

**STRATEGIC RESPONSES TO SUSTAINABILITY REPORTING REGULATION
AND MULTIPLE STAKEHOLDER DEMANDS: AN ANALYSIS OF THE
SPANISH EU NON-FINANCIAL REPORTING DIRECTIVE TRANSPOSITION**

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Abstract

Purpose: This paper studies companies' strategic responses to regulative institutional pressures on sustainability reporting. Particularly, it investigates the role of multiple stakeholder demands in shaping corporate responses to Law 11/2018 that transposes the EU Non-Financial Reporting Directive in Spain.

Design/methodology/approach: Informed by Oliver's framework, the study analyzes the 2018 non-financial information of Spanish listed companies mandated to report under Law 11/2018 to explore the relationship between adopting a particular strategic response and companies' stakeholder configuration.

Findings: Companies facing multiple stakeholder pressures tend to use a compromise strategy favoring the disclosure of relevant topics to a specific stakeholder type. Specifically, environmentalists are the most influential stakeholder in determining the coverage of sustainability topics to the detriment of other stakeholders when companies suffer from regulatory pressures.

Originality: In contrast to previous literature exploring the extent to which firms comply with regulation, the study considers that companies can respond more actively to mandatory sustainability reporting requirements.

Research limitations/implications: The study contributes to disentangling the factors determining how companies respond to sustainability reporting regulation. Future research could perform longitudinal and large multinational analyses to study the evolutionary process of corporate responses.

Practical implications: The study is relevant to managers and policymakers as it highlights that sustainability reporting regulation should promote the coverage of relevant topics to less influential stakeholders.

Social implications: The study explores the extent to which current sustainability reporting regulation can increase transparency on sustainability issues for all stakeholders.

Keywords

Sustainability reporting regulation, strategic responses, sustainability reporting, stakeholder demands, institutional pressure, EU Non-Financial Reporting Directive.

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1. Introduction

The relevance of sustainability reporting regulation (hereafter, SRR) has increased significantly in the last two decades worldwide (see <https://www.carrotsandsticks.net>). SRR is particularly developed in Europe, where EU states have adapted their domestic legislation to incorporate the requirements of the EU Non-Financial Reporting Directive 2014/95 (hereafter, NFRD) that mandates public interest entities to publish a non-financial statement on social and environmental issues (Garcia-Torea *et al.*, 2020). Furthermore, as part of the EU Sustainable Finance Strategy, the EU is revising the NFRD to advance SRR by extending the range of firms obliged to report and the requirements they must meet. SRR represents a significant source of “institutional pressure” to which organizations might respond in different ways (Oliver, 1991). Taking advantage of the rising importance of SRR in the EU, this study analyzes the strategic responses that companies adopt when subject to the influence of institutional regulatory pressures related to sustainability reporting. Notably, we explore the role of companies’ multiplicity of stakeholders in determining their response to SRR.

In parallel with the development of SRR, social and environmental accounting researchers have studied its capacity to promote corporate disclosures (see, for instance, Agostini *et al.*, 2021; Carini *et al.*, 2021; Larrinaga *et al.*, 2002; Luque-Vílchez and Larrinaga, 2016; Muserra *et al.*, 2020). This stream of literature has investigated SRR by considering the extent to which firms comply, particularly with the NFRD, and the impact of regulation on non-financial disclosures (Korca and Costa, 2021). This perspective tends to conceive organizations as passive actors subject to institutional pressures emanating from SRR. In contrast to this view, Oliver (1991) emphasizes that organizations can respond to institutional pressures by selecting from varied strategic responses ranging from passive conformity to active resistance (acquiescence, compromise, avoidance, defiance, and manipulation).

Despite its relevance to understanding how institutional pressures influence corporate disclosures, few studies have relied on Oliver (1991)’s framework to explain sustainability reporting practices (Aureli *et al.*, 2020). Criado-Jiménez *et al.* (2008) investigated Spanish

