



The Sustainable Development Goals and Large Spanish Companies: An analysis of their commitment based on their Non-Financial Reporting

Los Objetivos de Desarrollo Sostenible y las Grandes Empresas Españolas: Un análisis de su Compromiso a partir de su Reporte No Financiero

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ABSTRACT

This paper aims to analyse the level of commitment with the SDGs of large Spanish companies based on the information published in their Non-Financial Statements and their letters from the chairman. To achieve this objective and identify potential explanatory factors, a balanced sample of 58 Spanish companies, 29 listed and 29 unlisted, in 2019 has been used. The results of this study evidence: i) the greater commitment with the SDGs of companies which are exposed in the stock markets and those which are larger; ii) the relevance of the diversity into the boards of directors, in order to integrate the largest and the widest number of interests as well as those values and principles which are intrinsically associated to women directors; and iii) the greater emphasis on those SDGs related to well-known issues by these organizations, thanks to their greater experience in non-financial reporting, publishing documents such as corporate social responsibility or sustainability reports.

Keywords: Sustainable Development Goals, Agenda 2030, Non-Financial Reporting, Spain.

RESUMEN

El presente trabajo tiene como principal objetivo evaluar el nivel de compromiso con los Objetivos de Desarrollo Sostenible (ODS) de las grandes empresas españolas a partir de la información contenida en sus Estados de Información No Financiera (EINF) y las cartas de sus presidentes e identificar los posibles factores explicativos asociados a la propia organización. Para ello se ha contado con una muestra equilibrada de 58 compañías españolas, 29 cotizadas y 29 no cotizadas, en el ejercicio 2019. Los resultados obtenidos ponen de relieve: i) la mayor preocupación que despiertan los ODS entre las empresas expuestas en los mercados bursátiles y aquellas que son de mayor tamaño; ii) la importancia de contar con consejos de administración diversos, que integren el mayor número de intereses posibles así como aquellos valores y principios que se atribuyen de forma intrínseca a las mujeres; y iii) el mayor énfasis en aquellos ODS relacionados con aquellas temáticas ya conocidas por este tipo de organizaciones, gracias a su mayor experiencia en el reporting no financiero, publicando documentos como los informes de responsabilidad social corporativa o las memorias de sostenibilidad.

Palabras clave: Objetivos de Desarrollo Sostenible, Agenda 2030, Estados de Información No Financiera, España.

1. INTRODUCTION

In a globalized world, companies' disclosures of social and environmental issues have become increasingly relevant in response to stakeholder demands to reinforce their corporate legitimacy (Grueso-Gala & Zornoza, 2022; Tyson & Adams, 2020). Annual reporting of social and environmental disclosures has become a widespread institutional practice among the world's largest companies (Farooq & De Villiers, 2019; Higgins *et al.*, 2018). In this regard, the Global Reporting Initiative (GRI) guidelines have contributed to this institutionalisation process, as well as improving the quality and comparability of sustainability information (Vinnari & Laine, 2013).

However, there is still a long way to reach a sustainable society. The high impact that human activity is having on our planet has led to a rapid transition from the Holocene to a new geological era, the Anthropocene, where the demand for natural resources, energy and water has increased dramatically (Bebbington *et al.*, 2020). This, together with concerns about global warming, social inequalities and waste generation, reinforces the discourse of sustainability as a challenge for present and future generations (Bebbington & Unerman, 2018). At the corporate level, recent accounting and financial scandals have resulted in a considerable decrease in trust and credibility for companies. This social challenge requires being addressed by companies and the alignment with the achievement of social and environmental principles is a crucial component (Dumay & Guthrie, 2017).

In response to the above concerns, the 193 member states of the United Nations General Assembly agreed at the end of 2015 on sustainability-related targets, establishing the 2030 Agenda for Sustainable Development. This Agenda comprises the 17 Sustainable Development Goals (SDGs) and represents a shared commitment by all nations to combat poverty, inequality, injustice, and to safeguard the planet. It aims to address global issues by protecting the environment, advancing sustainability, eradicating poverty and inequality, and guaranteeing peace and prosperity for all. United Nations members must collaborate towards these objectives, while it also encourages businesses to contribute towards their attainment. In this regard, organisations are expected to have a crucial role in the accomplishment of the SDGs, as stated in the 2030 Agenda (Rosati & Faria, 2019a, 2019b), and they are encouraged to adopt sustainable initiatives and practices, as well as to integrate sustainability data in their reports addressed to internal and external users (Grueso-Gala & Zornoza, 2022).

On the other hand, recent global events, such as the COVID-19 pandemic and the conflict in Ukraine, have intensified the food, energy and humanitarian crises, even more so when analysed in the context of a developing climate emergency, which is why the expectations set for the achievement of the SDGs in the 2030 Agenda are at risk, as indicated by the United Nations in its latest report (United Nations, 2022).

All the aforementioned arguments reinforce the importance of analysing how enterprises can contribute to the achievement of the SDGs, especially from an accounting approach. In this sense, accounting is conceived as a technical, societal, and ethical endeavour combined with a general concern for shaping a better world tomorrow (Carnegie *et al.*, 2021). In this context, the achievement of the SDGs supposes an opportunity for organisations to integrate their

social, environmental and economic impacts into their accounting and management systems, as a means of managing and disclosing them (Bebbington & Unerman, 2020). This raises the question of how accounting can help organisations contribute to the 2030 Agenda. Achieving a sustainable future beyond the SDGs implies that accounting must measure and disclose its contributions to sustainable development as clearly as possible (Hummel & Szekely, 2021). Ultimately, the emergence of the 2030 Agenda for Sustainable Development in 2015 has increased the pressure on companies to disclose information on their compliance with the SDGs and is seen as a fundamental part of a company's disclosure strategy (PwC, 2018).

