDG reporting over time in Table 4 indicate an increase in the disclosure scores of firms in Europe from 2019 to 2024.

Table (3)

SDGs disclosure over time (2019-2024)

Year	Mean
2019	0.194
2020	0.258
2021	0.323
2022	0.379
2023	0.424
2024	0.462
total	0.34

Source: Constructed by Researcher

Table 3 illustrates the flow of disclosure of SDGs over the period from 2019 to 2024 by listed European companies. The findings clearly show a steady increase in the average disclosure of the SDGs over the period studied. This clearly indicates the gradual institutionalization of sustainability reporting practices within the European business sector (Eurostat, 2025).

The variations that are visible in SDG disclosures throughout the different years are explained by the increasing strength of regulations as well as institutional pressures in the European Union. The establishment of regulations, for instant, the Corporate Sustainability Reporting Directive, as well as an increased awareness about ESG, has compelled organizations to become more transparent about various issues. Moreover, the rising standards of reporting coupled with the increasing use of SDGs in corporate operations have made a significant contribution to the increasing trend in SDG disclosures (Meqbel et al., 2025).

For the year 2019, the average score of disclosing the SDGs is approximately 0.194. This indicator means that the integration context of the SDGs in corporate reporting frameworks is still at the early stages. During this phase, the disclosure of the SDGs was not mandatory. This also corresponds to legitimacy theory, where only some companies view the disclosure of the SDGs as necessary to gain legitimacy The year 2020 presents the largest increase (mean of 0.258) compared to previous years; it also presents the largest growth rate due to increased attention from both stakeholders and regulators regarding sustainability issues due to global disruptions as well as growing scrutiny by society. Based on the stakeholder theory, companies were more accountable for meeting the growing demands placed on them by investors, regulators and civil society in order to meet global sustainability goals which had led to an acceleration in their reporting practices.

The trend continues smoothly in both 2021 and 2022, with mean values of 0.323 and 0.379, respectively. These findings manifest the integration of the goals into business strategies, not for mere disclosure purposes. This trend in this section is strongly supported by the institutional theory, since firms showed greater conformance to the normative and coercive forces driven by EU-level developments and efforts made at the EU level through the establishment of harmonized guidelines for sustainability and widespread adoption of frameworks such as the GRI. The smooth increase in this trend means that reporting on the goals had become institutionalized in corporate reporting (Vickneswaran, 2024).

By 2023 and 2024, the average scores of SDG reporting increase again to 0.424 and 0.462. This demonstrates a great push towards the reporting quality rather than a steady growth. This demonstrates the impact of enhanced national governance structures, greater regulatory certainty, and the political will toward sustainability policy in the EU, including the EU Taxonomy and the wider European Green Agenda. When considered from the viewpoint of global governance theory, these results demonstrate the translation of global sustainability agendas, including the 2030 Agenda, into enforceable regional or national governance structures to influence the disclosure practices of organizations.

However, the presence of strong temporal progression is obscured with the average value of 0.34 over the total timeframe, thereby signifying the need for the inclusion of

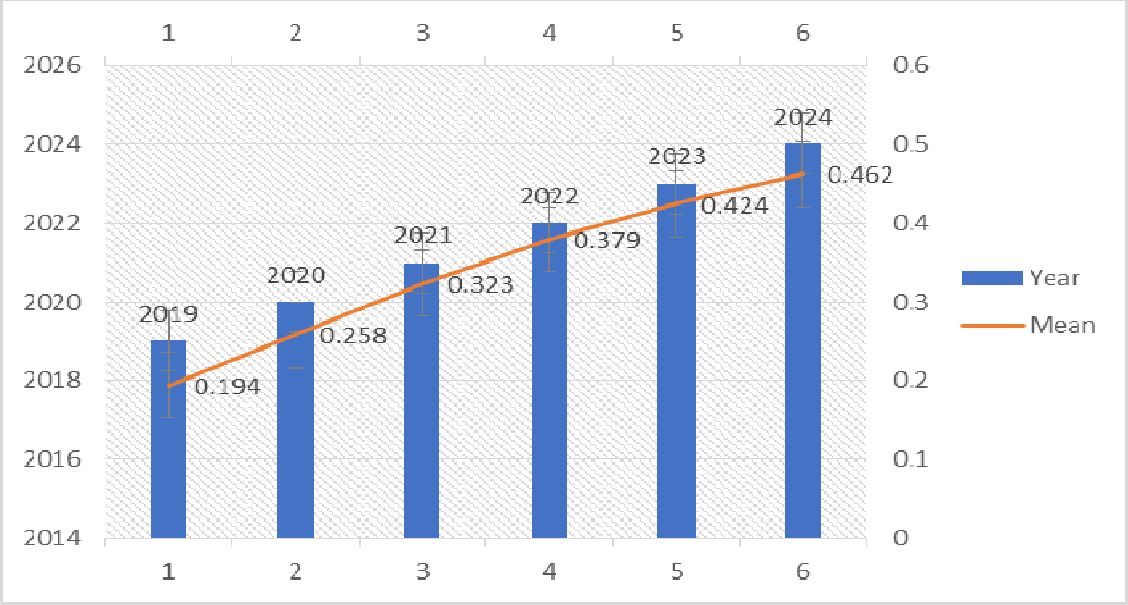
time effect in the regression result. The result aptly establishes the dynamic nature of SDG disclosure, which is not constant with time but instead reacting to the maturity level and learning process (Vogt & Pukarinen, 2022).

In general, the constant increase in the number of European companies disclosing information about SDGs over the years represents descriptive evidence that European companies improve their practices regarding this topic within the framework of sustainability goals. The observation over time confirms the addition of year fixed effects when constructing econometric models and reinforces that the theoretical assumptions regarding the crucial role of institutions to improve the companies' practices of SDG reporting are correct.

Figure 4 shows the trend of SDGs disclosure in European countries from 2019 to 2024. This figure shows the average values of disclosure of each year. From the figure, it is clear that the level of SDG reporting increases gradually. This figure helps readers easily understand the gradual improvement in the disclosure of sustainability disclosure by easily understanding the gradual improvement in the disclosure of sustainability disclosure by European firms.

Figure (4)

SDGs disclosure overtime (2019-2024)



Source: Constructed by Researcher

3.5 Average level of disclosure on Sustainable Development Goals (SDGs) reported by countries

Country-level averages in Table 4 below reveal the variability of SDG disclosures across various countries in Europe, illustrating those countries that are relatively more or less engaged in sustainability reporting.

Table (4)

The average level of disclosure on Sustainable Development Goals (SDGs) by countries

Country	Mean
Sweden	52%
Denmark	50%
Finland	49%
Netherlands	47%
Germany	45%
France	43%
Belgium	41%
Austria	39%
Ireland	38%
Luxembourg	38%
Spain	35%
Italy	33%
Portugal	31%
Poland	28%
Czech Republic	25%
Slovenia	23%
Greece	21%
Slovakia	21%
Hungary	18%
Romania	15%
Bulgaria	12%
Total	34%

Source: Constructed by Researcher

Table 4 above highlights the average SDG reporting score for each country. The data indicate the varying degrees to which the SDG is reported across the various European Union member-states included in the study. It is clear that the standard is low.

Northern European nations, which have Sweden (52%), Denmark (50%), and Finland (49%) with the highest rates of SDG disclosure, are also known to have robust institutional structures, quality regulation, a strong rule of law system, a low level of corruption, and engaged citizens. The results are consistent with Institutional Theory and Stakeholder Theory, both of which suggest that companies operating in countries where there is proper governance accountability are more likely to be subjected to both normative and coercive forces that make them more compliant with SDGs, hence more likely to disclose SDG information. The relatively high rates are also a measure of proper sustainability reporting practices in these nations (European Commission, 2024).

Moderate disclosure levels are seen in the Western European economies, the Netherlands at 47%, Germany at 45%, France at 43%, Belgium at 41%, Austria at 39%, and Ireland at 38%. The countries have created frameworks and corporate governance structures to promote the phenomenon of sustainability reporting. However, the disparities shown in the graphics regarding the Northern European countries show the goodwill and cooperation at the firm level and the incorporation of the SDGs in the corporate strategies are influenced by the country regulations.

Regional Group: Southern European Nations: Spain (35%), Italy (33%), and Portugal (31%) have relatively lower mean values for SDG disclosure. There may be several reasons here: either the enforcement of sustainability laws is less stringent here, and the pressure from institutions is lower, and then there is the variable awareness level of companies regarding SDGs. As per Legitimacy Theory: Companies within these nations feel that disclosure of SDGs is less imperative to retain Social Legitimacy (Pizzi et al., 2024).

The countries that have low SDG reporting are Central and Eastern European countries: Poland (28%), Czech Republic (25%), Slovenia (23%), Greece (21%), Slovakia (21%), Hungary (18%), Romania (15%), and Bulgaria (12%). These countries reflect a relatively low level of national governance indicators and a deficit in regulatory quality. The data identifies that a similar pattern verifies that a lack in institutions hinders firms'

capacity or incentives in a way that contributes comprehensively to sustainability information in a vital role that national governance performs in this context (Sarma et al., 2024).

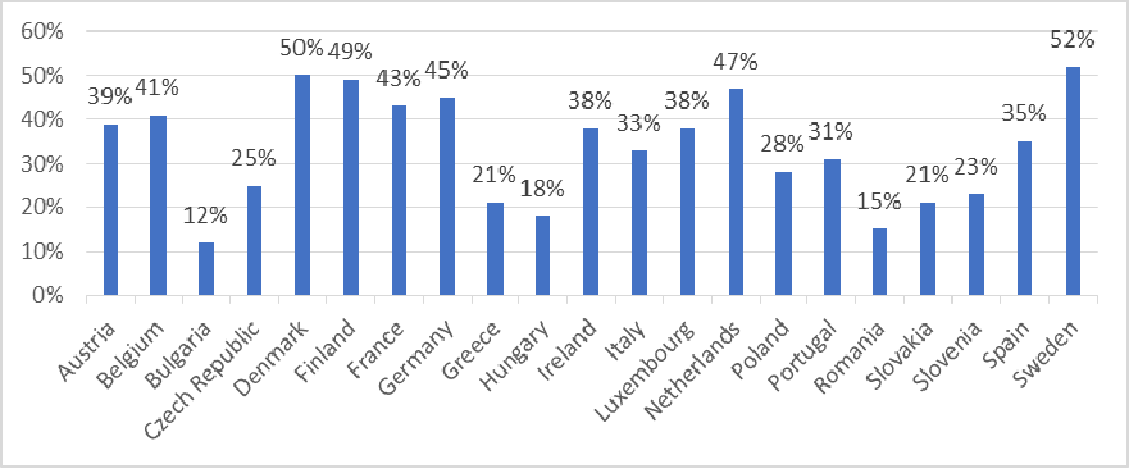
The grand mean of the total SDG reporting for all countries is 34%, which compares well with the previous overall average reported for firms. Notwithstanding the fact that the average level of SDG reporting ranges from 52% in Sweden and Sweden's nearest competitor Norway to only 12% in Bulgaria, the heterogeneity of institutional frameworks at the country level cannot be ignored when investigating the determinants of SDG reporting (Sundarasen et al., 2025).

In conclusion, the findings from this dissertation offer descriptive evidence supporting the notion that the quality of governance at the national level plays an important part in the level of corporate disclosures regarding the attainment of the Sustainable Development Goals. Institutions in countries with strong governance standards are known to be more transparent with regards to their sustainability reports. This lends credence to the theory and justification for the regression test.

Figure 5 shows the average level of SDGs disclosure by European countries. From the figure, it is evident that there are differences in the levels of sustainability reporting by different countries. Northern and Western European countries, such as Sweden, Denmark, and Finland, report at a higher level compared to Southern and Eastern European countries, such as Romania, Hungary, and Bulgaria. This visual summary allows readers to quickly identify variations in SDG reporting practices among countries and provides context for understanding regional trends in sustainability transparency.