companies' responses to the regulation mandating them to disclose environmental information in financial statements in the early 2000s. They concluded that companies failed to comply with the regulation. However, firms did not directly dismiss it (one of Oliver's defiance responses) but opted for a concealment strategy (an avoidance response) to make financial statements' users perceive that they were complying with regulation without actually doing so. Criado-Jiménez *et al.* (2008) studied the role of regulation when dealing with financial environmental information, which is useful to the stakeholders most interested in financial statements (i.e., investors and regulators). By contrast, we explore organizations' responses when confronted with the need to disclose information on a set of sustainability topics (not only financially relevant environmental issues) that might be important to a broader range of stakeholders. Oliver (1991) postulates that the fact that an organization has multiple stakeholders is a significant determinant of the strategic response it adopts. In this regard, Neu *et al.* (1998) reported that the power of different stakeholders affected voluntary environmental disclosures of Canadian companies in the 1980s. They found that firms took a mixture of acquiescence, compromise, and defiance strategies when responding to stakeholder pressures. Firms were more likely to provide information relevant to shareholders than environmental disclosures of interest to less powerful stakeholders, such as environmentalists.

Departing from Criado-Jiménez *et al.* (2008) and Neu *et al.* (1998), our investigation advances knowledge on the role of SRR in enhancing corporate reporting by analyzing the influence of multiple stakeholder demands on how companies react to mandatory sustainability disclosure. In contrast to those studies, the NFRD transposition allows us to exploit a setting in which to analyze organizations' responses to compulsory disclosures on a broad set of CSR topics affecting a wide variety of stakeholders (and not just specific environmental information relevant to financial stakeholders, as Criado-Jiménez *et al.*, 2008) in a context in which sustainability disclosure is mandatory (rather than voluntary, as Neu *et al.*, 1998). Investigating this issue contributes to understanding the factors that shape the extent to which SRR promotes more transparent non-financial disclosures.

We focus on the Spanish transposition of the NFRD through Law 11/2018 as a research setting. Using the sample of Spanish listed firms subject to the Law in 2018, the first year of its application, we perform a regression analysis to study the relationship between companies' compliance with SRR and their multiplicity of stakeholders. We find that corporate disclosures improve when companies have to attend to the demands of a diversity of stakeholders, suggesting an acquiescence strategy (i.e., companies comply more fully with the Law).

However, the overall level of disclosure is mainly due to the high coverage of environmental issues compared to other matters. This effect is more significant when environmentalists are one of the constituencies belonging to firms' multiplicity of stakeholders. These results indicate that companies partly conform to rules through a compromise strategy that focuses on the demands of a particular stakeholder type, environmentalists.

This study makes a two-fold academic contribution. First, it expands the debate on how the NFRD influences corporate sustainability reporting practices by drawing on a theoretical framework that differs from the commonly applied in this research line (Korca and Costa, 2021). Relying on Oliver's (1991) framework contributes to the SRR literature by responding to the need of investigating the connection of regulation and enforcement with sustainability information (Patten and Shin, 2019), emphasizing the complexity of corporate responses to SRR (Aureli *et al.*, 2020; Criado-Jiménez *et al.*, 2008). Second, our investigation highlights the relevance of understanding the role of companies' stakeholder configuration in the interplay of factors shaping firms' responses to institutional regulatory pressures on sustainability reporting. When mandated to inform on a broad set of sustainability themes, companies facing multiple stakeholder demands tend to follow a compromise strategy favoring the disclosure of topics that are more relevant to one of their constituencies. Our findings are also useful to managers and policymakers, particularly in the EU, where the NFRD is now under revision, pointing to the need to analyze mandated topics to promote those relevant to less influential stakeholders. We developed these contributions more in-depth in the last section.

The rest of the paper is structured as follows. Section 2 provides a literature review on SRR. Section 3 explains the theoretical underpinnings and develops the hypotheses. Section 4 describes the methodology, while section 5 reports the results. Finally, section 6 discusses our findings, and section 7 concludes.

2. Literature review

Prior literature has explored the role of SRR at different levels. Some studies have investigated the country-level regulation of environmental disclosures in financial statements. This research line found that companies do not fully comply with such information obligations. Fallan and Fallan (2009) compared Norwegian companies' voluntary and mandatory environmental disclosures before and after changes in statutory requirements. They found that mandatory information increased after regulatory changes, although firms did not completely fulfil the