As noted by Bebbington & Unerman (2020), accounting researchers have been slow to show interest in research related to the achievement of the SDGs, suggesting that there is a low level of development of empirical evidence from the accounting discipline (Bebbington & Unerman, 2018; Powell & McGuigan, 2022). Based on these motivations, the main objective of this paper is to assess the level of commitment to the SDGs of large Spanish companies, using the information published in their non-financial information statements (NFISs) and their chairpersons' letters, and to identify possible explanatory factors associated with the organisation characteristics. For this purpose, this research was conducted using the data for 2019 of 58 Spanish-listed and unlisted companies. Spain is of particular interest because it is one of the Western countries with the longest tradition of organisations' commitment to social and environmental disclosures (Reverte, 2015). It is well-known that it has a long tradition of regulating annual sustainability reporting (Luque-Vílchez & Larrinaga, 2016).

The results emphasise the greater concern for SDGs among companies with higher exposure to the stock markets and the significance of diverse boards that integrate varied interests and values, including those that are intrinsically attributed to women. Additionally, companies prioritise SDGs related to areas they are familiar with based on their previous experience in sustainable reporting.

The paper is organised as follows. In the following section, we provide an overview of the institutional framework for social and environmental disclosure. Subsequently, we discuss the theoretical background before presenting our hypothesis statement. Then, there is a description of the sample and methodology used, together with the findings. The paper then concludes with a discussion and conclusions section.

2. INSTITUTIONAL FRAMEWORK FOR THE DISCLOSURE OF SOCIAL AND ENVIRONMENTAL INFORMATION

In recent years, the transparency of sustainability information has emerged as a significant aspect of the European Union's policy, spanning from 2006 to 2011 (Krasodomska *et al.*, 2020). In 2011, the European Commission endorsed the Corporate Social Responsibility (CSR) strategy for the period 2011-2014, marking the catalyst for the European debate on sustainability reporting regulations (Reverte, 2015).

After multiple endeavours to enhance relevance, transparency, and comparability of non-financial information disclosure by companies within the European Union (EU), the European Parliament devised and implemented Directive 2014/95 on Non-Financial In-

formation and Diversity. This directive aims to shape how large enterprises disclose information about the sustainability of their policies and the impact on businesses using non-financial information. Similarly, this regulation aimed to rebuild trust with investors and consumers in businesses (La Torre *et al.*, 2020) and enhance transparency and corporate responsibility. Therefore, it represents a significant regulatory measure to harmonize non-financial information practices across all European member states (La Torre *et al.*, 2018). Moreover, recently, European entities such as the European Financial Reporting Advisory Group (EFRAG) have been working on designing standards to enhance sustainability information disclosure. The European Union itself has recently issued a new proposal for a European Directive on Sustainability Reporting, which introduces more detailed information requirements and extends the scope of these requirements to all large companies and publicly traded firms (Cinquini & De Luca, 2022).

Similarly, in recent years, we have witnessed a growing process of standardization and harmonization of various frameworks for sustainability reporting (Adams & Abhayawansa, 2021). In this regard, the International Financial Reporting Standards (IFRS) has set up the International Sustainability Standards Board (ISSB) to work globally towards a comprehensive standard for sustainability information disclosure in capital markets (IFRS, 2023). Specifically, the ISSB is committed to developing the Sustainability Accounting Standards Board.

Following the EU policies, Spain enacted the Law 2/2011 on Sustainable Economy, which required public limited companies with more than 1,000 employees to annually prepare a corporate social responsibility report based on internationally accepted standards. This report had to be communicated to the State Council of Corporate Social Responsibility (Larrinaga *et al.*, 2018). Recently, the Spanish Government approved Law 11/2018 on non-financial information as the transposition of EU Directive 2014/95 (Garcia-Torea *et al.*, 2019). This law sets forth certain requirements for large companies and/or public interest entities, such as the disclosure of social and environmental information in a non-financial statement (Esteban-Arrea & Garcia-Torea, 2022). Specifically, this law applies to “public limited companies, limited liability companies, and companies limited by shares, which, simultaneously, are considered public interest entities¹ and have an average number of employees exceeding 500 during the fiscal year. Additionally, they are considered large companies, as defined by Directive 2013/34, meaning

¹ According to Royal Decree 877/2015, the following are considered public interest entities:

a) Credit institutions, insurance companies, and entities issuing securities traded on official secondary securities markets or the alternative stock market segment for expanding companies. b) Investment service companies and collective investment institutions that, for two consecutive fiscal years, have a minimum of 5,000 clients in the first case, or 5,000 participants or shareholders in the second case, along with the management companies that administer these institutions. c) Pension funds that, for two consecutive fiscal years, have a minimum of 10,000 participants, and the management companies that administer these funds. d) Banking foundations, payment institutions, and electronic money institutions. e) Entities other than those mentioned in the previous paragraphs, which, for two consecutive fiscal years, have a net turnover exceeding 2,000,000,000 euros and an average workforce of more than 4,000 employees. f) Groups of companies where the parent company is one of the entities mentioned in the previous points.

their net turnover, total assets, and average number of employees determine their qualification in this regard” (Law 2018). Additionally, in 2021, the scope of application is extended to include public interest entities, entities that prepare consolidated annual accounts with an average workforce of more than 250 employees, and organizations that meet one of the following requirements: the company’s total assets exceed 20,000,000 euros, and its net turnover is greater than 40,000,000 euros. However, companies will cease to be obligated to submit the NFIS if they fail to meet any of the requirements for two consecutive fiscal years.