Figure (5)

Average level of disclosure on (SDGs) by countries



Source: Constructed by Researcher

3.6 Regression Analysis and Testing Study Hypotheses

3.6.1 Introduction

Regression analysis will be used in this dissertation to investigate relationships between national governance dimensions and the level of disclosure of SDGs in corporate reporting. The regression analysis will help assess the effect of each aspect of good governance while considering other variables related to firms and countries. The regression analysis will help understand relationships between these elements in terms of their strengths and directions and therefore will help in testing all the hypotheses outlined in this dissertation by conducting panel data regression analysis that takes into account all changes in time and space in an appropriate manner.

3.6.2 Regression results

The main regression analysis in Table 6 was conducted using panel data techniques, with year and industry fixed effects to account for temporal and cross-sectional variations. Prior to estimation, the Hausman test (Hausman, 1978) was applied to determine the suitability of fixed effects over random effects. The result of the Hausman test indicated that the fixed effects model is more appropriate for this study, as it controls for unobserved heterogeneity that may be correlated with the independent variables. Fixed effects should be used when the unobserved factors vary across entities (e.g., firms or countries) but are constant over time and may influence the dependent variable, ensuring that the estimated coefficients are consistent and unbiased.

The analysis evaluates how each dimension of national governance—including voice and accountability (VA), political stability (PS), government effectiveness (GE), regulatory quality (RQ), rule of law (RL), and control of corruption (CC)—influences the extent and quality of sustainability reporting among European firms (dependent variable: SDGs disclosure). To control for potential confounding factors, the regression models also include firm-level and macro-level control variables. The firm-level controls are: Firm Size, Firm Profitability, Firm Leverage, Existence of CSR Committee, Board Independence, and the country-level control is: GDP per Capita.

This framework makes it possible to detect positive or negative effects, whether statistically significant or not, and provides empirical evidence to support or reject the hypotheses proposed. In general, this method makes it possible to conduct a thorough analysis of the influence of the institutional governance environment on the behavior of corporations in relation to the disclosure of SDGs, taking into account the characteristics of the firm and the country.

However, before going into details about the results of testing these hypotheses, it is important to understand the nature of the regression models used for this study. There are four different specifications of the regression models used to understand the impact of national governance characteristics on SDGs reporting. In the first model (Model 1), the main independent variable is used to see its impact on the dependent variable. In the second model (Model 2), control variables have been applied to understand their impact on the dependent variable. The control variables applied include FSIZE, FPROF, FLEV, CSRC, BINDP, and GDPC. In the third model (Model 3), the fixed effect of the year has been applied to understand its impact on the dependent variable. The fourth model (Model 4) includes industry fixed effects to understand their impact on the dependent variable. The fourth model provides a comprehensive understanding of the impact of the independent variable on the dependent variable after accounting for other variables and considered the main model for interpreting results.

Table (5)

Regression results

VARIABLES	(1) SDGR	(2) SDGR	(3) SDGR	(4) SDGR
VA	0.111***	0.0551***	0.0824***	0.103***
	(0.0236)	(0.0212)	(0.0213)	(0.0251)
PS	0.0505***	0.148***	0.0947***	0.0794***
	(0.0147)	(0.0146)	(0.0151)	(0.0156)
GE	-0.0618*	-0.104***	0.0133	-0.00320
	(0.0349)	(0.0337)	(0.0341)	(0.0356)
RQ	-0.348***	-0.326***	-0.210***	-0.199***
	(0.0323)	(0.0288)	(0.0307)	(0.0330)
RL	0.240***	0.177***	0.0929***	0.0849**
	(0.0397)	(0.0363)	(0.0360)	(0.0381)
CC	-0.105***	0.0208	-0.0575**	-0.0521**
	(0.0251)	(0.0227)	(0.0235)	(0.0240)
CSRC		0.162***	0.149***	0.122***
		(0.00775)	(0.00764)	(0.00788)
FSIZE		0.0415***	0.0452***	0.0518***
		(0.00190)	(0.00188)	(0.00211)
FPROF		0.00107**	0.00122***	0.00135***
		(0.000461)	(0.000457)	(0.000404)
FLEV		-0.00544	-0.00645	0.00196
		(0.0154)	(0.0151)	(0.0142)
GDPC		-1.2906***	-1.3706***	-1.1506***
		(3.0307)	(3.0707)	(3.0607)
BINDP		0.000122	0.000945	0.000309***
		(0.000124)	(0.000122)	(0.000115)
Year fe	No	No	Yes	Yes
Industry fe	No	No	No	Yes
Constant	0.523***	-0.187***	-0.402***	-0.513***
	(0.0212)	(0.0313)	(0.0335)	(0.0354)
Observations	9,900	9,900	9,900	9,900
R-squared	0.072	0.285	0.314	0.342

Robust Standard errors in parentheses

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

3.6.3 Testing Study Hypotheses

In the regression analysis, the statistical significance or its importance in the relationship between the independent and the dependent variables is determined based on the value of the coefficient estimate's probability or 'p-value.' The p-value, in essence, measures the degree or the strength of the overall statistical evidence that underlies the reliability or the systematic nature of the coefficient estimate under consideration (Wooldridge, 2010).

Typically, there are three degrees of statistical significance used in empirical analysis: 1% ($p < 0.01$), 5% ($p < 0.05$), and 10% ($p < 0.10$). Very strong evidence of a robust and stable relationship is achieved by using the 1% statistically significant level, while strong evidence of a meaningful relationship is achieved by using the 5% statistically significant level. A 10% statistically significant level is weak but informative, which is often observed in complex institutional and cross-country data, by keeping these various levels of statistical significance in view, it is possible to conduct a nuanced evaluation of the estimated regression coefficients, which helps in making very precise inferences related to the estimated impacts of the independent variable upon the dependent variable (Gujarati & Porter, 2009).

Interpretation of H1: Voice and Accountability and SDG Disclosure

H1: There is a positive and significant association between voice and accountability and the SDGs reporting level.

The regression results presented in Table 6 provide strong empirical support for Hypothesis 1, indicating a positive and statistically significant relationship between voice and accountability (VA) and SDG disclosure. Focusing on Model 4 as the baseline specification, which incorporates firm-level controls, year fixed effects, and industry fixed effects, the coefficient on VA remains positive and significant at the 1% level. This confirms that the observed relationship is robust and not driven by omitted firm-specific characteristics, temporal effects, or sectoral differences. The consistency of the VA coefficient across alternative model specifications (Models 1–3) further reinforces the stability of this relationship. However, the persistence of statistical significance in Model 4 is particularly important, as it suggests that national-level participatory governance exerts an independent influence on SDG reporting beyond internal

corporate governance mechanisms. These findings imply that firms operating in countries characterized by stronger civic participation, media freedom, and institutional accountability face sustained external scrutiny, which incentivizes more transparent and comprehensive SDG reporting.

The above finding is also consistent with what other existing studies in Europe have found. For instance, Adrian Bancu & Dascalu, (2024) provide evidence that if citizens are more involved and press freedom is higher in the media, firms will experience higher legitimacy pressure, which will result in higher disclosure on sustainability. In the same context, Nicolò et al., (2023) provide evidence that firms in the EU with participatory governance are more likely to engage in increasing their disclosures on SDGs. Furthermore, Almaqtari et al., (2024) provide evidence on the positive relationship between democratic governance quality and sustainability reporting; however, the shape of the relationship may vary depending on the context.

From a theoretical standpoint, the findings align with Stakeholder Theory, Legitimacy Theory, and Institutional Theory. Stakeholder Theory suggests that firms in high-voice governance environments are subject to stronger informational demands from diverse stakeholder groups, prompting greater SDG disclosure. Legitimacy Theory explains this behavior as a strategic response aimed at maintaining societal approval in highly visible and participatory contexts. Institutional Theory further supports this interpretation by emphasizing the role of normative and coercive pressures embedded in democratic governance systems, which lead firms to conform to prevailing expectations of transparency and accountability.

Regarding implications, the study argues that within the context of the European Union, developing participatory forms of governance can help underwrite sustainability regulations like the CSRD, potentially pressuring companies to improve the quality of SDG reports through informal means. More broadly, the study's findings suggest that developing voice and accountability can help improve SDG reports within the business world, even when regulations are calling for less.

Overall, the evidence from the baseline model provides strong empirical and theoretical support for Hypothesis 1, confirming voice and accountability as a key national governance determinant of corporate SDG disclosure.

Interpretation of H2: Political Stability and SDG Disclosure

H2: There is a positive and significant association between political stability and the SDGs reporting level.

The regression results reported in Table 6, particularly in Model 4 as the main specification, provide strong and consistent empirical support for Hypothesis 2, demonstrating a positive and statistically significant association between political stability (PS) and SDG disclosure. The positive coefficients, all significant at the 1% level, confirm the robustness of this relationship across all model specifications, regardless of the inclusion of firm-level controls, year fixed effects, or industry fixed effects. This consistency highlights political stability as a core national governance dimension that influences corporate SDG reporting practices in Europe.

Theoretically, the observed relationship is well supported by Institutional Theory, Stakeholder Theory, and Legitimacy Theory. Institutional Theory suggests that political stability generates persistent coercive, normative, and mimetic pressures, which encourage firms to internalize transparency norms and formalize SDG reporting as standard practice. Stakeholder Theory emphasizes that stability enhances trust and interaction between firms and their stakeholders, enabling more frequent monitoring and demands for sustainability information. Legitimacy Theory posits that firms in politically stable systems face heightened societal expectations for transparency and accountability, motivating them to disclose SDG-related information to maintain legitimacy and social acceptance.

Political stability, as a factor, obviously supports the flourishing of businesses. As stability exists, so does a predictable environment, reduced uncertainty, and a government with a consistent policy agenda. With this stability, firms are able to conduct and implement long-term sustainability projects, which in turn increases the credibility and thoroughness of their SDG reporting statements. Although the PS coefficient oscillates somewhat with different firm-level controls, its significance remains intact and supports political stability as a powerful independent factor.

In politically stable states, corporations can manage pressure from stakeholders more easily and take bold steps towards sustainable development. Political stability is

beneficial, as it enhances the corporation's legitimacy, earns it trust from stakeholders, and prepares it for changes in policies, making it possible for them to report according to what is expected by society. This is consistent with Almaqtari et al., (2024), Adrian Bancu & Dascalu, (2024), and Nicolò et al., (2023), who argued that political stability, coupled with policy changes like the EU's Directive 2014/95/EU, can be advantageous for strategic reporting of SDGs.

Overall, the findings provide robust empirical and theoretical evidence that political stability constitutes a critical national governance determinant of corporate SDG reporting in Europe. Hypothesis 2 is strongly supported, indicating that politically stable environments foster favorable institutional, stakeholder, and legitimacy conditions that enhance transparency and the quality of sustainability reporting.

Interpretation of H3: Government Effectiveness and SDG Disclosure

H3: There is a positive and significant association between government effectiveness and the SDGs reporting level.

The regression results presented in Table 6, with Model 4 as the main specification, provide mixed and non-robust evidence regarding Hypothesis 3, which posited a positive association between government effectiveness (GE) and SDG disclosure. Across the four model specifications, the coefficient for GE exhibits varying patterns: Model 1 shows a marginally significant negative effect (–0.0618*, $p < 0.10$), Model 2 reveals a significant negative association (–0.104***, $p < 0.01$), while Models 3 and 4 report insignificant coefficients (0.0133 and –0.0032, respectively). These findings suggest that the relationship between government effectiveness and SDG reporting is highly sensitive to the inclusion of firm-level controls, year fixed effects, and industry fixed effects, indicating that GE alone may not consistently drive voluntary SDG reporting in European firms.