legal requirements. By contrast, voluntary information increased more before the introduction of regulatory changes. Negash and Lemma (2020) provide similar findings in the context of South Africa. By interviewing professional accountants, they show that companies only complied with the normative scripts of the law regarding the disclosure of environmental liabilities as a form of legitimating strategy, while they overlooked regulative scripts. Larrinaga *et al.* (2002) also provide evidence of the limited impact of regulation on the environmental information disclosures in Spanish firms' financial statements between 1997 and 1999. They concluded that the standard regulating such disclosures could not foster transparency because companies only considered it an administrative reform rather than an institutional one. This finding can be further explained by Bebbington *et al.* (2012). Informed by the notion of normativity (i.e., the ways in which actors regard rules as binding), these authors compared the reporting regime in Spain, characterized by a hard-law approach, and in the UK, characterized by a soft-law environment. They concluded that enacting a law does not guarantee the creation of a norm. They found that sustainability reporting became a norm in the UK, whereas this was not the case in the Spanish context because regulation failed to be clear and congruent with prior practices.

Another set of papers has explored the extent to which country-level regulation influences the disclosure of stand-alone social and environmental reports. Chauvey *et al.* (2015) analyzed whether the French regulation *Nouvelles Régulations Économiques #2001-420*, enacted in 2001, increased and improved French companies' CSR disclosures between 2004 and 2010. Although the amount of information increased, they found that the quality of reporting practices did not substantially improve as firms seemed to use disclosures to legitimize their behavior rather than foster transparency. Similar findings were reported by Costa and Agostini (2016), who studied the effect of the Italian Legislative Decree 32/2007 on the quantity and completeness of environmental and personnel information. In contrast to these studies, Luque-Vílchez and Larrinaga (2016) found that the Spanish Sustainable Economy Law failed to increase the number of reporting companies and only produced a limited improvement in disclosures.

Due to the significant SRR development in the EU, a growing stream of literature has explored the changes in corporate disclosure practices driven by the NFRD, particularly in the Italian context (see Korca and Costa, 2021 for a detailed literature review on the NFRD). Muserra *et al.* (2020) interviewed 17 Italian sustainability reporting preparers and auditors. They identified several aspects of the Italian transposition, such as making the boards of directors responsible

for firms' non-financial information, the flexibility of the content to be reported, and the requirement to assure the non-financial statements, that indicate its capacity to foster the level of sustainability disclosures. However, studies analyzing the reports produced by Italian companies prove that improvements are still limited. Pizzi *et al.* (2021) show that the “comply-or-explain” principle of the Italian transposition allows companies, especially those operating in controversial industries, to exclude relevant information on their performance to legitimize their behavior. Leopizzi *et al.* (2019) concluded that firms did not substantially comply with regulation because their reports mainly focused on positive aspects and covered past and/or present actions, but rarely their future intentions. Their findings contrast with those of Agostini *et al.* (2021). These authors report that although the NFRD failed in improving the completeness and tone of non-financial information of 20 Italian listed firms, it fostered the disclosure of more forward-looking and future-oriented environmental and employee information. Agostini *et al.* (2021) also found that the NFRD increased the amount of information and also provoked an important shift of non-financial disclosures previously included in stand-alone sustainability reports to annual reports. Additionally, their results indicate that the NFRD does not play a significant role in the relationship between non-financial information and financial performance. This finding aligns with the study of Cordazzo *et al.* (2020) on the value relevance of non-financial disclosures after the NFRD transposition. Other authors have also investigated whether the NFRD affected the disclosure of specific sustainability topics. Carini *et al.* (2021) performed a case study of an oil and gas company, showing that the coverage of environmental topics in its reports increased after the enactment of the Italian transposition. By contrast, the case study of Korca *et al.* (2021) of a banking firm shows that the impact of the NFRD differs depending on the reported topics. They found that the quantity of information increased for all sustainability topics, while its quality only improved for social and employee-related disclosures.

Poland is the second country where the NFRD transposition has been subject to most academic inquiry (Korca and Costa, 2021). Matuszak and Róžańska (2021) report that Polish companies are likely to comply with the NFRD. This effect was especially apparent in those firms with low reporting levels before the EU SRR. The attention to the Italian and Polish settings is mainly driven by the lack of relevant and specific SRR references before the NFRD enactment (Korca and Costa, 2021). Nevertheless, other countries have also been investigated. For instance, Jaggi *et al.* (2021) analyzed whether the NFRD affected the corruption disclosures of a multi-country sample. They found that the amount of information covering this topic

increased due to the NFRD. The divergence of findings depending on the samples and contexts between countries calls for the need to advance knowledge on the role of SRR in fostering sustainability reporting and the determinants enabling it to do so.