Regarding the content required for this NFIS, the law indicates that it must include information related to, in the first place, the description of the group’s business model, including its business environment, organization and structure, markets of operation, objectives and strategies, and key factors and trends that may impact its future evolution. In second place, about the policies applied by the group regarding these matters, including due diligence procedures for identifying, assessing, preventing, and mitigating significant risks and impacts, as well as verification and control measures, along with the actions taken. Third, on the results of those policies, incorporating key non-financial performance indicators. Fourthly, on the main risks related to these issues, linked to the group’s activities. And finally, about key non-financial performance indicators specific to the business activity, meeting criteria of comparability, materiality, relevance, and reliability. In addition to the above information, the NFIS should include the following: 1) Information about environmental matters, considering the potential effects of the company’s activities on the environment, and indicating the entity’s measures for risk prevention and environmental safeguards. 2) Information on social and personnel-related matters, utilizing various indicators, including gender distribution. 3) Information on respect for human rights, explaining the company’s policy on this matter. 4) Information concerning efforts to combat corruption and bribery. 5) Information about the company’s impact on society.

On the other hand, the adoption of the United Nations’ 17 Sustainable Development Goals (SDGs) is further evidence that sustainability information disclosure is increasing on a global scale (Niemann & Hoppe, 2018). Specifically, Target 12.6, within SDG 12 - Responsible Consumption and Production, calls for an increase in sustainability reporting by various types of organizations. In line with this, the United Nations Global Compact (UNGC) and the Global Reporting Initiative (GRI) launched a document on the joint reporting of the SDGs (GRI, 2018; UNGC, 2018) and issued several guidelines for incorporating the SDGs into reports (UNGC, 2018). This information is relevant since, as indicated by GRI (2018), preparing sustainability reports can facilitate the measurement, understanding, and communication of companies’ performance in relation to the SDGs, aid in setting internal goals, and manage the transition towards more sustainable development. Additionally, the United Nations has developed its own SDG Impact Standards, serving as a guide to help organizations disclose information about their contribution to sustainable development and the SDGs (SDG Impact, 2021a), although there is no common guidance on its implementation (Sachs *et al.*, 2019).

In this context, the establishment of the 2030 Agenda for Sustainable Development necessitates the disclosure of non-financial information related to the set goals of the SDGs. Specifically, the transposition of Directive 2014/95/EU into the Spanish context

provides an excellent opportunity to examine the various strategies adopted by Spanish companies regarding their commitment to sustainability and the achievement of the SDGs. This, in turn, creates the opportunity and necessity to analyse to what extent the SDGs are being disclosed in the NFISs of Spanish companies.

3. THEORETICAL FRAMEWORK

3.1. Literature review

After the approval of the 17 SDGs by the United Nations General Assembly, some researchers have pointed out that including information about the achievement of the SDGs can be a significant step for a company to enhance the information disclosed in its sustainability reports (Sierra-García *et al.*, 2022). It becomes a strategic decision for the company, emphasizing its willingness to address these objectives, as companies need to take sustainable actions and report them to demonstrate how they address stakeholders' concerns (Grueso-Gala & Zornoza, 2022). Meanwhile, sustainability reports can assist organizations in understanding, communicating, and better managing their contributions to the SDGs.

In this regard, according to a report by KPMG, 69% of N100 companies and 72% of G250 companies disclosed information about their business activities in relation to the SDGs in their non-financial information reports in 2020 (KPMG, 2020). Similarly, 56% of N100 companies and 51% of G250 companies revealed information related to the SDGs. However, there are differences both in the number of SDGs included in the reports and in the prioritization of specific SDGs for disclosure by companies (Nichita *et al.*, 2020; Polo-Garrido *et al.*, 2022; PwC, 2019).

Despite the increase in the level of disclosure of the SDGs by companies, the publication of the 2030 Agenda has not had the expected impact initially. Referring to the work of Bebbington & Unerman (2020), researchers in the accounting field have been slower in producing academic work related to the achievement of the SDGs compared to other social disciplines. This is despite the clear connection between SDG 12 and accounting (Nieman & Hoppe, 2018). An analysis of the literature reveals that, for example, in Greece, no significant changes were detected in the content or structure of sustainability reports (Tsalis *et al.*, 2020). In Portugal, it was observed that communication of the SDGs by companies is more likely when the organization has a higher turnover and discloses sustainability reports (Fonseca & Carvalho, 2019). On the other hand, in the study by Nichita *et al.* (2020) on a sample of large chemical companies in Central Europe, 63% of the analysed reports did not clearly mention the SDGs and showed differences in structure and length. Lastly, in a study conducted on a sample of European companies listed on the STOXX Europe 600 Index, it was revealed that the majority of the presented annual reports did not provide sufficient information related to the SDGs (Hummel & Szekely, 2022). Similar evidence can be found in the work of Erin *et al.* (2022), where it is demonstrated that Nigerian companies have so far shown poor performance in corporate reporting on the SDGs.

In this regard, Botchway *et al.* (2023) argue that incompatibility and complexity could be possible reasons for these low levels of disclosure of information about the SDGs. Additionally, there is

also some concern about the credibility of organizations in being accountable and overseeing their governance due to the lack of assurance and limited scope of assurance engagements (Adams *et al.*, 2020). Conducting independent assurance of the information contained in the NIFS is an essential tool to build trust and increase the credibility of the disclosed information (Simnett *et al.*, 2009), as according to Sierra-García *et al.* (2022), assurance reduces scepticism about information related to the SDGs.