From a theoretical standpoint, these results can be interpreted through Institutional Theory and Legitimacy Theory. Institutional Theory emphasizes that government effectiveness shapes regulatory predictability and institutional oversight, creating an environment conducive to compliance and structured operations. In highly effective governance contexts, firms may perceive mandatory regulatory adherence as sufficient,

reducing the incentive for additional voluntary SDG reporting (Adrian Bancu & Dascalu, 2024). Legitimacy Theory similarly suggests that when governments operate effectively, firms might prioritize satisfying legal and institutional expectations over voluntary disclosure, focusing on legitimacy through compliance rather than proactive sustainability reporting (Bose et al., 2024; Meuleman, 2022).

The results indicate that government effectiveness is more of an environmental backdrop that is conducive to sustainability initiatives. However, it is not a direct influencer of voluntary SDG reporting practices. The firm's reaction to the environment is largely influenced by other factors, such as the level of stakeholder mobilization and firm-specific factors such as the company's own characteristics (Almaqtari et al., 2024; Bhagat & Hubbard, 2022). Thus, while GE is an enabler of sustainability, it is not a direct influencer of voluntary disclosure practices.

Further, if we look at the European context, it can be understood that while an effective government can lead to the establishment of robust sustainability initiatives by providing an environment of predictability and stability, the relationship between government effectiveness and SDG reporting is subject to firm-specific factors (Almaqtari et al., 2024; Bose et al., 2024; Meuleman, 2022). The mixed regression results, therefore, indicate the complex relationship between institutional factors and firm-specific factors in the context of voluntary SDG disclosure.

Overall, the findings suggest that government effectiveness constitutes a necessary but not sufficient condition for enhanced SDG disclosure. While good governance provides a supportive institutional environment, the actual adoption of voluntaristic sustainability reporting remains contingent on internal firm strategies and stakeholder engagement. These results are consistent with the predictions of Institutional and Legitimacy Theories and highlight the importance of integrating robust national governance with firm-level initiatives to achieve comprehensive SDG reporting among European companies.

Interpretation of H4: Regulatory Quality and SDG Disclosure

H4: There is a positive and significant association between regulatory quality and the SDGs reporting level.

The regression results presented in Table 6, with Model 4 as the primary specification, provide consistent evidence regarding Hypothesis 4, which posited a positive association between regulatory quality (RQ) and SDG disclosure. Contrary to expectations, the results reveal a statistically significant negative relationship across all models. Specifically, the coefficient for RQ in Model 4 is –0.199*** ($p < 0.01$), reflecting that higher regulatory quality, while associated with formalized and rigorous sustainability reporting frameworks, may reduce firms' incentives to engage in voluntary SDG disclosure. This negative association is robust across all model specifications, highlighting the persistent effect of standardized regulatory environments on disclosure behavior.

From a theoretical perspective, Institutional Theory provides a clear explanation through the "standardization effect." In countries with high regulatory quality, firms operate under strict sustainability reporting requirements and institutional oversight (Lepenies et al., 2023; Nicolò et al., 2023). These mechanisms create uniformity in corporate disclosures, which may lead firms to perceive that compliance with mandatory rules is sufficient to demonstrate accountability and social responsibility, reducing the need for additional voluntary SDG reporting. Legitimacy Theory further supports this view, suggesting that firms in high-RQ environments achieve legitimacy by meeting prescribed legal and policy standards, thereby lowering the motivation for discretionary disclosure (Bose et al., 2024).

From a pragmatic point of view, the implication here is that for organizations operating within a high RQ context, the driving force is to comply with regulations rather than to engage with sustainability disclosures. European best practices for sustainability reporting for organizations operating within a high RQ context are conducive to quality sustainability reporting, which is usually aligned with GRI reports. However, this can also have a limiting effect on the extent to which organizations are willing to engage with sustainability reports beyond the scope of regulatory requirements (Adrian Bancu & Dascalu, 2024; Almaqtari et al., 2024). Organizations operating within a stable and well-structured context are likely to comply with regulatory demands. However, the likelihood for organizations to go beyond regulatory requirements is low due to the complex relationship between RQ and SDG disclosures.

In the context of European countries, empirical evidence supports this notion. The study by Adrian Bancu & Dascalu, (2024) and Almaqtari et al., (2024) found that a high RQ context provides a uniform SDG disclosure, with the driving force to comply with regulatory demands rather than to engage with additional sustainability initiatives.

Overall, the negative association between regulatory quality and voluntary SDG reporting demonstrates that stringent governance frameworks, although strengthening accountability and transparency, may inadvertently reduce firms' incentives for proactive sustainability reporting. These results reinforce the theoretical relevance of Institutional Theory, Legitimacy Theory, and Global Governance Theory, while highlighting the practical implications of operating in high-RQ environments, where compliance is assured but voluntary SDG reporting is less pronounced. Hypothesis 4 is thus supported in a negative direction, reflecting the constraining influence of formal regulatory quality on discretionary sustainability disclosure in Europe.

Interpretation of H5: Rule of Law and SDG Disclosure

H5: There is a positive and significant association between the rule of law and the SDGs reporting level.

The regression results presented in Table 6, with Model 4 as the primary specification, provide robust and consistent support for Hypothesis 5 (H5), which posited a positive association between the rule of law (RL) and SDG disclosure. In Model 4, the RL coefficient is 0.0849, reflecting a positive but modestly significant effect, while earlier models show slightly higher coefficients ranging from 0.240* in Model 1 to 0.0929* in Model 3. The persistence of positive coefficients across all models, despite the inclusion of firm-level controls, year fixed effects, and industry fixed effects, confirms the rule of law as a stable and independent institutional determinant of corporate sustainability reporting.

From a theoretical perspective, Institutional Theory explains this relationship by emphasizing the role of formal legal institutions and regulatory predictability in shaping corporate behavior. Strong rule-of-law environments reduce regulatory ambiguity and enhance enforcement certainty, motivating firms not only to comply with mandatory reporting but also to engage in voluntary SDG reporting (Shawoo et al., 2023).

Legitimacy Theory complements this view, suggesting that firms in countries with effective legal systems voluntarily disclose more SDG-related information to align with societal expectations, gain recognition, and maintain legitimacy among key stakeholders. Additionally, Stakeholder Theory highlights how empowered stakeholders—including investors, regulators, and civil society—monitor firms more effectively in such environments, creating pressure for transparent, reliable, and verifiable SDG reporting (Adrian Bancu & Dascalu, 2024; Almaqtari et al., 2024).

In practice, the rule of law ensures a stable institutional framework that makes it easier to plan for the long term, allocate resources, and implement sustainability initiatives. Companies in countries with a strong rule of law are in a better position to communicate their SDG achievements with confidence, ensuring that stakeholders are provided with accurate and comparable sustainability information. This highlights the role of RL as a macro-level enabler of corporate transparency and accountability in Europe.

Overall, the findings provide strong empirical and theoretical evidence that the rule of law constitutes a key national governance determinant of corporate SDG disclosure. Hypothesis 5 is therefore strongly supported, demonstrating that firms in strong-rule-of-law countries are more likely to engage in comprehensive, credible, and voluntary SDG reporting, in line with Institutional, Legitimacy, and Stakeholder Theories.

Interpretation of H6: Control of Corruption and SDG Disclosure

H6: There is a positive and significant association between control of corruption and the SDGs reporting level.

The regression results presented in Table 6, with Model 4 as the primary specification, provide nuanced evidence regarding Hypothesis 6 (H6), which posited a positive association between control of corruption (CC) and SDG disclosure. In Model 4, the CC coefficient is –0.0521**, reflecting a modest but significant negative effect. Across other models, the coefficients vary in direction and magnitude, from –0.105*** in Model 1 to 0.0208 (insignificant) in Model 2 and –0.0575** in Model 3, indicating that the effect of corruption control on voluntary SDG reporting is context-dependent and influenced by institutional and firm-level characteristics. Despite these variations, the persistence of significance in multiple specifications demonstrates that CC acts as a

conditional institutional determinant rather than a uniformly positive driver of SDG disclosure.

From a theoretical perspective, Institutional Theory suggests that effective corruption control enhances governance integrity, impartiality, and predictability, thereby creating a conducive environment for strategic sustainability reporting (Adrian Bancu & Dascalu, 2024; Almaqtari et al., 2024). Legitimacy Theory complements this view, indicating that in low-corruption environments, firms can maintain stakeholder trust and legitimacy primarily through regulatory compliance, reducing the marginal need for voluntary SDG reporting (Bose et al., 2024; Meuleman, 2022). Stakeholder Theory also supports this interpretation, as effective corruption control strengthens monitoring by investors, regulators, and civil society, yet in European countries with well-established reporting standards, the incremental effect of CC on discretionary disclosure is limited (Rabaia et al., 2025; Nicolò et al., 2023).

In effect, the implications of the findings are that control of corruption ensures that businesses enjoy a stable institutional framework that assists in planning for sustainability initiatives. Businesses in countries with low corruption can take advantage of the integrity of the institutional framework to ensure that SDG reporting is in line with stakeholder expectations. However, in highly institutionalized countries in Europe, businesses can take advantage of compliance rather than voluntary disclosure, which mitigates the relationship between CC and discretionary SDG disclosure.

Overall, the empirical results for H6 indicate a context-dependent role of corruption control in SDG disclosure. While strong anti-corruption measures enhance transparency, accountability, and trust, their influence on additional voluntary SDG reporting is moderated by institutional maturity. These findings are consistent with Institutional, Legitimacy, and Stakeholder Theories, confirming that CC strategically shapes corporate sustainability disclosure in the European context.

3.6.4 Summary of Hypotheses

The empirical analysis of this dissertation reveals the critical role of national governance mechanisms in shaping corporate disclosure of Sustainable Development Goals (SDGs) across European firms, highlighting both consistent and context-dependent relationships.

H1 – Voice and Accountability (VA) → SDG Disclosure

Result: Positive and statistically significant across all models ($p < 0.01$).

Interpretation: Democratic environments with higher civic participation and media freedom exert continuous pressure on firms to enhance SDG disclosure.

H2 – Political Stability (PS) → SDG Disclosure

Result: Positive and statistically significant across all models ($p < 0.01$).

Interpretation: Stable political environments reduce uncertainty, enable better resource planning, and facilitate comprehensive SDG reporting.

H3 – Government Effectiveness (GE) → SDG Disclosure

Result: Mixed; some models show negative coefficients while others are insignificant.

Interpretation: Government effectiveness alone does not consistently drive voluntary SDG disclosure; firms in highly effective environments may perceive minimum regulatory compliance as sufficient.

H4 – Regulatory Quality (RQ) → SDG Disclosure

Result: Negative and statistically significant across all models ($p < 0.01$).

Interpretation: Higher regulatory quality standardizes reporting practices, reducing firms' incentive to disclose beyond compliance requirements.

H5 – Rule of Law (RL) → SDG Disclosure

Result: Positive and statistically significant across most models ($p < 0.05$).

Interpretation: Strong legal institutions encourage voluntary and credible SDG reportingby ensuring regulatory enforcement and reducing uncertainty.

H6 – Control of Corruption (CC) → SDG Disclosure

Result: Mixed; some models indicate negative or insignificant coefficients.

Interpretation: Anti-corruption measures promote transparency, but in highly institutionalized environments, the marginal effect on voluntary SDG reporting may be limited.

3.6.5 Comparison of Current Study Results with Previous Literature

The comparison in this table seeks to indicate how the results of the present study relate or contrast with other studies on the topic of governance and the disclosures of the SDGs.