Overall, previous studies have investigated the level of firms' compliance with SRR and its impact on corporate disclosure (Korca and Costa, 2021) without considering that companies may adopt a diverse range of strategic responses along the spectrum from complete to non-compliance. To the best of our knowledge, only two papers have performed an in-depth analysis of firms' strategic responses to SRR. Criado-Jiménez *et al.* (2008) studied the effect of the 2002 ICAC resolution on environmental information provided in financial statements. Relying on Oliver's (1991) framework, they found that firms followed a concealment strategy through impression management techniques to influence the perception of financial statements' users and make them perceive they were complying while failing to do so. Additionally, Aureli *et al.* (2020) explored how Italian companies responded to the NFRD by interviewing different actors of the sustainability reporting landscape and analyzing the reports published by a family firm in 2017 and 2018. They concluded that an acquiescence strategy was followed in the first year of the transposition, while more active responses (bargaining and manipulating) were implemented in the second year to determine the content and balance the information requirements. Our study adds to this line of research by exploring the role of firms' multiplicity of stakeholders in determining their responses to SRR.

3. Theoretical framework and hypotheses development

Oliver (1991)'s framework of strategic responses to institutional pressures is grounded on institutional theory. Initially, institutional theory highlighted the value of conformity and the convenience of adhering to institutional pressures, like norms and rules (DiMaggio and Powell, 1983), to obtain social acceptance (Chen and Roberts, 2010). This perspective conceived organizations as passive actors that adapt to institutional rules and norms as a source for stability, legitimacy, and social acceptance. Institutional pressures are considered to produce isomorphic sustainability disclosure practices and convert sustainability reporting into a "taken for granted" corporate activity (Higgins and Larrinaga, 2014). DiMaggio and Powell (1983) identified three isomorphic institutional processes: coercive isomorphism, which arises from regulatory influence and legal frameworks; mimetic isomorphism, which results from the imitation among peers; and normative isomorphism, which derives from the need of

organizations to behave in a socially acceptable way. Based on these theoretical lenses, SRR represents a source of coercive isomorphism that could homogenize reporting practices among regulatees.

In contrast to that approach, Oliver (1991) offers an insightful perspective arguing that institutional pressures, like regulation, do not always create isomorphic practices among corporations. Oliver describes five potential responses that organizations can follow when facing institutional pressures. The five responses go along the spectrum from passive conformity to active resistance. *Acquiescence* considers that firms adhere to institutional pressures to obtain legitimacy and social acceptance. Acquiescence involves different tactics, ranging from unconscious compliance to more conscious and strategic decisions to comply. *Compromise* involves partial conformity to institutional pressures due to the existence of multiple demands. In this situation, firms may choose to balance their expectations, pacify some demands, or bargain concessions. *Avoidance* means that organizations dismiss the need to comply by concealing non-compliance, avoiding external scrutiny, or scaping the domain affected by institutional pressures. *Defiance* implies a rejection of rules or norms by ignoring, challenging, or even attacking the sources of institutional pressure. Finally, *manipulation* is the most active strategy. It includes co-opting the institution from which the rule emanates, influencing against regulators through lobbies, or even controlling the institutional source.

Previous research has shown that firms respond differently when facing diverse accounting regulatory requirements. Haraldsson and Tagesson (2014) revealed that after implementing full cost accounting reporting in the Swedish water and sewerage sector, the level of compliance with accounting principles and regulation was far from complete and that organizations followed compromise and avoidance strategies. Similarly, Shrives and Brennan (2017) documented an increasing use of rhetorical strategies to produce misleading explanations on the reasons for non-compliance after the UK Corporate Governance Code reform. Also, as we explained above, Criado-Jiménez *et al.* (2008) reported that the avoidance tactic of concealing non-compliance was the most common strategy among Spanish firms mandated to report environmental provisions in their financial reports.