Hence, the relevance of this study lies in analysing the impact of SDG disclosure in the Spanish context, as despite the importance and relevance of this topic, very few research studies have examined the commitment to SDGs among large Spanish companies and how various variables can influence such behaviour.

3.2. Explanatory theories and hypotheses

Most previous studies on the variables affecting corporate behaviour in terms of sustainability information disclosure are grounded in various theories, such as legitimacy theory, stakeholder theory, and institutional theory (De Villiers & Van Staden, 2011). In this regard, there is no consensus on the use of one specific theory or a combination of these theories (Cho *et al.*, 2015; De Klerk & de Villiers, 2012). Thus, García-Benau *et al.* (2022) indicate that the strategy adopted by companies regarding sustainability issues could fall under either the legitimacy theory or the stakeholder theory approach. However, Ali *et al.* (2017), in a literature review on the determinants of sustainability disclosure, indicate that there is no generally accepted theory in this regard, and therefore, a singular approach should not be employed (Cormier *et al.* 2005; Reverte, 2009). The reason is that the practice of disclosing social and environmental information is highly complex and requires the use of different theoretical arguments to explain how organizations behave in this regard (Owen, 2008). In line with the above, the present study is based on legitimacy and stakeholder theories to examine whether the disclosure of information about the SDGs by Spanish companies depends on different variables.

According to legitimacy theory, companies are bound by a "social contract" wherein they agree to undertake various socially desirable and beneficial actions for the environment and society in exchange for approval of their objectives and other rewards, ensuring their survival (Castelo & Lima, 2008; De Klerk *et al.*, 2015). From an information disclosure perspective, companies prepare annual sustainability reports to legitimize their actions before society, as the need to improve their reputation and image (Brammer & Pavelin, 2008; Reverte, 2009). Several studies have found that environmentally sensitive companies or larger firms, due to their higher visibility and exposure to public opinion, have greater incentives to disclose social and environmental information as a strategy for social legitimacy (Cormier & Gordon, 2001; Deegan, 2002). Likewise, the disclosure of the SDGs is related to increased pressure on companies from external stakeholders and can be relevant for attracting responsible investments (Gugler, 2015) and enhancing corporate reputation (Li *et al.*, 2010). According to Rosati and Faria (2019a, 2019b), the disclosure of social and environmental commitments by companies can enhance the achievement of the SDGs as reflected in sustainability reports and reinforce their corporate legitimacy.

On the other hand, stakeholder theory posits that companies are part of a social system that extends beyond their own activities,

where their actions affect and are affected by other stakeholders within society (Deegan, 2002; Freeman, 1984). From this perspective, it has been argued that disclosing social and environmental information helps foster an equitable relationship between the company and its stakeholders by addressing the demands and needs of various users of accounting information (Coombs & Holladay, 2012; Da Silva & Aibar-Guzmán, 2010). According to this theory, companies from different sectors disclose sustainability information in line with the expectations of their key stakeholders (Reverte, 2009; Sweeney & Coughlan, 2008). Thus, it is expected that companies operating in sectors with lower environmental impact may face less pressure regarding their environmental performance, leading to a lower degree of disclosure of social and environmental information (Reverte, 2009). Similarly, companies in certain sectors with a significant impact on the environment tend to exhibit a higher degree of disclosure and secure their sustainability reports due to pressure from their key stakeholders (Martínez-Ferrero & García-Sánchez, 2017).

Built upon the aforementioned theories, we aim to test several hypotheses to analyse whether the level of commitment to the disclosure of information about the SDGs depends on a set of explanatory factors.

Firstly, we will examine whether organizational variables, such as stock market listing, size, and sector, are related to the commitment of companies towards achieving the SDGs. Drawing upon stakeholder theory, which emphasizes the ethical behaviour of companies towards various stakeholders in their environment, it is logical to assume that as the interest in a company increases, it should strive to perform better in meeting the needs of these stakeholders (Reverte, 2009).

Publicly listed companies hold greater interest for society than non-listed companies, which should make them more involved in the SDGs and their disclosure. In this regard, there is a higher level of engagement with the SDGs observed among publicly listed companies, although it is still not sufficient (Castiñeira *et al.*, 2020). Durán & Gil (2020) highlight the growing importance of sustainability indices such as those in the Dow Jones for Spanish listed companies, as having a high sustainability index becomes increasingly important for attracting new investors. The number of companies providing more information in their sustainability reports is also on the rise (Oteo, 2015). This is due to a greater demand for knowledge from the markets towards companies and their behaviour (Reverte, 2009), especially for those companies listed on the stock market or secondary markets, as they are more exposed to public opinion than non-listed companies. In fact, there is a high awareness of the SDGs among listed companies in the Italian market (Izzo *et al.*, 2020). Transparency in sustainability reports, company websites, and social media platforms instils greater confidence in investors (García-Benau *et al.*, 2022). Thus, based on legitimacy theory, publicly listed companies are more exposed to the public and, due to reputation concerns, are under greater pressure to commit to achieving the SDGs.

Regarding company size, we must analyse whether larger companies show greater interest in engaging with the SDGs. In the context of disclosing social and environmental information, most academic literature has found a positive association between organization size and their commitment to disclosure practices, as larger companies are more visible to the public, making them

organizations exposed to society, and they typically have a larger number of stakeholders to satisfy (Gamerschlag *et al.*, 2011; Tagesson *et al.*, 2009). Campo *et al.* (2020) observed that company size influences their involvement in achieving the SDGs. Similarly, Fonseca & Carvalho (2019) concluded that companies with a larger turnover are more likely to communicate information about the SDGs. Therefore, based on legitimacy and stakeholder theories, larger companies exhibit higher levels of commitment to disclosing information about the SDGs.