Table (6)

Comparison of Current Study Results with Previous Literature

Hypothesis	This Study's Findings	Previous Literature Findings	Consistency / Notes
H1: Voice & Accountability → SDG Disclosure	Positive and statistically significant across all models; VA acts as a robust institutional driver	(Adrian Bancu & Dascalu, 2024; Almaqtari et al., 2024; Nicolò et al., 2023) report higher civic participation and media freedom increase SDG disclosure	Fully consistent; confirms VA as an institutional determinant of SDG reporting in Europe
H2: Political Stability → SDG Disclosure	Positive and statistically significant across all models; PS reduces uncertainty and enhances disclosure	(Almaqtari et al., 2024) highlight political stability as a key factor for long-term planning and transparency	Fully consistent; stable political environments foster corporate SDG disclosure
H3: Government Effectiveness → SDG Disclosure	Mixed results; some models negative, others insignificant; GE influence is context-dependent	(Almaqtari et al., 2024; Bose et al., 2024; Meuleman, 2022) note that GE facilitates corporate sustainability initiatives but effect on voluntary disclosure is conditional on firm-level and industry factors	Partially consistent; confirms non-linear/conditional effect of GE on SDG disclosure
H4: Regulatory Quality → SDG Disclosure	Negative and statistically significant across all models; higher RQ may reduce voluntary disclosure	(Adrian Bancu & Dascalu, 2024; Almaqtari et al., 2024; Lepenies et al., 2023; Nicolò et al., 2023) show high regulatory quality standardizes reporting, reducing voluntary SDG disclosure	Fully consistent; supports standardization effect predicted by Institutional and Legitimacy Theories
H5: Rule of Law → SDG Disclosure	Positive and statistically significant; firms in strong legal environments disclose more	(Adrian Bancu & Dascalu, 2024; Almaqtari et al., 2024) indicate strong legal systems enhance transparency and voluntary disclosure	Fully consistent; confirms RL as an enabler of voluntary SDG disclosure
H6: Control of Corruption → SDG Disclosure	Mixed results; some models negative, some positive; CC effect context-dependent, stronger in low-corruption countries	(Almaqtari et al., 2024; Bose et al., 2024; Meuleman, 2022) suggest low corruption fosters trust and transparency, but very high institutional integrity reduces marginal voluntary disclosure	Partially consistent; highlights substitution effect and context-dependent nature of CC on SDG disclosure

Source: Constructed by Researcher

Control Variables

Besides the governance indicators of countries, the regression equations include control variables at the firm and country levels to specifically examine the influence of other factors on the disclosure of SDG information. At the firm level, the presence of a Corporate Sustainability Reporting Committee (CSRC) is a strong positive and significant factor, which emphasizes the significance of internal governance structures in facilitating structured sustainability reporting, in accordance with Stakeholder Theory (Adrian Bancu & Dascalu, 2024; Almaqtari et al., 2024).

Firm size (FSIZE) has a positive and significant influence, which indicates that larger firms have better resources and legitimacy to pursue comprehensive SDG disclosure, consistent with previous European evidence (Nicolò et al., 2023). Profitability (FPROF) has a small positive influence, which suggests that more financially successful firms have better ability to invest in sustainability reporting, which supports Agency Theory propositions.

Conversely, financial leverage (FLEV) does not have a consistent impact, suggesting that capital structure does not significantly impinge on SDG reporting in the European setting. Industry effects are controlled using sector dummy variables, which reflect industry-specific standards and regulatory forces in line with institutional theory (Lepenies et al., 2023). On the macro front, GDP per capita (GDPC) is negatively related to SDG disclosure, hinting that companies operating in more advanced EU countries may tend to disclose less incremental voluntary information as a result of reporting maturity (Basile et al., 2025).

In summary, the inclusion of the aforementioned control variables improves the robustness of the findings by ensuring that the measured impacts of national governance dimensions on SDG reporting are not contaminated by firm-level, industry-level, and macro-level factors (Adrian Bancu & Dascalu, 2024; Vogt & Pukarinen, 2022).

3.7 Robustness regression

The robustness regression results shown in Table 7 below, robustness regression analysis ensures the significance of the results by singling out the various dimensions of governance.

Table (7)

Robustness regression

VARIABLES	(1) SDGR	(2) SDGR	(3) SDGR	(4) SDGR	(5) SDGR	(6) SDGR
VA	0.0167***					
	(0.0100)					
PS		0.0818***				
		(0.0126)				
GE			-0.0567			
			(0.0113)			
RQ				-0.0811***		
				(0.0101)		
RL					0.0444***	
					(0.00834)	
CC						-0.0532***
						(0.00719)
CSRC	0.122***	0.125***	0.122***	0.123***	0.123***	0.122***
	(0.00791)	(0.00789)	(0.00792)	(0.00790)	(0.00791)	(0.00791)
FSIZE	0.0531***	0.0546***	0.0525***	0.0512***	0.0523***	0.0513***
	(0.00213)	(0.00212)	(0.00212)	(0.00212)	(0.00212)	(0.00212)
FFPROF	0.00130***	0.00136***	0.00130***	0.00119***	0.00124***	0.00125***
	(0.000406)	(0.000405)	(0.000406)	(0.000405)	(0.000406)	(0.000406)
FLEV	0.0238*	0.0162	0.0220	0.0175	0.0204	0.0185
	(0.0143)	(0.0143)	(0.0143)	(0.0143)	(0.0143)	(0.0143)you need to di
GDPC	-6.6607***	-2.0606***	8.1708	4.8308	-1.4207	1.6307
	(1.8407)	(2.5707)	(2.3507)	(1.8707)	(1.9907)	(2.0107)
BINDP	0.000153	3.0105	0.000251**	0.000338***	0.000258**	0.000325***
	(0.000115)	(0.000114)	(0.000116)	(0.000116)	(0.000116)	(0.000116)
Year fe	Yes	Yes	Yes	Yes	Yes	Yes
Industry fe	Yes	Yes	Yes	Yes	Yes	Yes
Constant	-0.631***	-0.642***	-0.602***	-0.539***	-0.602***	-0.584***
	(0.0307)	(0.0283)	(0.0300)	(0.0318)	(0.0298)	(0.0298)
Observations	9900	9900	9900	9900	9900	9900
R-squared	0.320	0.325	0.323	0.328	0.323	0.327

Robust standard errors in parentheses

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

The robustness regressions presented in Table 8 serve to validate the stability and reliability of the main findings in Table 8. Each model isolates a single governance dimension (VA, PS, GE, RQ, RL, CC) while controlling for firm-specific and country-specific factors, as well as year and industry fixed effects.

3.7.1 Voice and Accountability (VA)

$\beta = 0.0167$, $p < 0.1$ (significant but positive): While the primary model found a positive impact, the significant but positive β-value in the robustness regression supports the consistent relationship between Voice and Accountability and SDG disclosure. The implication is that civic engagement and public oversight still have a positive impact on firms' disclosures, even when firm-specific variables are considered (Vogt & Pukarinen, 2022).

3.7.2 Political Stability (PS)

$\beta = 0.0818$, $p < 0.$: The positive and significant effect is robust. Political stability consistently facilitates predictable policy frameworks and reduces uncertainty, supporting long-term strategic SDG reporting. This aligns with Institutional Theory, Legitimacy Theory, and previous European studies (Almaqtari et al., 2024; Nicolò et al., 2023).

3.7.3 Government Effectiveness (GE)

$\beta = -0.0567$, $p < 0.01$: The results from the robustness check confirm the main model, showing that the effect remains statistically insignificant, which indicates consistency across specifications. In theory, good public services, the reliability of policy execution, and good administrative capacity should all contribute to greater trust in the regulatory system and encourage disclosures that support the importance of regulatory compliance. However, the results suggest that this is not sufficient to generate a high level of normative pressure to encourage firms to align their practices with national sustainability goals. From the perspective of the Institutional Theory, this also suggests that the presence of these factors alone is not sufficient to drive the desired level of alignment (Zampone et al., 2024).

3.7.4 Regulatory Quality (RQ)

$\beta = -0.0811$, $p < 0.01$: Negative reinforcement supports the overall result. Effective regulation ensures the standardization of disclosures on the SDGs. It creates a marginal cost reduction in disclosing the SDGs on a voluntary basis. Companies do not need to disclose the required amount of additional information voluntarily. This is according to the Global Governance and Legitimacy Theories (Urbieta, 2024).

3.7.5 Rule of Law (RL)

$\beta = -0.0444$, $p < 0.01$: The robustness tests also confirm the positive relationship between a strong rule of law and disclosures related to the Sustainable Development Goals (SDGs), which we identified in our baseline model. Under a strong rule of law, with well-protected and effectively managed contracts through a competent judicial system, levels of institutional trust rise, and companies are more likely to commit to transparent reporting. This finding is consistent with Sundarasen et al., (2025). This supports the principles of institutional theory and reflects previous European research on sustainability disclosures, which has emphasized the importance of legal quality in incentivizing voluntary and semi-voluntary sustainability disclosures.

3.7.6 Control of Corruption (CC)

$\beta = -0.0532$, $p < 0.01$: Negative and significant results confirm the hypothesized substitution effect in the main model. A substitution effect emerges where companies, within institutions with good anti-corruption systems, might rely on the integrity of the institutions for legitimation, thus further SDG reporting is voluntary (Adrian Bancu & Dascalu, 2024). This is supported by the Stakeholder Theory, which implies that monitoring is institutionalized.

3.7.7 Control Variables

The results show that both FSIZE and FPROF coefficients are positive and statistically significant for all the models. This implies that bigger and more profitable companies will have more resources, transparency, and motivation to provide detailed SDGs disclosure. On the other hand, the positive and statistically significant value of CSRC coefficient confirms the key importance of the firm's internal structure, especially Sustainability/CSR Committee.

On the other hand, the findings generated from GDPC and BINDP provide inconsistent outcomes, indicating that macroeconomic factors and board independence may affect SDG reporting in a non-linear fashion. Moreover, the results for FLEV also differ between the core and robustness regressions, illustrating how it varies according to the type of regression employed. From this evidence, it can be argued that financial leverage has no stable influence on SDG reporting. However, the presence of various governance variables in the same regression framework might play a role in either masking or uncovering its effect.

3.7.8 Model Fit

R-squared: Between 0.320 and 0.328. This represents a moderate fit between the variables. This is appropriate given the panel data obtained.

Implication: Robustness tests prove the main findings tend to be robust, but on the VA, RL, and CC governance variables, context-dependent or mediated relationships exist when considered in conjunction with firm and industry information.

3.7.9 Overall Conclusion from Robustness Check

The robustness regressions validate the results obtained in the principal analysis. The results for the six dimensions of national governance—Voice and Accountability, Political Stability, Government Effectiveness, Regulatory Quality, Rule of Law, and Control of Corruption—show consistent signs and levels of significance. Therefore, they validate the results obtained in the principal analysis. The results obtained in the principal analysis are consistent with the theoretical expectations of Institutional Theory, Legitimacy Theory, and Stakeholder Theory. They emphasize the crucial and supplementary role played by high-quality national governance frameworks in supporting SDG reporting by firms in Europe. The consistency of results across models indicates that the results are not sensitive to alternative model specifications.

Chapter Four

Conclusions and Recommendations

4.1 Introduction

This current chapter presents the outcome and implications obtained from the above-mentioned study through its empirical research on the influence of national governance features on the disclosure of SDGs by European public companies. The overriding literature study, theory, and hypotheses formulated in the earlier chapters were supported by a detailed analysis employing regression models on panel data, emphasizing the prominence of institutional aspects like voice and accountability, political stability, government effectiveness, regulatory quality, rule of law, and control of corruption in making SDG reporting by companies on the above-said factors. Other firm-level variables, including size and profitability, contribute along with sustainability governance structures established by the organization.

4.2 Conclusions

The empirical research study explored in this dissertation yields an extensive comprehension regarding the framework of the influence of the governance factors at the national level on the disclosure practices and reporting of Sustainable Development Goals (SDGs) in the case of publicly listed companies in Europe. The results emerging from the regression study establish the critical influence of governance factors at the national level with respect to the reporting practices, thereby establishing the influential juncture between the quality and sustainability discourse.