Different drivers and motivations determine the adoption (Dienes *et al.*, 2016) and the way in which regulation influences reporting practices (Carini *et al.*, 2021). Oliver (1991) theorizes that several factors are more likely to promote the adoption of specific strategic responses. Particularly, she reflects on five factors: (1) the cause giving rise to institutional pressures, (2) the quantity and capacity of stakeholders to exert pressure, (3) the congruence of the pressure

with the rationale of the organization, (4) the enforcement mechanisms used to promote compliance, and (5) the environmental context in which the institutional pressures unfold. Compared to Criado-Jiménez *et al.* (2008)'s setting in which firms were requested to report financial environmental information for investors and regulators in their financial statements, the current Spanish SRR regime that emanated from the NFRD requires companies to provide information on a broad range of social and environmental topics to a wide set of stakeholders. Although companies should report the information in their financial statements, they are allowed to disclose it in a different document that must be adequately referenced in financial statements. Therefore, the Spanish SRR context provides a setting in which the quantity and capacity of stakeholders to exert pressure on organizations may shape corporate responses to mandatory sustainability reporting.

Oliver (1991) argues that having multiple stakeholders can hinder companies' responses to institutional pressures due to the conflicts resulting from their various demands. She maintains that firms in this situation are more likely to resist institutional pressures through compromise, avoidance, defiance, or manipulation strategies. However, the growing social concern about firms' social and environmental impacts (Gray, 1992) has led to the enactment of several regulations on sustainability reporting in Spain during the last two decades, being the transposition of the NFRD the latest and most significant milestone (Garcia-Torea *et al.*, 2020). This SRR tradition makes it almost impossible for firms to openly dismiss or defy regulatory requirements (Criado-Jiménez *et al.*, 2008). The EU transposition mandates the disclosure of several topics that are relevant to different stakeholders. Therefore, our first hypothesis expects that companies facing several stakeholder demands will be more likely to cover the mandated topics.

H1: companies facing multiple stakeholder demands will be more likely to report on the topics requested by the SRR.

However, providing information on a very extensive range of topics can be burdensome because sustainability reporting involves high costs in terms of time and resources (Solomon and Lewis, 2002; Thorne *et al.*, 2014). Consequently, companies may need to decide which topics they will cover more extensively. Stakeholder pressure is a significant determinant of sustainability information (Gallego-Álvarez *et al.*, 2017). Yet, different stakeholders have different capacities and power to influence corporate sustainability disclosures (Fernandez-Feijoo *et al.*, 2014;

Gamerschlag *et al.*, 2011). Companies with multiple stakeholders will find it challenging to respond equally to the multiple and usually conflicting demands of stakeholders. Therefore, when subject to institutional pressures, firms may opt to meet the demands of their most relevant constituency to the detriment of the less relevant ones (Cho *et al.*, 2015; Neu *et al.*, 1998). Therefore, we propose the following hypothesis:

H2: companies facing multiple stakeholder demands will be more likely to respond with a compromise strategy and cover more extensively the topics that are more relevant to particular stakeholder types.

4. Methodology

4.1. Sample and data sources

We studied the sustainability disclosures of the sample of Spanish listed firms mandated to report sustainability information under Law 11/2018 that transposes the NFRD into the Spanish legislation. We selected Spain as our research setting because, although this country has a long-standing tradition of SRR (Garcia-Torea *et al.*, 2020), the compliance of Spanish firms has usually been low and incomplete (Bebbington *et al.*, 2012; Larrinaga *et al.*, 2002). However, Law 11/2018 is more ambitious and demanding than the NFRD for two reasons (Commission of Economy, Industry and Competitiveness, 2018). First, the Law broadens the scope of affected companies (see Figure 1). While the NFRD applies to public interest entities with more than 500 employees and considered large undertakings as defined in Directive 2013/34/EU; Law 11/2018 extends this obligation to all companies with more than 500 employees (this threshold is reduced to 250 since 2021) that are either public interest entities or that meet two of the three criteria for being considered large undertakings (i.e., total assets exceed 20,000,000 euros; net turnover exceeds 40,000,000 euros; average number of employees exceed 250) during two consecutive years at the reporting date. Second, Law 11/2018 lists specific sub-topics that companies must report to adequately cover the environmental, social and employee, respect for human rights, anti-corruption, and bribery matters mentioned in the NFRD.

To perform the analysis, we selected a sample of companies from the whole population of firms affected by Law 11/2018. Specifically, we studied the 93 firms of the Spanish Stock Exchange with more than 500 employees by the end of 2018. We focused on listed corporations because they are considered public interest entities according to Royal Decree 877/2015. They also receive high levels of pressure from various stakeholders (Huang and Kung, 2010), which make

them suitable to test the hypotheses. We removed eight companies headquartered abroad that must publish the non-financial statement in their home country. We also eliminated one firm that was a subsidiary of another organization in the sample, as only the parent company must comply with Law 11/2018. After these adjustments, the final sample consists of the 84 listed firms mandated to issue a non-financial statement for 2018. We analyzed 2018 because it was the first year of Law 11/2018 application.