Lastly, the sector in which companies operate can influence their involvement in achieving the SDGs (Young & Marais, 2012). Numerous studies have found that companies belonging to environmentally sensitive sectors are more inclined to disclose information on sustainability issues (Brammer & Pavelin, 2008; Gamerschlag *et al.*, 2011; Morhardt, 2010). Following legitimacy theory, these companies are more exposed to public scrutiny, and their behaviour is closely examined by society. As a result, they may feel pressured to disclose information about the SDGs as a strategy to legitimize their actions before society, and thereby enhance their reputation and image (Da Silva & Aibar-Guzmán, 2010; Morhardt, 2010).

Based on the previous arguments, our first hypothesis is:

H1: Organizational characteristics are correlated with the achievement of the SDGs.

Secondly, certain variables related to audit and assurance reports may influence companies' behaviour in disclosing information about the SDGs. Based on legitimacy theory, companies that are required to present an audit report, which can improve the quality and credibility of the information provided, will be more exposed to stakeholder opinions and therefore more likely to disclose information about the SDGs. On the other hand, the assurance process involves an independent, objective, and rigorous review of the procedures and controls used to collect, measure, and report the disclosed information, which increases credibility and confidence in sustainability reports. Moreover, such assurance is often carried out using internationally recognized standards and criteria, providing a framework and reference for disclosure and ensuring that certain requirements and quality criteria are met. Therefore, companies that consider sustainability as a strategic issue and face higher stakeholder pressures are more likely to assure their sustainability reports (Kolk & Perego, 2010). Thus, companies that ensure their reports enhance, on one hand, the credibility of non-financial information (Fernandez-Feijóo *et al.*, 2015) as incurring the costs associated with assurance highlights their commitment to providing high-quality information (Simnett *et al.*, 2009) and, on the other hand, credibility towards stakeholders (Hodge *et al.*, 2009; O'Dwyer & Owen, 2005). In fact, some studies indicate that external verification is positively and significantly associated with the SDGs (Rosati & Faria, 2019b; van der Waal & Thijssens, 2020). Likewise, the type of company chosen as an auditor or assurer for the audit and assurance process can be seen as a sign of legitimacy for a company and its commitment to sustainability reporting (Schaltegger & Wagner, 2011), reflecting its strategic orientation towards the SDGs (Rosati & Faria, 2019b). In the audit and assurance industry, the Big Four have an established reputation, and their presence as assurers of sustainability reports can increase their credibility, as their experience and expertise in

auditing and compliance can provide greater confidence in the quality and independence of the disclosed information (García-Sánchez *et al.*, 2019). The literature indicates that commitment to the SDGs is related to the assurance firm being a Big Four (Sierra *et al.*, 2022) and that the quality of reports is significantly higher when the assurers are auditors (Fernandez-Feijóo *et al.*, 2012; Romero *et al.*, 2010; Zorio *et al.*, 2013) due to their independence and high level of expertise (Velte & Stawinoga, 2017).

Therefore, based on the above, the second hypothesis we propose is:

H2: Variables related to audit and assurance are correlated with the achievement of the SDGs.

Thirdly, we will examine whether corporate governance characteristics influence the orientation towards the SDGs by companies. In this regard, the Board of Directors is responsible for developing the organization's strategy, which includes sustainability issues (Jizi, 2017), so the size and composition of the Board may influence its decisions on sustainability (Cucari *et al.*, 2018). Regarding size, some studies suggest that a larger size may be associated with greater inefficiency, as it could increase the difficulty of reaching consensus when making disclosure decisions, especially in the case of voluntary disclosure (Brown *et al.*, 2006; Daily *et al.*, 2003). However, other studies suggest the opposite relationship; a larger size may introduce greater diversity of perspectives and knowledge, which can foster more transparency and information disclosure. Additionally, it may imply greater oversight and control of management, leading to increased accountability and disclosure of non-financial practices, such as those related to the environment, social responsibility, and governance (Ballesteros *et al.*, 2015; Mintzberg, 1993; Pearce & Zahra, 1992). On the other hand, gender diversity on the board, in terms of the proportion of women, is considered a key factor in increasing disclosure levels (Fernandez-Feijóo *et al.*, 2012; Fernandez-Feijóo *et al.*, 2014; Qureshi *et al.*, 2020; Srinidhi *et al.*, 2011), as the presence of female directors provides a diverse set of skills, competencies, professional experiences, leadership styles, knowledge, and opinions. In this way, women influence the commitment of companies towards adopting environmentally and socially responsible behaviours, resulting in higher levels of disclosure for the benefit of various corporate stakeholders (Fernandez *et al.*, 2019; Nicolo *et al.*, 2021). In fact, the findings obtained by Rosati and Faria (2019a) suggest a positive, albeit weakly significant, relationship between SDG reporting and the percentage of women on the board. Therefore, our third hypothesis is:

H3: Variables on corporate governance are correlated with the achievement of the SDGs.

4. SAMPLE AND METHOD

To contrast the orientation towards the 2030 Agenda and the SDGs of large Spanish companies based on the analysis of their NFISs and the letters from their CEOs, it was decided to use a balanced sample comprising 58 of the largest Spanish companies, 29 listed and 29 unlisted, forced to publish a NFIS by Law 11/2018. The reason for drawing a balanced final sample, composed of an equal number of listed and unlisted companies, was to avoid any sampling bias in conducting a survey selecting the largest firms of Spain, as these would inevitably be list-

ed companies. Thus, on the one hand, 29 of the 35 companies comprising the Spanish IBEX-35 stock market index were selected, excluding financial and insurance companies. On the other hand, the unlisted companies were selected from the Sistema de Análisis de Balances Ibéricos (SABI) database. From an initial subsample of 184 unlisted firms with more than 500 employees, the 29 largest ones by number of employees with a NFIS among their individual annual statements were selected.