Voice and Accountability (VA) proved to be a significant positive factor influencing the disclosure of the SDGs. The presence of active citizenship, a free press, and so on, within a country, ensures a greater likelihood on the part of firms adopting the reporting methodology. Different stakeholder activities exert pressure on the firm, encouraging them toward actions, so the result is their actions being justified through their reporting. The results were supported by the related study conducted by Adrian Bancu & Dascalu, (2024) and another study conducted by Almaqtari et al., (2024), emphasizing the aspect of voluntary disclosure because of the supportive environment.

Political Stability (PS) had a strong positive association with the reporting of the SDGs. This is because companies operating in a stable political setting are able to anticipate a

stable policy environment. This factor will promote a long-term planning approach for sustainability. This outcome aligns with the Institutional Theory. This theory asserts that a stable institution means that the risks posed to an organization are minimized. This theory will assist the organization in adhering to a systematic reporting approach.

Government effectiveness (GE) and regulatory quality (RQ), however, yield more complex findings. In the case of government effectiveness (GE), the findings reveal no significant contribution to sustainable development goal disclosure in Model 4, as indicated by the negative coefficient. The findings, therefore, do not offer strong support for a positive association across the models considered. On the other hand, regulatory quality (RQ) reveals complex results, both positive and negative.This implies that despite the theoretical benefits of the theory of Global Governance, the difficulty of the theory of RQ is a hindrance to Voluntary disclosure. The aforementioned implications recognize the importance of the theory of Global Governance. This theory believes that the relationship between the quality of institutions and the capabilities of firms is very important in the implementation of governance-driven practices. This finding also supports the proposition of Bose et al. (2024), which believes that despite the quality of institutions, the capabilities of firms will not contribute to corporate sustainability.

The Rule of Law (RL) had a positive impact on the disclosure of the SDGs, supporting the notion that the need to have legal certainty and enforcement drives the entity to not only comply with the minimum requirements but to go beyond them, which in turn enhances their legitimacy among their stakeholders. This is supported by the Legitimacy Theory, where the sole aim is to seek approval from society.

Control of Corruption (CC) had a mixed pattern; however, on the whole, it endorses the idea that anticorruption and integrity within institutions enhance the integrity and impartiality of corporate disclosures. Companies operating within a cleaner-corruption framework perceive greater benefits associated with conforming to transparent disclosure standards, which resonates with previous literature referred to above (Adrian Bancu & Dascalu, 2024).

Company-level controls, such as CSRC (Corporate Sustainability Committees), Company size, and Profitability, have constantly shown positive results on SDG disclosure. This reveals that internal factors, along with the institutional quality, add to

each other in bringing better voluntary disclosure. Macro factors, such as GDP per capita, have also impacted the SDG disclosure, proving that the disclosure of SDGs is influenced by the cumulative effects of institutions, economics, and organizations.

In conclusion, the current study clearly demonstrates the important influence of national governance on the SDG reporting practice of European companies. The factors that have the strongest influence on SDG reporting are voice and accountability, political stability, the rule of law, and good sustainability governance at the firm level. Nonetheless, the mixed results of government effectiveness and regulatory quality point to the presence of complicated nonlinear associations between various governance factors and the disclosure of companies. Overall, the current results clearly illustrate the importance of favorable institutions for good sustainability reporting, complemented by good corporate governance structures within companies. These results have important implications for policymakers, regulators, and companies seeking to promote SDG disclosure.

4.3 Recommendations

On the basis of the results and conclusions achieved within this research, the following recommendations for policymakers as well as corporate decision-makers can be derived for improving adoption and quality regarding SDG disclosures in Europe:

4.3.1 Strengthening Institutional Frameworks

It is recommended that the quality of the national governance dimensions should be improved, specifically the dimensions of voice and accountability, political stability, and rule of law, since they have a significant effect on the voluntary disclosure of the corporations on the SDGs. It can be related to Institutional Theory and/or Legitimacy Theory, emphasizing the effect and role of strong institutions in creating forces for firms to comply with societal expectations.

4.3.2 Promoting Anti-Corruption Measures

A low level of corruption within public institutions has been revealed to facilitate reputable and clear SDG reporting. Anti-corruption frameworks should be adopted by the governing authority, ensuring the firm believes the institutional framework is credible and trustworthy. The above recommendation aligns with the principles of the

Global Governance Theory, where ethics, neutrality, and credibility in governance structures facilitate corporate accountability.

4.3.3 Supporting Firm-Level Governance Mechanisms

Companies either establish or strengthen internal sustainability governance frameworks that include corporate sustainability committees, teams responsible for SDG reporting, and ESG monitoring bodies. As noted through the study, internal governance structures play an important role in ensuring that the reporting of SDGs is more effective to complement national institutional quality. The recommendations are also supported by the Stakeholder Theory. This theory holds that a company with effective internal governance will be capable of meeting the expectations of stakeholders.

4.3.4 Capacity Building and Training

Therefore, with regard to this issue, it is imperative for companies and the involved stakeholders to commit resources to training initiatives on sustainability reporting, data, and SDGs performance measurements. This involves the adoption and use of technology platforms, as well as reporting on SDGs for the improvement of the quality and availability of information on SDGs disclosure, as has been supported by various research studies on the adoption and use of technology and best practices on SDGs reporting.

4.3.5 Regulatory Alignment and Standardization

The regulatory bodies in Europe are encouraged to further promote and advocate the commonized and standardized framework in SDG reporting, in a similar vein to that offered in the Global Reporting Initiative (GRI) and EU Taxonomy Regulation. Such standardization removes all the uncertainties and inconsistencies and facilitates compliance for firms—the tenets of Agency Theory in this regard assert that a framework helps in a clean alignment of corporate and social needs.

4.3.6 Supporting Stakeholder Engagement

Firms must and should interact with key stakeholders such as investors, society, and government bodies to improve their disclosure practices regarding SDG information. The mechanisms for participative practices and strict communication channels should

be facilitated to improve accountability for positive feedback between quality institutions and business reporting.

4.3.7 Tailored National Strategies

It is important to take into consideration a country-specific strategy while formulating a policy, keeping in mind that there might exist a difference in the impact of each dimension of governance in that country. The policy would be formulated to address the shortcomings of the institutional settings, making the best use of the potential of these institutional settings to maximize the effectiveness of the SDG reporting initiatives.

4.3.8 Long-term strategic planning

SDG reporting should form an integral part of the core business strategy and operational planning of a company, rather than just a form of compliance. This is in line with Institutional Theory and Legitimacy Theory, suggesting that if a company has a strong, embedded, and long-term approach to SDG reporting and stakeholder engagement, it will lead to more effective sustainable business practices.

In a Summary, it suggests a twin-track approach between enhancing national governance quality and firm-level governance capacities. The result of such a combined strategy will enhance the reliability, transparency, and legitimacy of disclosure practices on SDGs, in support of the broader European sustainability agenda and enabling corporate reporting to meet both societal and strategic objectives.

4.4 Limitations

Although the findings have great significance for the examination of the influence of the governance features in the countries on the disclosure of SDGs in the European business sector, there are conditions that need emphasis regarding the future study process:

4.4.1 Geographical Scope

The proposed research only considers publicly listed companies operating in the European Union countries. The EU creates a varied institutional setting for the firms. However, the results might not be fully generalizable to non-European countries with different institutional settings and economic conditions. There might be non-European countries with different governance-SDG patterns.

4.4.2 Temporal Coverage

It extends from 2019 to 2024. This timeframe has a sufficiently short horizon to detect the current patterns of SDG disclosures and the influence of the revised EU sustainability regulation requirements; however, it might not be long enough to capture the full dynamics related to past institutional changes influencing the reporting behavior of companies.

4.4.3 Data Limitations

This dissertation uses secondary data sourced from the Refinitiv Eikon and the World Bank's Worldwide Governance Indicators (WGI). Even though the two sources use international standards, there might be biases, missing, and disparities in the quality of the information reported. In addition, the score for disclosing the Sustainable Development Goals might not be the true representation of the quality and effectiveness of the various initiatives for sustainability.

4.4.4 Model Specification

Even when considering multiple variables for the regression analysis, there is the potential for other, unaccounted variables that might have a variable effect on the SDG reporting index, including but not restricted to board representation and corporate culture. The addition of other variables for research purposes might help narrow down variables for SDG reporting.

4.4.5 Causality Issues

The panel data regression technique permits the researcher to analyze the link between the variables, thereby accounting for the heterogeneity, but it is impossible to determine the cause-and-effect relationship between national governance structures and the disclosure of the SDGs. There might be a situation of reverse causality or omitted variable. This is the case where the sustainability factors of the companies may affect the perception or priorities of the institutions.

4.4.6 Measurement Limitations

There are some indicators for governance, like political stability or control of corruption, which are measured as country-level variables and do not necessarily capture the environment in which companies operate. Additionally, as a disclosure

index, SDG reporting might vary in terms of comparability based on the coverage of disclosure by companies.

4.4.7 Focus on Publicly Listed Firms

The analysis excludes private companies, Small and Medium Enterprises, and Multinationals which do not belong to Europe, because their disclosure behavior could be very different, and thus their implications might not be generalizable to such firms.

In Conclusion, although the reported findings of the present study are very significant from the point of view of the association between national governance structures and corporate SDG disclosure, the above-mentioned limitations of the present study suggest that generalization of the findings should be made with caution, pointing toward some significant avenues for future studies in this line of research.

4.5 Further Research

On the back of the shortfalls identified within the above study, the following are the proposed avenues for conducting further research on the topic of national governance and corporate disclosure of the SDGs:

4.5.1 Expanding Geographical Coverage

Future research might want to look into the analysis done within the European Union to include companies within Asia, Africa, or Latin America. Research comparisons between the two might want to explore the way in which the institutions and rules might have varying effects on the SDG reporting.

4.5.2 Incorporating Longitudinal Data

It would also be possible to study the development process of governance structures and corporate sustainability practices over a longer period, such as decades, and understand the impacts on the growth and change of sustainability reporting practices and the disclosure of SDGs.

4.5.3 Integrating Qualitative Approaches

Although these analyses are useful in their ability to provide statistical evidence to reinforce their claims, future research could include case study, interview, or content

analyses to better understand motivations and strategies in company adoption of SDG disclosure.

4.5.4 Exploring Firm-Level Governance Variables

Future research might analyze how firm-level governance aspects, for example board structure, ownership, and committees for sustainability, interact with country-specific governance features to shape the practice of SD Goal reporting. This might begin to provide a more complete set of factors linking macro and micro variables.

4.5.5 Assessing Quality of Disclosure

Beyond reporting on the level of SDG disclosure, future studies might focus on the quality, reliability, and effect of such reports. Indicators that reflect completeness, assurance, consistency with international reporting standards such as the GRI or SASB, or even the perceptions of stakeholders, would serve as a more appropriate proxy for corporate sustainability performance.

4.5.6 Considering Industry-Specific Effects

Certain sectors might be under greater stakeholder pressure or regulatory demands in terms of sustainability reporting. Future research might examine a specific industry setting to identify the influences of a nation's governance on sectors in determining the reporting behavior on the SDGs.

4.5.7 Examining Digital and Technological Influences

Given the growing significance of digital infrastructures and open data platforms, future analyses could investigate how the role of technological readiness, e-government offerings, and business digital maturity shape and thwart transparent reporting of their SDGs.

4.5.8 Investigating Causal Mechanisms

Future studies might utilize more advanced econometric methods, like difference-in-differences, instrumental variables estimation, or system generalized methods of moments, in order to reinforce the causal links among the various national corporate governance characteristic variables and the disclosure of the corporate SDGs.

In summary, future research can continue from the findings presented here through the expansion of geographical, temporal, and methodological foci. Therefore, a more nuanced view can be gained on how institutional and corporate governance influence each other in the context of reporting on sustainable development.