<<Insert Figure I here>>

Companies must publish their non-financial statement as part of the management report included in financial statements. However, Law 11/2018 allows firms to disclose the mandated non-financial information in a separate document if adequately referenced in the non-financial statement. The separate document, usually the sustainability report, was analyzed in these cases. We followed a two-step process to retrieve non-financial statements or sustainability reports. First, we looked for these reports in the Global Reporting Initiative (GRI) Database. Law 11/2018 suggests that firms apply the guidelines provided by this organization to elaborate non-financial statements; hence we expected that companies would have uploaded them to the GRI Database. However, we could only obtain the reports of six companies. In the second step, we searched for the reports of the remaining firms on their corporate webpage, retrieving the reports of 76 companies. After this process, we were unable to obtain the report of two companies. Law 11/2018 requires firms to facilitate access to their non-financial statements on their corporate webpages for at least six months after the end of the reporting year. Therefore, we considered that these firms failed to publish their non-financial statements given that it was not available during that period. We observed that several companies issued the non-financial statement, but some of the mandated topics were referenced to the sustainability report. In these cases, both reports were analyzed. Out of the 82 firms issuing reports, 67 published the required non-financial disclosures in their non-financial statements, 8 used both the non-financial statement and the sustainability report, while 7 provided the information in their sustainability reports.

In addition to the non-financial statements and sustainability reports, we used the SABI Database and the Thomson Reuters Eikon Database to collect financial and CSR data.

4.2. Variable definition

Dependent variable: SRR compliance level and coverage

In line with previous studies (e.g., Agostini *et al.*, 2021; Luque-Vílchez and Larrinaga, 2016), we used content analysis to evaluate the extent to which companies covered the topics Law 11/2018 requires. The Law mandates companies to provide information on specific topics classified into five broad blocks: environment, personnel, human rights, corruption, and society. Companies should provide a set of specific indicators suggested by relevant sustainability reporting initiatives, such as GRI, to adequately inform about those topics (ERGO, 2019). Table I provides the number of proposed indicators for each block and topic.

<<Insert Table I here>>

We used this list of indicators as items to perform the content analysis (Beattie *et al.*, 2004). Following Cormier *et al.* (2005), each indicator was scored on a 0-3 scale: 0 when the indicator was not provided, 1 when the indicator was covered partially by disclosing general and vague information, 2 when the indicator was comprehensively covered by providing narrative information, and 3 when the indicator was comprehensively covered by providing monetary or quantitative information. The appendix illustrates the codification of items following this scale. The authors performed a manual content analysis of the reports to perform an in-depth and thorough evaluation of their disclosures (Agostini *et al.*, 2021; Costa and Agostini, 2016). To guarantee the reliability of the content analysis (Krippendorff, 1980), a pilot test was carried out in which the two authors codified a subset of 24 reports to determine the criteria for codifying the remaining reports. Discrepancies emerging during the coding process were discussed until consensus was reached.

We aggregated the value of the different items to create two disclosure indexes (Beattie *et al.*, 2004). On the one hand, we computed the overall level of a firm's compliance (*COMPL_LEVEL*) by calculating the proportion of the sum of the indicators' scores of a firm respect to the maximum value it could get ($195=65 \text{ indicators} \times 3$). This measure captures the extent to which companies provide comprehensive information to cover the different topics mandated to report by Law 11/2018. This variable integrates a mechanistic and an interpretative approach to proxy for the amount and richness of disclosures (Beck *et al.*, 2010). On the other hand, we calculated the proportion of covered indicators regardless of the level at which they

were reported (*COMPL_COV*). Comparing both variables allow us to ascertain the extent to which companies offered relevant information on the required topics or if they only provided disclosures to cover them. In the case of the firms for which we were unable to retrieve any report, both variables were given the value of zero as the mandated information was not publicly available on its webpage as required by Law 11/2018.

Additionally, we focused on the items relevant to environmentalists and employees to test whether firms follow a compromise strategy. Law 11/2018 pays special attention to issues related to these stakeholder types as the environmental and personnel blocks gather the highest number of topics compared to the other three blocks. We calculated the proportion of the sum of the environmental indicators' scores respect to the sum of the maximum value they could get ($75=25 \text{ indicators} * 3$) (*COMPL_ENV*). We computed the variable for the employee block in the same fashion (maximum value: $63=21 \text{ indicators} * 3$) (*COMPL_EMPL*).