The final sample, made up of 58 Spanish companies, consisted of 4 companies dedicated to construction, 6 to energy, 9 to technology and communications, 14 to industrial activity, 17 to services and 8 to other activities. In relation to their size, although all were large companies in terms of the number of employees, there is great diversity in this respect, with companies with more than 190,000 employees, such as the listed ACS, to companies with less than 170, such as the also listed Merlin Properties.

For the 58 companies, the NFISs and the chairperson's letters for 2019 were obtained from their websites, SABI or from the website of the Spanish National Securities Market Commission. The analysis of the letters is due to these documents constituting a reflection of the organisational culture that top management intends to communicate (Mäkelä & Laine, 2011). Through these letters or first words addressed to readers by a company's CEO, organisations show how they strategically approach sustainability and their current concerns (Palmer *et al.*, 2004).

Following the recommendations of Neuendorf (2002), a content analysis was applied to assess the companies' orientation towards the 2030 Agenda and the SDGs. As such, a coding guide of 18 items was designed, assigning a value of one or zero depending on whether the company reported information on each item or not. Specifically, there was one item to assess whether the company made any kind of global reference to the terms "Agenda 2030", "SDGs" or "sustainable development goals"; and seventeen other items to check whether the documents made specific references to any of the 17 SDGs, either by stating the number of the SDG referred to or by referring to its topic (for instance, the reference to SDG 1 can be found on page 9 of the NFIS by Mercadona S. A., which reads as follows: "Work towards ending poverty by engaging in partnerships with initiatives and organizations striving to reduce poverty levels within the most marginalized populations"). To guarantee the reliability of scores during the codification process, each document was analysed by two of the researchers and only in the case of discrepancies a third author participated.

With 116 documents (58 NFISs and 58 letters) analysed and coded using binary values, two indices were designed, one for each type of document, to assess the orientation of companies towards the 2030 Agenda and the SDGs and to compare statistical associations with the organisational characteristics studied. These two indices were calculated as the ratio between the total score of the 18 items assessed for each company in its NFIS (or in its letter) and the highest attainable score of eighteen. Statistical association analyses were performed with the software SPSS. Once the non-normality of the variables had been confirmed using the Kolmogorov Smirnov statistic, the non-parametric Mann-Whitney test was used, recommended for the study of association with categorical variables of 2 categories in small samples, or the Spearman Coefficient test for the analysis of correlation with quantitative variables.

The variables identified as potential explanatory factors for greater orientation towards sustainable development were:

- a) Industry sensitivity. Dichotomous variable coded with 1 when the company carries out an activity classified as sensitive (see *Miras-Rodríguez et al., 2019* or *Sierra et al., 2022*).
- b) List. Dichotomous variable coded 1 if the company is listed, 0 otherwise.
- c) Auditor opinion. Variable with four categories according to whether the opinion was favourable, qualified, unfavourable or refused.
- d) Auditor Big4. Dichotomous variable coded 1 when the financial statements had been audited by a Big4, 0 otherwise.
- e) Assurance provider Big4. Dichotomous variable coded 1 when the NFIS had been verified by a Big4, 0 otherwise.
- f) Auditor = Assurance provider. Dichotomous variable coded 1 when the auditor and verifier matched, 0 otherwise.
- g) Size. Measured by total assets, number of employees and turnover.
- h) ROA. As the quotient, as a percentage, of ordinary profit before tax and total assets.
- i) Debt Ratio. As the ratio of liabilities to total equity and total liabilities.
- j) Board Size. The number of directors on the board of directors.
- k) Board Gender. Percentage of female directors on the board.

The necessary information for each variable, or its coding, was collected directly from the SABI database (a, b, g, h and i), the audit report (c and d) or from the NFIS (e, j and k). In some cases, the annual statements and management reports were also consulted.

5. RESULTS

The analysis of the orientation of large companies towards the 2030 Agenda and the SDGs shown in Table 1 reveals that three out of four companies (75.86%) made some reference to the SDGs. However, only 33 out of 58 chosen companies have emphasized one or more of the 17 SDGs. Of the two documents analysed, it is evident that the chairperson's letter contains predominantly general references to the 2030 Agenda, with only 32.76% of the presidents expressing some concern about these issues in their discourses.

Table 1
Analysis of the SDG Orientation of the Largest Spanish Companies

Specific references to...	In 2019 Non-Financial Information Statement		In 2019 Letter from the Chairperson	
	N. Companies of the sample	%Companies over the total sample	N. Companies of the sample	%Companies over the total sample
“SDG” or “Agenda 2030”	44	75.86	19	32.76
SDG 1	13	22.41	0	0.00
SDG 2	11	18.97	0	0.00
SDG 3	23	39.66	0	0.00
SDG 4	24	41.38	0	0.00
SDG 5	22	37.93	1	1.72
SDG 6	16	27.59	1	1.72
SDG 7	19	32.76	2	3.45
SDG 8	28	48.28	2	3.45
SDG 9	24	41.38	0	0.00
SDG 10	17	29.31	0	0.00
SDG 11	22	37.93	0	0.00
SDG 12	23	39.66	0	0.00
SDG 13	25	43.10	2	3.45
SDG 14	12	20.69	0	0.00
SDG 15	10	17.24	0	0.00
SDG 16	17	29.31	0	0.00
SDG 17	23	39.66	0	0.00
Companies WITH any reference (global or specific) to SDGs in their 2019 Non-Financial Information Statements or in their Chairperson's Letter.			44	(75.86%)
Companies WITH specific reference to any of the 17 SDGs in their 2019 Non-Financial Information Statements or in their Chairperson's Letter.			33	(56.90%)
Companies WITH specific reference to any of the 17 SDGs in their 2019 Non-Financial Information Statements.			33	(56.90%)
Companies WITH specific reference to any of the 17 SDGs in their 2019 Chairperson's Letter.			4	(6.90%)

Source: Own elaboration.