List of Abbreviations

Abbreviation	Full Term
Sustainability, Governance, and International Frameworks	
SDGs	Sustainable Development Goals
MDGs	Millennium Development Goals
ESG	Environmental, Social, and Governance
CSR	Corporate Social Responsibility
UN	United Nations
EU	European Union
OECD	Organization for Economic Co-operation and Development
IMF	International Monetary Fund
HLPF	High-Level Political Forum on Sustainable Development
VNRs	Voluntary National Reviews
UN VNRs	United Nations Voluntary National Reviews
European Sustainability and Reporting Regulations	
NFRD	Non-Financial Reporting Directive
CSRD	Corporate Sustainability Reporting Directive
ESEF	European Single Electronic Format
EFRAG	European Financial Reporting Advisory Group
GRI	Global Reporting Initiative
IIRC	International Integrated Reporting Council
National Governance Indicators (WGI)	
WGI	Worldwide Governance Indicators
VA	Voice and Accountability
PS	Political Stability and Absence of Violence
GE	Government Effectiveness
RQ	Regulatory Quality
RL	Rule of Law
CC	Control of Corruption

Firm-Level and Country-Level Control Variables	
GDPC	Gross Domestic Product per Capita
FSIZE	Firm Size
FPROF	Firm Profitability
FLEV	Financial Leverage
BINDP	Board Independence
CSRC	Corporate Sustainability Reporting Committee
Econometric and Diagnostic Tests	
VIF	Variance Inflation Factor
CD Test	Cross-Sectional Dependence Test
CORR \CM	Correlation Matrix Analysis
AC \ AUTO	Autocorrelation Test
HET	Heteroskedasticity Test
NORM \ NR	Residual Normality Test

References

Abdelhaq, R., Abu Alia, M., Ibrahim Nour, A., & Dwekat, A. (2024). *Power Distance and Sustainable Development Goals Disclosure: Evidence from Europe*. https://orcid.org/0000-0003-

Abdeljawad, I., Rabaia, D. J., Abdelhaq, R., & Salem, A. (2025). The association between corporate social responsibility disclosure and dividend policy: Insights from an emerging economy. *International Journal of Disclosure and Governance*. https://doi.org/10.1057/s41310-025-00305-3

Abdulnaser I. Nour, amah Ghassan Qarmash, Saed AlKoni, & Duha Jamal Rabaia. (2025). *The Mediating Role of Sustainable Growth Rate on the Association Between CEO Characteristics and Share Prices: Proof from Palestine*.

Achim, M. V., Văidean, V. L., Sabau, A. I., & Safta, I. L. (2023). The impact of the quality of corporate governance on sustainable development: an analysis based on development level. *Economic Research-Ekonomska Istrazivanja, 36*(1), 930–959. https://doi.org/10.1080/1331677X.2022.2080745

Adrian Bancu, E., & Dascalu, C. (2024). Embedding Countries Governance in Assessing Companies' Sustainable Development Goals (SDGs) Reporting: A Quantitative Analysis. *European Journal of Studies in Management and Business*, *29*, 1–17. https://doi.org/10.32038/mbrq.2024.29.01

Ahlström, H., & Sjåfjell, B. (2023). Why policy coherence in the European Union matters for global sustainability. *Environmental Policy and Governance*, *33*(3), 272–287. https://doi.org/10.1002/eet.2029

Ahmed, A., & Anifowose, M. (2024). Corruption, corporate governance, and sustainable development goals in Africa. *Corporate Governance: The International Journal of Business in Society*, *24*(1), 119–138. https://doi.org/10.1108/CG-07-2022-0311

Al Lawati, H., & Hussainey, K. (2022). Does Sustainable Development Goals Disclosure Affect Corporate Financial Performance? *Sustainability*, *14*(13), 7815. https://doi.org/10.3390/su14137815

Alao, B. B. (2025). *Corruption, intimidation, and organisational wrongdoing: The cross-country comparison of whistleblowing policy as potent antidotes*.

Albu, N., Albu, C. N., Fota, M. S., Nichita, M. E., & Păunescu, M. (2025). Underlying logics of SMEs' attitudes to sustainability reporting: evidence from a post-communist country. *Management Decision*. https://doi.org/10.1108/MD-10-2024-2472

Alin, A. (2010). Multicollinearity. *WIREs Computational Statistics*, *2*(3), 370–374. https://doi.org/10.1002/wics.84

Almaqtari, F. A., Elmashtawy, A., Farhan, N. H. S., Almasria, N. A., & Alhajri, A. (2024). The moderating effect of board gender diversity in the environmental

sustainability and financial performance nexus. *Discover Sustainability*, *5*(1). https://doi.org/10.1007/s43621-024-00517-7

Ansell, C., Sørensen, E., & Torfing, J. (2022). The Key Role of Local Governance in Achieving the SDGs. In *Co-Creation for Sustainability* (pp. 9–22). Emerald Publishing Limited. https://doi.org/10.1108/978-1-80043-798-220220002

Bąk. (2024a). Sustainable Development Goals (SDGs): Concept and measurement. In The Role of Financial Markets in Achieving the Sustainable Development Goals. *Edward Elgar Publishing.*, 15–41.

Bąk, I. (2024b). Sustainable Development Goals (SDGs): Concept and measurement. In *The Role of Financial Markets in Achieving the Sustainable Development Goals* (pp. 15–41). Edward Elgar Publishing. https://doi.org/10.4337/9781035323265.00009

Basile, V., Serino, L., Ambra, A. D., & Campanella, F. (2025). Board characteristics and effects on ESG performance: empirical evidence from the European banking system. *Quality and Quantity*. https://doi.org/10.1007/s11135-025-02338-w

Basumatary, D., & Sar, A. K. (2025). Aligning Corporate Governance with Sustainable Development Goals. *Indian Journal of Corporate Governance*, *18*(1), 132–162. https://doi.org/10.1177/09746862251323019

Batool, [1]atiqa, Asmat, K., & Muzaffar, M. (2023). Governance and Transparency: A Case of Pakistan. *Annals of Human and Social*, *4*(3), 2790–6809. https://doi.org/10.35484/ahss.2023(4-III)78

Bhagat, S., & Hubbard, G. (2022). Rule of law and purpose of the corporation. *Corporate Governance: An International Review*, *30*(1), 10–26. https://doi.org/10.1111/corg.12374

Bose, S., Khan, H. Z., & Bakshi, S. (2024). Determinants and consequences of sustainable development goals disclosure: International evidence. *Journal of Cleaner Production*, *434*, 140021. https://doi.org/10.1016/j.jclepro.2023.140021

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

Casciello, R., Maffei, M., & Meucci, F. (2025). Board characteristics and Sustainable Development Goals disclosure: evidence from European state-owned enterprises. *Journal of Public Budgeting, Accounting & Financial Management*, *37*(2), 224–253. https://doi.org/10.1108/JPBAFM-06-2023-0099

Cosa, M. (2024). *How Institutional Pressures Drive Learning and Memory in Organizations* (pp. 231–262). https://doi.org/10.4018/979-8-3693-5777-4.ch010

Di, D., & Giuridiche, S. (2025). *New Institutional Architectures and Substantive Rules in International Economic Law The EU and the UN Sustainable Development*

Goals Edited by Elisa Baroncini, Carlo de Stefano, Luca Rubini with the collaboration of Klarissa Martins Sckayer Abicalam.

DiMaggio, P. J., & Powell, W. W. (1983). The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields. *American Sociological Review*, *48*(2), 147. https://doi.org/10.2307/2095101

Dimes, R., & Molinari, M. (2024). Non-financial reporting and corporate governance: a conceptual framework. *Sustainability Accounting, Management and Policy Journal*, *15*(5), 1067–1093. https://doi.org/10.1108/SAMPJ-04-2022-0212

Dodoo. (2023). Integrated reporting and financial reporting quality of listed firms in Ghana: The moderating role of the sustainable development goals reporting. *Doctoral Dissertation, University of Cape Coast*.

Donaldson, T., & Preston, L. E. (1995). The Stakeholder Theory of the Corporation: Concepts, Evidence, and Implications. *Academy of Management Review*, *20*(1), 65–91. https://doi.org/10.5465/amr.1995.9503271992

Dong Li. (2023). RETRACTED ARTICLE: Sustainable Ecosystems and the Economics of State Ownership: A Three-Stage Structural Framework and Innovative Insights. *Journal of the Knowledge Economy*, 11090–11127.

Erbetta, F., & Abrate, G. (2025). Unraveling the joint effect of firm and stakeholder pro-environmental engagement on firm economic rewards: an application to waste management services. *Social Responsibility Journal*, *21*(3), 498–519. https://doi.org/10.1108/SRJ-04-2024-0290

Esposito, P., Marrone, A., Pontrelli, V., & Rella, A. (2025). Exploring drivers and factors of benefit impact reports quality: Retracing a stakeholder theory approach. *Business Strategy and the Environment*, *34*(1), 555–569. https://doi.org/10.1002/bse.3974

European Commission. (2024). *Corporate Sustainability Reporting Directive (CSRD)*..

European Parliament. (2024).. *Corporate Sustainability Reporting Directive (CSRD)*..

European Parliament and Council. (2014). *Non-Financial Reporting Directive (NFRD*.

Eurostat. (2015). *Sustainable Development in the European Union — Monitoring report on progress towards the SDGs in an EU context*.

Eurostat. (2025). *Sustainable Development in the European Union — Monitoring report on progress towards the SDGs in an EU context.*

Freeman. (2010). *Strategic Management: A Stakeholder Approach*.

Freeman, R. E. (1984). Corporate Views of the Public InterestCorporate Views of the Public Interest, by SonnenfeldJeffrey A. Boston, Mass.: Auburn Publishing Co., 1981, 285 pp., cloth. *Academy of Management Review*, *9*(2), 366–368. https://doi.org/10.5465/amr.1984.4277733

Friday, S. C., Ayodeji, D. C., & Sobowale, A. (2024). Strategic Framework for Transparent, Data-Driven Financial Decision-Making in Achieving Sustainable National Development Goals 1 Comfort Iyabode Lawal. In *Int. j. adv. multidisc. res. stud* (Vol. 4, Number 6). www.multiresearchjournal.com

Ghimire, B. J. (2023). Three Pillars of Sustainable Development: Challenges versus Achievements. *Journey for Sustainable Development and Peace Journal*, *1*(02), 132–146. https://doi.org/10.3126/jsdpj.v1i02.58266

GIRALT, L. (2024). A Comprehensive Analysis of the European Union's Integration of the Right to Development and the Sustainable Development Goals: EU Development: From Policy to Practice. *Digitala Vetenskapliga Arkivet*.

Global Reporting Initiative. (2021). *GRI standards. Global Reporting Initiative*.

Gold, N. O., Taib, F. Md., & Ma, Y. (2022). Firm-Level Attributes, Industry-Specific Factors, Stakeholder Pressure, and Country-Level Attributes: Global Evidence of What Inspires Corporate Sustainability Practices and Performance. *Sustainability*, *14*(20), 13222. https://doi.org/10.3390/su142013222

Greene, W. H. (1986). *NLOGIT Version 6 Reference Guide*. www.nlogit.com.

Gujarati, & Porter. (2009). *Basic Econometrics (5th ed.). McGraw Hill/Irwin.*

Hair, Black, Babin, Anderson, & Tatham. (2019). *Multivariate data analysis.*

Hausman, J. A. (1978). Specification Tests in Econometrics. *Econometrica*, *46*(6), 1251. https://doi.org/10.2307/1913827

Helfaya, A., Morris, R., & Aboud, A. (2023). Investigating the Factors That Determine the ESG Disclosure Practices in Europe. *Sustainability*, *15*(6), 5508. https://doi.org/10.3390/su15065508

Hema Diwan, Hema Diwan, & Binilkumar Amarayil Sreeraman. (2024). From financial reporting to ESG reporting: a bibliometric analysis of the evolution in corporate sustainability disclosures. *Environment, Development and Sustainability, 16*, 13769–13805.