Independent variable: multiplicity of stakeholders

Prior studies report that the pressure of different stakeholders affects the level of sustainability disclosure (Gamerschlag *et al.*, 2011; Neu *et al.*, 1998). According to Fernandez-Feijoo *et al.* (2014), customers, employees, investors, and the environment are the main stakeholders that significantly affect sustainability reporting practices. Given that our sample consists only of listed firms, we assume all suffer from significant investor pressure, and we do not consider this stakeholder type. We proxied for the pressure of the other three stakeholder types (environment, employees, and customers) using specific dichotomous variables.

We measured environmentalists' pressure (*ENV*) by assessing whether or not a firm operates in an environmentally sensitive industry. We classified companies belonging to the following industries as environmentally sensitive: mining, metals, chemistry, paper, petroleum, utilities, energy, chemicals and drugs, oil exploration, agriculture, automotive, aviation, construction, logistics, railroad, waste management, water utilities and manufacturing (Aerts and Cormier, 2009; Cho and Patten, 2007; Fernandez-Feijoo *et al.*, 2014).

Regarding employees (*EMPL*), we compared the relative number of employees among firms (Huang and Kung, 2010). This variable takes the value of one if the company's number of employees is above the sample median and zero otherwise.

We assessed customers' pressure (*CUS*) by differentiating companies operating in popular industries among customers (energy utilities, financial services, food and beverages, health

care, household and personal products, retailers, telecommunications, textiles and apparel, waste management and water utilities) from the rest (Fernandez-Feijoo *et al.*, 2014).

We computed the variable multiplicity of stakeholders (*MULT*) by adding up the values of each stakeholder proxy. Therefore, it ranges from zero to three.

We computed additional variables to capture the relative pressure of employees and environmentalists within a firm's multiplicity of stakeholders. As abovementioned, we focused on these two types of stakeholders because most of the information required by Law 11/2018 is expected to be relevant to them. The variable *MULT_ENV* takes the value of *MULT* minus one if environmentalists are one of the relevant stakeholders of a firm, a zero otherwise. This variable aims to assess the influence of the other stakeholder types when environmentalists are a relevant stakeholder. We computed the variable for the employees following the same logic (*MULT_EMP*).

Control variables

We included the following control variables that explain the level of sustainability reporting (Clarkson *et al.*, 2008; Dienes *et al.*, 2016; Nazari *et al.*, 2017). Firm Size (*SIZE*) was measured as the logarithm of total assets (Nazari *et al.*, 2017). Ownership structure (*OWN*) was calculated as the percentage of free float (Gamerschlag *et al.*, 2011). Return on assets (*ROA*) was computed by dividing the profit before taxes by total assets (Nazari *et al.*, 2017). Finally, leverage (*LEV*) was measured as the firm's total debt divided by total assets (Clarkson *et al.*, 2008; Nazari *et al.*, 2017).

4.3. Models

We defined the following models to test the hypotheses. We used Model 1 to analyze the influence of the multiplicity of stakeholders on the overall coverage on the topics mandated to report:

$$COMPL = \beta_0 + \beta_1 MULT + \sum_j (\beta_j Control_j) + \varepsilon \quad [Model\ 1]$$

Where the dependent variable *COMPL* was defined as *COMPL_COV* and *COMPL_LEVEL* to analyze the extent to which *MULT* affects the quantity of reported indicators and the level at which they are covered.

We used Model 2 to test H2 regarding the use of a compromise strategy by companies facing multiple stakeholder demands:

$$COMPL_topic = \beta_0 + \beta_1 MULT + \sum_j (\beta_j Control_j) + \varepsilon \quad [Model\ 2]$$

Where the dependent variable *COMPL_topic* was defined as *COMPL_ENV* and *COMPL_EMPL* to analyze whether the presence of a multiplicity of stakeholders makes firms cover disclosures of one of these topics (environmental or employee) more extensively.