Most Spanish companies have chosen to include the necessary information on their SDG performance in their NFISs, and 75% of them (33 out of 44) specifically address at least one of the goals in depth. The companies most commonly referenced SDG8 (Decent Work and Economic Growth), SDG13 (Climate Action), SDG9 (Industry, Innovation and Infrastructure), and SDG4 (Quality Education) in their reports. In contrast, SDG15 (Life on Land), SDG2 (Zero Hunger) and SDG14 (Life below Water) received the least attention.

The results shown in Table 2 on the analysis of the associations between the qualitative variables and the two indices designed to assess the orientation in each document reflect

that the listing and the type of opinion issued by the auditor on the annual accounts are positively related to the companies' interest with the SDGs, regardless of the document analysed. Listed companies, and consequently more exposed to the scrutiny of potential investors, and those for which auditors give an unqualified opinion, are more oriented towards sustainable development. The activity and the industry sensitivity are only significantly related to the CEOs' references to the 2030 Agenda in their letters. Thus, it can be appreciated how companies with potentially critical activities for sustainability tend to emphasize corporate commitment to the SDGs in their CEOs' letters, even if only in general terms.

Table 2
Organisational Qualitative Variables and SDG Orientation of the Largest Spanish Companies

QUALITATIVE VARIABLES		In 2019 Non-Financial Information Statement				In 2019 Letter from the Chairperson		
Factors	Categories	N.	Score (%) ^a	U-Mann Whitney	Asymp. Sig.	Score (%) ^b	U-Mann Whitney	Asymp. Sig.
Industry sensitivity	No	33	30.47	329.500	.187	1.52	297.500	.028**
	Yes	25	42.67			4.00		
List	No	29	13.22	122.500	.000***	0.96	235.500	.000***
	Yes	29	58.24			4.21		
Auditor Opinion	Unqualified Op.	52	39.74	36.500	.002***	2.88	99.000	.077*
	Qualified Op.	6	0.93			0.00		
Auditor Big4	No	4	5.55	70.000	.238	0.00	70.000	.157
	Yes	54	37.96			2.78		
Assurance provider Big4	No	6	15.74	116.500	.308	0.00	99.000	.077*
	Yes	52	38.03			2.88		
Auditor = Assurance prov.	No	10	46.11	184.500	.248	2.77	235.500	.910
	Yes	48	33.56			2.55		

Sign.: ***99%(p<0.01); **95%(p<0.05); *90%(p<0.1)

^a For each category, the average score in percentage, resulting from dividing the sum of the scores of the 18 items assessed for each company in its non-financial report by the maximum possible score, i.e. eighteen.

^b For each category, the average score in percentage, resulting from dividing the sum of the scores of the 18 items assessed for each company in its Chairperson's Letter by the maximum possible score, i.e. eighteen.

Source: Own elaboration.

Table 3
Organisational Quantitative Variables and SDG Orientation of the Largest Spanish Companies

QUANTITATIVE VARIABLES					In 2019 Non-Financial Information Statement		In 2019 Letter from the Chairperson	
Factors	Mean	S.E.	Min.	Max.	Spearman Coefficient	Unilateral Sign.	Spearman Coefficient	Unilateral Sign.
Total Assets (Thousands of EUR)	12968586.33	25452875.73	28256	122369006	.719***	.000	.547***	.000
Number of Employees	19270.03	40223.22	162	194038	.683***	.000	.484***	.000
Turnover (Thousands of EUR)	6713247.16	12455476.20	33791	49328000	.711***	.000	.520***	.000
ROA(%)	3.19	10.96	-55.50	34.98	.143	.142	.035	.398
Debt Ratio(%)	68.28	25.31	4.46	154.80	-.380***	.002	-.348***	.004
Board Size	7.83	5.13	1.00	17.00	.646***	.000	.444***	.000
% Women in Board	20.69	0.16	0.00	63.00	.376***	.002	.202***	.064

Sign.: ***99%(p<0.01); **95%(p<0.05); *90%(p<0.1).

Source: Own elaboration.

The analysis of Table 3 reveals statistically significant associations between Spanish corporate orientation towards the 2030 Agenda and the SDGs, and the following organizational variables: company size, debt ratio, board size and the presence of women on the board. These statistical relationships arise from examining both the NFISs and the letters from the chairs. Irrespective of the measure used, it is confirmed that larger companies engage in a higher level of disclosure related to sustainable development. Likewise, indebtedness is inversely related to SDG orientation, with companies that rely more heavily on equity exhibiting a stronger SDG orientation. The two governance mechanisms examined have a positive relationship with the SDG orientation of Spanish companies. Companies with a higher number of board members and a greater presence of women demonstrate a higher tendency to-

wards the SDGs. Therefore, the diversity in board numbers and gender is linked to a higher interest in developing actions to achieve the SDGs.

The analysis of the sign and significance of the different associations examined provides partial support for hypotheses 1 (on organisational variables) and 2 (on audit and assurance) and confirms hypothesis 3 (on corporate governance). In addition, the balanced sample design has enabled us to investigate the orientation towards the various SDGs of listed and unlisted companies through their NFISs. Table 4 illustrates that listed companies are more prompted towards the 17 goals. A thorough analysis of the orientation to sustainability of these two types of organisations shows that, while there are differences in the SDGs mentioned, SDG8 receives the most attention overall and SDG15 the least.