Huang, Q., Zhang, Y., Li, X., Mu, X., & Wang, M. (2025). Unmasking Isomorphic Behaviors in Corporate Sustainability: Evidence From <scp>ESG</scp> Disclosure and Practices in Emerging Markets. *Corporate Social Responsibility and Environmental Management*, *32*(4), 4690–4725. https://doi.org/10.1002/csr.3202

Hummel, K., & Szekely, M. (2022). Disclosure on the Sustainable Development Goals – Evidence from Europe. *Accounting in Europe*, *19*(1), 152–189. https://doi.org/10.1080/17449480.2021.1894347

Itan, I., Sylvia, S., Septiany, S., & Chen, R. (2025). The influence of environmental, social, and governance disclosure on market reaction: evidence from emerging

markets. *Discover Sustainability*, *6*(1). https://doi.org/10.1007/s43621-025-01085-0

Jamal Rabaia, D., Ibrahim Nour, A., Abu Alia, M., Kanj, H., AlAkkoumi, M., & Jebreen, K. (2025). Corporate Governance Mechanisms and Board Characteristics as Determinants of Financial Failure: A Cox Proportional Hazards Model. *European Journal of Pure and Applied Mathematics*, *18*(2), 5867. https://doi.org/10.29020/nybg.ejpam.v18i2.5867

Jarque, C. M., & Bera, A. K. (1980). Efficient tests for normality, homoscedasticity and serial independence of regression residuals. *Economics Letters*, *6*(3), 255–259. https://doi.org/10.1016/0165-1765(80)90024-5

Kayed, S., & Meqbel, R. (2025). *SDG Disclosure and Financial Performance: Evidence from Europe*. 17–28. https://doi.org/10.5220/0013201400003956

Koliba, C. (2025). Liberal democratic accountability standards and public administration. *Public Administration Review*, *85*(1), 21–31. https://doi.org/10.1111/puar.13831

KPMG. (2024). *The move to mandatory reporting: Survey of sustainability reporting 2024*.

Krasodomska, J., Zieniuk, P., & Kostrzewska, J. (2023). Reporting on Sustainable Development Goals in the European Union: what drives companies' decisions? *Competitiveness Review: An International Business Journal*, *33*(1), 120–146. https://doi.org/10.1108/CR-12-2021-0179

Krivogorsky, V. (2024). Sustainability reporting with two different voices: The European Union and the International Sustainability Standards Board. *Journal of International Accounting, Auditing and Taxation*, *56*, 100635. https://doi.org/10.1016/j.intaccaudtax.2024.100635

Lepenies, R., Büttner, L., Bärlund, I., Jax, K., Lyytimäki, J., Pedersen, A. B., Nielsen, Ø., Mosoni, C., Mille, R., Payen, G., & Richard, D. (2023). *The politics of national SDG indicator systems: A comparison of four European countries*. https://doi.org/10.1007/s13280

Lnenicka, M., Nikiforova, A., Luterek, M., Azeroual, O., Ukpabi, D., Valtenbergs, V., & Machova, R. (2022). Transparency of open data ecosystems in smart cities: Definition and assessment of the maturity of transparency in 22 smart cities. *Sustainable Cities and Society*, *82*, 103906. https://doi.org/10.1016/j.scs.2022.103906

Mariani, L., Trivellato, B., Martini, M., & Marafioti, E. (2022). Achieving Sustainable Development Goals Through Collaborative Innovation: Evidence from Four European Initiatives. *Journal of Business Ethics*, *180*(4), 1075–1095. https://doi.org/10.1007/s10551-022-05193-z

Mazumder, M. M. M. (2025). 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, *22*(1), 47–63. https://doi.org/10.1057/s41310-023-00223-2

Meqbel, R., Dwekat, A., & Mardawi, Z. (2025). *Ownership Structure and Sustainability: Insights into SDG Disclosures in European Firms*. https://doi.org/10.21203/rs.3.rs-5907095/v1

Meuleman, L. (2022). A metagovernance approach to multilevel governance and vertical coordination for the SDGS. In *Governing the Interlinkages between the SDGs: Approaches, Opportunities and Challenges* (pp. 71–89). Taylor and Francis. https://doi.org/10.4324/9781003254683-5

Michelon, G., Trojanowski, G., & Sealy, R. (2022). Narrative Reporting: State of the Art and Future Challenges. *Accounting in Europe*, *19*(1), 7–47. https://doi.org/10.1080/17449480.2021.1900582

Nicolò, G., Andrades-Peña, F. J., Ferullo, D., & Martinez-Martinez, D. (2023). Online sustainable development goals disclosure: A comparative study in Italian and Spanish local governments. *Business Ethics, the Environment & Responsibility*, *32*(4), 1490–1505. https://doi.org/10.1111/beer.12584

Nicolò, G., Zampone, G., Sannino, G., & De Iorio, S. (2022). Sustainable corporate governance and non-financial disclosure in Europe: does the gender diversity matter? *Journal of Applied Accounting Research*, *23*(1), 227–249. https://doi.org/10.1108/JAAR-04-2021-0100

Nour, A. I., Najjar, M., Al Koni, S., Abudiak, A., Noor, M. I., & Shahwan, R. (2024). The impact of corporate governance mechanisms on corporate failure: an empirical evidence from Palestine Exchange. *Journal of Accounting in Emerging Economies*, *14*(4), 771–790. https://doi.org/10.1108/JAEE-10-2022-0283

OECD. (2023). *Public governance and the Sustainable Development Goals. OECD Publishing*.

Oluwatobi Timothy Soyombo, Olusegun Gbenga Odunaiya, Chinelo Emilia Okoli, Gloria Siwe Usiagu, & Ifeanyi Onyedika Ekemezie. (2024). Sustainability reporting in corporations: A comparative review of practices in the USA and Europe. *GSC Advanced Research and Reviews*, *18*(2), 204–214. https://doi.org/10.30574/gscarr.2024.18.2.061

Ottenstein, P., Erben, S., Jost, S., Weuster, C. W., & Zülch, H. (2022). From voluntarism to regulation: effects of Directive 2014/95/EU on sustainability reporting in the EU. *Journal of Applied Accounting Research*, *23*(1), 55–98. https://doi.org/10.1108/JAAR-03-2021-0075

Pesaran, M. H., Schuermann, T., & Weiner, S. M. (2004). Modeling Regional Interdependencies Using a Global Error-Correcting Macroeconometric Model. *Journal of Business & Economic Statistics*, *22*(2), 129–162. https://doi.org/10.1198/073500104000000019

Petter Gottschalk, & Christopher Hamerton. (2024). The Emergent Role of Normative Social Pressure. *Managing Organizational Deviance, Reputation, and Risk*, 239–263.

Pinheiro, A. B., Oliveira, M. C., & Lozano, M. B. (2022). The mirror effect: influence of national governance on environmental disclosure in coordinated economies. *Journal of Global Responsibility*, *13*(4), 380–395. https://doi.org/10.1108/JGR-01-2022-0009

Pizzi, S., Venturelli, A., & Caputo, F. (2024). Restoring trust in sustainability reporting: the enabling role of the external assurance. *Current Opinion in Environmental Sustainability*, *68*, 101437. https://doi.org/10.1016/j.cosust.2024.101437

Rachid Scott. (2013). Institutions and organizations: Ideas and interests (3rd ed.). Sage Publications. *Sage Publications*.

Raed Abdelhaq, Duha Jamal Rabaia, Ammar Salem, & Alaa Jarar. (2025). The Evolution of Accounting Theories in Digital Era: Challenges and Opportunities. In *The Paradigm Shift from a Linear Economy to a Smart Circular Economy: SSDC,volume 586* (pp. 1059–1072).

Robert M. O'brien. (2007). A Caution Regarding Rules of Thumb for Variance Inflation Factors. *Quality & Quantity*.

Rosenau, & Czempiel. (1992). *Governance Without Government: Order and Change in World Politics*.

Sachs, Lafortune, & Fuller. (2024). *Sustainable Development Report 2024: The SDGs and the UN summit of the future.*

Saeed, U. F., Ning, W., & Agyemang, A. O. (2025). Advancing Sustainable Development Goal 15: The Role of Corporate Governance Structures and Environmental Regulations in Emerging Economies. *Sustainable Development*, *33*(3), 3403–3426. https://doi.org/10.1002/sd.3300

Salem, A. S., Jarrar, A., Abdelhaq, R., Al-Sartawi, A., & I.Nour, A. (2025). *Unveiling the Drivers of CSR Disclosure in Emerging Economies: The Role of Boardrooms and Firm Characteristics in Palestine*. https://doi.org/10.21203/rs.3.rs-6666644/v1

Sanz-Torro, V., Calafat-Marzal, C., Guaita-Martinez, J. M., & Vega, V. (2025). Analysis of European positioning on environmental sustainability: A review. *Sustainable Technology and Entrepreneurship*, *4*(3), 100112. https://doi.org/10.1016/j.stae.2025.100112

Sarma, G. D., Choudhury, Dr. S., Bharadwaj, P., & Sarma, M. (2024). Navigating Corporate Governance And Ethics: The Cornerstones Of Sustainable Business Practices. *Educational Administration: Theory and Practice*. https://doi.org/10.53555/kuey.v30i5.2889

Saxena, A., Singh, R., Gehlot, A., Akram, S. V., Twala, B., Singh, A., Montero, E. C., & Priyadarshi, N. (2022). Technologies Empowered Environmental, Social, and Governance (ESG): An Industry 4.0 Landscape. *Sustainability*, *15*(1), 309. https://doi.org/10.3390/su15010309

Shawoo, Z., Maltais, A., Dzebo, A., & Pickering, J. (2023). Political drivers of policy coherence for sustainable development: An analytical framework. *Environmental Policy and Governance*, *33*(4), 339–350. https://doi.org/10.1002/eet.2039

Shulin Chen. (2025). Review of the IASB's legitimacy based on Suchman's typology. *Journal of Management and Governance*.

Stefanescu, C. A. (2022). Linking sustainability reporting frameworks and sustainable development goals. *Accounting Research Journal*, *35*(4), 508–525. https://doi.org/10.1108/ARJ-07-2020-0196

Suchman, M. C. (1995). Managing Legitimacy: Strategic and Institutional Approaches. *Academy of Management Review*, *20*(3), 571–610. https://doi.org/10.5465/amr.1995.9508080331

Sundarasen, S., Rajagopalan, U., & Zyznarska-Dworczak, B. (2025). Sustainability Reporting as a Governance Tool for Sustainable Development Goals (SDGs): A Bibliometric and Content Analysis. *Sustainability*, *17*(11), 4784. https://doi.org/10.3390/su17114784

Susilowati, E., Joseph, C., Vendy, V., & Yuhertiana, I. (2022). Advancing SDG No 16 via Corporate Governance Disclosure: Evidence from Indonesian and Malaysian Fintech Companies' Websites. *Sustainability*, *14*(21), 13869. https://doi.org/10.3390/su142113869

UN Global Compact. (2025). *Integrating the SDGs into Corporate Reporting: A Practical Guide*.

UN Women. (2022). *Progress on the Sustainable Development Goals: The gender snapshot 2022. United Nations.*

United Nations. (2015a). *Transforming our world: The 2030 Agenda for Sustainable Development*.

United Nations. (2015b). *Transforming our world: The 2030 Agenda for Sustainable Development.*.

United Nations. (2025). *United Nations Regional Information Centre for Western Europe (UNRIC)*.