Table 4
Analysis of the SDG Orientation: Listed vs. Unlisted Companies

In 2019 Non-Financial Information Statement, specific references to...	Listed Companies		Unlisted Companies	
	N. Listed Companies	% Companies over the 29 listed companies	N. Unlisted Companies	% Companies over the 29 unlisted companies
SDG 1	11	37.93	2	6.90
SDG 2	10	34.48	1	3.45
SDG 3	18	62.07	5	17.24
SDG 4	20	68.97	4	13.79
SDG 5	18	62.07	4	13.79
SDG 6	16	55.17	0	0.00
SDG 7	18	62.07	1	3.45
SDG 8	21	72.41	7	24.14
SDG 9	20	68.97	4	13.79
SDG 10	16	55.17	1	3.45
SDG 11	19	65.52	3	10.34
SDG 12	18	62.07	5	17.24
SDG 13	21	72.41	4	13.79
SDG 14	10	34.48	2	6.90
SDG 15	10	34.48	0	0.00
SDG 16	13	44.83	4	13.79
SDG 17	18	62.07	5	17.24

Source: Own elaboration.

6. DISCUSSION AND CONCLUSIONS

The assessment of the alignment of the largest Spanish companies with the 2030 Agenda and the SDGs confirms the trend previously observed by researchers such as [Martínez-Ferrero & García Meca \(2020\)](#), who selected 2015 and 2016 as the years of analysis, or [Sierra et al. \(2022\)](#), who chose 2017 and 2018, pointing out to the growing interest in including these issues in their NFISs. However, this study indicates that a slightly lower percentage than the latter authors made some reference to the SDGs, 75.86% compared to 80.95%. The explanation for this is that this study has used a sample of 50% unlisted companies. In fact, among the listed companies analysed, only 2 out of 29

(6.89%) made no reference to the 2030 Agenda and the SDGs in their NFISs, compared to 12 among the unlisted companies. This demonstrates the heightened awareness of SDGs among companies with greater engagement in the stock markets, which are more susceptible to the pressures of a broader interested range of investors.

The higher exposure, together with the greater capacity of companies with larger assets, employees, and turnover to allocate resources to sustainability-related initiatives and actions, are confirmed by the associations observed between the measures of corporate size used and the interest in the SDGs of Spanish companies, supporting the findings of [Rosati and Faria \(2019a\)](#), [Martínez-Ferrero & García-Meca \(2020\)](#) and [Sierra et al. \(2022\)](#).

Similarly, the indirect and significant relationship found between SDG commitment and indebtedness is in line with the results of Sierra *et al.* (2022), as they employ leverage as a control variable. It is confirmed that, to the extent that companies have a lower amount of required resources committed, they are able to undertake a greater number of initiatives related to sustainable development.

The significant relationship of the two board-related variables, board size and presence of women, highlights the relevance of integrating into board decision-making processes as many interests as possible as well as those values and principles that are intrinsically attributed to women, who are generally more prompted to sustainable development issues (Rosati & Faria 2019a).

Unlike other research that analysed reporting related to the 2030 Agenda based on a dichotomous measure (see Martínez-Ferrero & García-Meca, 2020; Rosati & Faria, 2019a, 2019b; Sierra *et al.*, 2022), this research has made it possible to assess the level of completeness of large Spanish companies when reporting their performance on the 17 SDGs, as Nichita *et al.* (2020) did for Central-Eastern European countries. In this regard, from the individual analysis of the NFISs and CEO letters, it is concluded that companies have emphasised those SDGs on issues that are more familiar to them due to their previous experience elaborating CSR reports, sustainability reports, or other similar documents. These issues are considered of particular relevance as they affect key stakeholders and are essential for conveying the image and reputation of a sustainable company. Specifically, as the reports of PwC (2019) or KPMG (2020) indicate, the Spanish companies of our sample are more interested in issues on decent work and economic growth, climate change and the development of reliable, sustainable, resilient and quality infrastructures that enable more efficient use of resources and promote the adoption of clean and environmentally sound technologies and industrial processes. On the other hand, the issues of least interest, as they probably consider out of their assignment and without added value to their key stakeholders, are the conservation of terrestrial ecosystems, hunger, or the end of poverty.

Contrary to the expected effect in view of the results of Sierra *et al.* (2022), the results do not statistically support that the commitment to the SDGs is related to the audit or assurance provider being a Big 4, nor even that the coincidence of both is related to the greater or lesser interest in the SDGs of large Spanish companies. However, companies whose NFISs were verified by Deloitte (45.55%) or KPMG (44.87%) tended to show a higher interest than those verified by PwC (36.67%) or EY (24.60%). This finding partially contrasts with those of Sierra *et al.* (2022) in pointing to KPMG as one of the assurance providers working for companies showing a greater commitment to the SDGs, although it should be mentioned that these authors used a dichotomous variable to assess whether companies addressed the SDGs in their sustainability reports.

This paper helps to shed light on the profile of the large Spanish corporation that, in view of its NFISs, shows a greater interest in the 2030 Agenda and the SDGs. However, this study is not free of certain limitations, such as those inherent to the sample, which is entirely Spanish, or those derived from the measurement instrument designed which, although it allows an a priori

evaluation of the orientation of companies towards the SDGs, it does not evaluate the content of the information provided for each SDG, as Nichita *et al.* (2020) proposed, nor does it analyse the scope, progress or performance of Spanish companies in terms of sustainable development.

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