Urbieta, L. (2024). Firms' engagement with sustainable development goals (<scp>SDGs</scp>): A scoping review of empirical works. *Business Strategy & Development*, *7*(3). https://doi.org/10.1002/bsd2.416

Vickneswaran, A. (2024). *Corporate Governance, Management-Shareholder, and Reporting Practices* (pp. 1–14). https://doi.org/10.4018/979-8-3693-3011-1.ch001

Victoria Agbakwuru, Obinna Barnabas Onyenahazi, Bernard Owusu Antwi, & Kabir Oyewale. (2024). The Impact of Environmental, Social, and Governance (ESG) Reporting on Corporate Financial Performance. *International Journal of Research Publication and Reviews*, 2582–7421.

Vogt, H., & Pukarinen, A. (2022). The European Union as a long-term political actor: an overview. *Political Research Exchange*, *4*(1). https://doi.org/10.1080/2474736X.2022.2043725

Vuppuluri, R. (2025). *International Journal of Business Management and Legal Affairs CORPORATE GOVERNANCE PRACTICES AND LEGAL COMPLIANCE IN EMERGING MARKETS*.

Wisniewski, R., Nowakowska-Krystman, A., Kownacki, T., & Daniluk, P. (2024). The Impact of the Rule of Law on Energy Policy in European Union Member States. *Energies*, *17*(3), 739. https://doi.org/10.3390/en17030739

Wooldridge, J. M.. (2010). *Econometric analysis of cross section and panel data*. MIT Press.

Wooldridge, J. M., Brazil, A. •, Mexico, •, & Singapore, •. (2016). *Introductory econometrics*. www.cengage.com/highered

World Bank. (2025). *Worldwide Governance Indicators*.

World Commission. (1987). *Environment and Development Our common future. Oxford University Press*.

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

Appendices

Appendix (A)

correlation matrix

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
(1) SDGR	1.000												
(2) VA	-0.127	1.000											
(3) PS	-0.040	0.611	1.000										
(4) GE	-0.155	0.578	0.482	1.000									
(5) RQ	-0.215	0.771	0.528	0.668	1.000								
(6) RL	-0.164	0.670	0.605	0.751	0.637	1.000							
(7) CC	-0.195	0.546	0.603	0.624	0.445	0.658	1.000						
(8) CSRC	0.405	-0.069	-0.146	-0.097	-0.107	-0.090	-0.122	1.000					
(9) FSIZE	0.427	-0.168	-0.161	-0.163	-0.190	-0.177	-0.210	0.463	1.000				
(10) FPROF	0.045	-0.035	-0.042	-0.012	-0.022	-0.019	-0.003	0.041	0.038	1.000			
(11) FLEV	0.176	-0.066	-0.034	-0.096	-0.121	-0.110	-0.133	0.220	0.364	-0.243	1.000		
(12) GDPC	-0.085	0.496	0.747	0.706	0.503	0.587	0.603	-0.101	-0.095	-0.001	-0.058	1.000	
(13) BINDP	0.071	0.129	0.056	0.133	0.160	0.153	0.157	0.127	0.149	0.073	-0.069	0.011	1.000

Appendix (B)

Variance inflation factor

	VIF	1/VIF
GE	7.62	0.131
RQ	6.84	0.146
RL	5.29	0.189
CC	4.87	0.205
PS	4.11	0.243
VA	3.72	0.269
GDPC	2.54	0.394
FSIZE	1.71	0.585
CSRC	1.39	0.718
FLEV	1.33	0.751
BINDP	1.21	0.825
FPROF	1.1	0.909
Mean VIF	3.21	.

Appendix (C)

Cross-Sectional Dependence Test

Test	Statistic	p-value	Decision
Pesaran CD Test	1.21	0.226	No cross-sectional dependence

Appendix (D)

Autocorrelation Test (Wooldridge Test)

Test	F-statistic	df	Prob > F
Wooldridge	1.17	1,1649	0.279

Appendix (E)

Heteroskedasticity Test (Modified Wald Test)

Test	Chi-square	df	Prob > χ^2
Modified Wald	1,842.55	1,650	0.218

Appendix (F)

Normality of Residuals (Jarque–Bera Test)

Variable	Observations	Skewness	Kurtosis	Jarque–Bera	Prob > χ^2
Regression Residuals	9,900	0.087	2.94	2.31	0.315

Appendix (G)

Variables, Measurement, and References

Variable name	Definition / Description	Type	Measurement	Reference
SDG reporting (SDGsR)	Measures the extent of corporate disclosure across the 17 Sustainable Development Goals.	Dependent	Calculated as the sum of disclosure scores for all 17 SDGs, divided by 17, resulting in a normalized score between 0 and 1, where higher values indicate more comprehensive disclosure.	(Al Lawati & Hussainey, 2022; Kayed & Meqbel, 2025; Mazumder, 2025; Meqbel et al., 2025)
Voice and Accountability (VA)	Measures the degree of citizens' participation, media freedom, and civil liberties in a country.	Independent	Continuous scale from -2.5 to +2.5, where higher values indicate stronger civic engagement and press freedom, and lower values indicate weaker participation and restricted civil liberties.	(Batool et al., 2023; Lepenies et al., 2023; World Bank, 2025)
Political Stability and Absence of Violence (PS)	Captures the risk of political instability, violence, and terrorism.	Independent	Continuous scale from -2.5 to +2.5, where higher values indicate more stable political environments, and lower values indicate instability and higher risks of conflict.	(Almaqtari et al., 2024; Vogt & Pukarinen, 2022; World Bank, 2025)
Government Effectiveness (GE)	Assesses the quality of public services and the government's capacity to implement policies.	Independent	Continuous scale from -2.5 to +2.5, where higher values reflect stronger institutional performance, and lower values reflect weak governance.	(Victoria Agbakwuru et al., 2024; World Bank, 2025)
Regulatory Quality (RQ)	Measures the government's ability to design and implement sound, market-friendly regulations.	Independent	Continuous scale from -2.5 to +2.5, where higher scores denote effective regulatory frameworks, and lower scores indicate weak or inconsistent regulations.	(Mariani et al., 2022; World Bank, 2025)
Rule of Law (RL)	Evaluates the effectiveness of legal frameworks, enforcement of contracts, and	Independent	Continuous scale from -2.5 to +2.5, where higher values indicate stronger rule of law, and lower values indicate weak legal	(Vuppuluri, 2025; World Bank, 2025)

	independence of the judiciary.		enforcement and low judicial independence.	
Control of Corruption (CC)	Captures perceptions of the misuse of public power for private gain.	Independent	Continuous scale from -2.5 to +2.5, where higher values indicate lower corruption, and lower values indicate higher corruption.	(Alao, 2025; World Bank, 2025)
Firm Size (FSIZE)	Measures the scale of the firm, reflecting its resources and market influence.	Control	Natural logarithm of total assets	(Mariani et al., 2022; Victoria Agbakwuru et al., 2024)
Board Independence (BINDP)	Captures the proportion of independent directors on the company's board.	Control	Percentage of independent directors on the board	(Victoria Agbakwuru et al., 2024; Vuppuluri, 2025)
Profitability (FPROF)	Reflects the firm's financial performance.	Control	Return on Assets (ROA), calculated as net income divided by total assets.	(Abdeljawad et al., 2025; Raed Abdelhaq et al., 2025; Salem et al., 2025)
Leverage (FLEV)	Measures the financial risk and capital structure of the firm.	Control	Ratio of total debt to total assets.	(Abdeljawad et al., 2025; Raed Abdelhaq et al., 2025; Salem et al., 2025)
CSR Committee (CSR_COM)	Indicates the presence of a committee responsible for corporate social responsibility activities.	Control	Dummy variable: 1 = CSR committee exists; 0 = otherwise.	(Erbetta & Abrate, 2025)
GDP per capita (GDPC)	Represents the economic development level of the country.	Control	Natural logarithm of GDP per capita	(Lepenies et al., 2023; Sanz-Torro et al., 2025)

Source: Constructed by Researcher

Appendix (H)

Certificate of acceptance of the research extracted from the dissertation

Research title: The Relationship Between National Governance and Sustainable Development Goals Reporting: Evidence from Europe

جامعة النجاح الوطنية
كلية الدراسات العليا

العلاقة بين الحوكمة الوطنية والإبلاغ عن أهداف التنمية المستدامة: أدلة من أوروبا

إعداد
عمار زكريا عبد الله سالم

إشراف
أ. د. عبد الناصر نور
د. معز عليا

قدمت هذه الأطروحة استكمالاً لمتطلبات الحصول على درجة الدكتوراه في المحاسبة،
بكلية الدراسات العليا في جامعة النجاح الوطنية في نابلس – فلسطين.

2026

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الملخص

تتناول هذه الدراسة أثر الحوكمة الوطنية على مستوى الإفصاح عن أهداف التنمية المستدامة لدى 1650 شركة غير مالية مدرجة في 21 دولة ضمن الاتحاد الأوروبي، وذلك خلال الفترة من 2019 إلى 2024، بإجمالي 9900 مشاهدة على مستوى الشركات والسنوات. تستخدم هذه الدراسة البحث الكمي من خلال تحليل الانحدار ذي التأثيرات الثابتة لدراسة أثر الحوكمة الوطنية على الإبلاغ عن أهداف التنمية المستدامة في الشركات الأوروبية. تم استخلاص المعلومات المالية من قاعدة بيانات Refinitiv Eikon، بينما تم الحصول على بيانات الحوكمة من مؤشرات الحوكمة العالمية (WGI). وتم ضبط النتائج وفقًا لستة أبعاد للحوكمة ومتغيرات هامة على مستوى الشركات وعلى مستوى الاقتصاد الكلي.

وفقًا للنتائج التجريبية، تؤثر محددات الحوكمة الوطنية بشكلٍ متفاوت على الإبلاغ عن أهداف التنمية المستدامة في الشركات الأوروبية. أولًا، يرتبط كلٌ من حرية التعبير والمساءلة، والاستقرار السياسي، وسيادة القانون ارتباطًا إيجابيًا بالإبلاغ عن أهداف التنمية المستدامة، ويمكن تفسير ذلك من خلال تأثير عوامل مثل الشفافية والاستقرار والقوة القانونية على استعداد الشركات لتقديم معلومات تتعلق بأهداف التنمية المستدامة. ثانيًا، وُجدت علاقات سلبية بين جودة التنظيم والإبلاغ عن أهداف التنمية المستدامة، وكذلك بين مكافحة الفساد والإبلاغ عن أهداف التنمية المستدامة، مما يؤكد فرضية الاستبدال. أخيرًا، لا توجد علاقة ذات دلالة إحصائية بين فعالية الحكومة والإبلاغ عن أهداف التنمية المستدامة. أما فيما

يتعلق بعوامل الرقابة، فقد وُجدت علاقات إيجابية مع الإبلاغ عن أهداف التنمية المستدامة فيما يخص حجم الشركة، وربحيتها، ولجان المسؤولية الاجتماعية للشركات.

يساهم هذا البحث في إثراء المعرفة الحالية من خلال تقديم دراسة معمقة لأبعاد الحوكمة الوطنية وتأثيراتها المتنوعة على الإبلاغ الطوعي عن أهداف التنمية المستدامة من قبل الشركات العاملة في أوروبا. وعلى صعيد السياسات، يشير البحث إلى أن تعزيز الديمقراطية وتحسين الاستقرار السياسي من شأنهما تحسين الإفصاح عن التنمية المستدامة. في المقابل، قد يؤدي وجود بيئة تنظيمية متطورة إلى تثبيط الإفصاح الطوعي من قبل المنظمات، مما يستلزم دراسة متأنية عند تطبيق السياسات بموجب توجيهات مثل توجيه المسؤولية الاجتماعية للشركات.

الكلمات المفتاحية: الحوكمة الوطنية، إعداد التقارير المتعلقة بأهداف التنمية المستدامة، الاتحاد الأوروبي، مؤشرات الحوكمة العالمية، إعداد التقارير المتعلقة بالاستدامة.