To further exploit H2, we also run Models 3a and 3b to disentangle the effect of a particular stakeholder type (environmentalists or employees) on the coverage of their respective topics.

$$COMP_ENV = \beta_0 + \beta_1 MULT_ENV + \sum_j (\beta_j Control_j) + \varepsilon \quad [Model\ 3a]$$

$$COMPL_EMPL = \beta_0 + \beta_1 MULT_EMPL + \sum_j (\beta_j Control_j) + \varepsilon \quad [Model\ 3b]$$

We estimated the models through an ordinary least square regression analysis with robust standard errors.

Table II summarizes the definition of the dependent, independent, and control variables and indicates the main models in which they were used.

<<Insert Table II here>>

Before running the regressions, we analyzed the evolution of sustainability reporting practices during the legislative process of the NFRD. We compared the *COMPL_LEVEL* and *COMPL_COV* variables in 2018 to their values in 2013 and 2016. We considered 2013 because it was the year before the publication of the NFRD in 2014. We also selected 2016 because it was an intermediate year between the publication of the NFRD and its transposition to the Spanish legislation in 2018. To evaluate whether there were significant changes in the content and level of sustainability disclosures, we compared the distribution of *COMPL_COV* and *COMPL_LEVEL* in 2018 respect to 2016, and in 2016 respect to 2013. We used the Shapiro-Wilk test to check whether the variables follow a normal distribution. As both variables were not normally distributed, we used the non-parametric test of Kruskal-Wallis to assess if there were significant changes between the years.

5. Results

5.1. Descriptive results

Table III provides the descriptive statistics and the correlation matrix. The mean value of COMPL_COV is 0.637, showing that, on average, companies provide information on 63.7% of the indicators covering the topics required by Law 11/2018. If we compared this figure with the mean of COMPL_LEVEL (0.542), we observe that the level of the information used to cover those indicators is not as relevant and valuable as needed. It is also noteworthy the high level of dispersion of the SRR compliance variables, ranging from 0 to nearly 1 and 0.9, in the case of COMPL_COV and COMPL_LEVEL, respectively. Regarding the multiplicity of stakeholders (MULT), companies face, on average, the demands of 1.655 stakeholders out of the three relevant types used to construct this variable.

The correlation matrix shows significant correlations between some independent variables. Most of these variables are not used in the same regression models simultaneously, and in the cases in which they do (e.g., ROA and LEV), the VIF value is below the suggested threshold (Hair *et al.*, 1995), indicating that there are no multicollinearity concerns

<<Insert Table III here>>

5.2. Evolution of SRR compliance levels

As companies may have shaped their reporting practices throughout the regulatory process (Carini *et al.*, 2021), table IV compares the mean value of the COMPL_LEVEL and COMPL_COV variables in 2013, 2016, and 2018 to study the influence of the NFRD on sustainability reporting practices. First, the number of companies publishing sustainability information increased from 62 firms in 2013 (the year before NFRD approval) to 74 companies in 2016 (the intermediate year between the NFRD and its transposition), and up to 82 companies in 2018 (after the approval of the NFRD transposition). Additionally, the coverage of the issues mandated to report under Law 11/2018 rose significantly: while companies provided, on average, 35.2% of the indicators in 2013, the percentage grew to 43.1% and 63.7% in 2016 and 2018, respectively. The increase in the level at which those indicators were produced was less pronounced, going from 29.7% in 2013 to 54.2% in 2018

<<Insert Table IV here>>

The results of the Kruskal-Wallis test provided in Table IV indicate that the most significant increase in the coverage of all topics and the level at which they were reported happened between 2018 and 2016. By contrast, the significance of the changes between 2016 and 2013 is lower and even non-significant for some topics. Overall, this analysis provides exploratory evidence suggesting that the most relevant increase in sustainability disclosures occurred between the approval of the NFRD and its transposition to the Spanish legislation [1]. This finding may indicate that firms follow an acquiescence strategy. However, the values of COMPL_COV are higher than COMPL_LEVEL. This divergence suggests that SRR fostered the coverage of topics as the regulatory process evolved more than it did the level of information (type of disclosures) at which companies reported on them. There are also some divergences when looking at the COMPL_COV and COMPL_LEVEL disaggregated by blocks. Notably, the coverage of human rights is far behind compared to the other blocks.

5.3. Main Analyses

Table V portrays the results of the main models to test our hypotheses. Models 1a and 1b provide support for H1 as MULT is positively associated to both compliance variables (MULT=0.047, $p<0.05$; MULTI=0.045, $p<0.10$). These findings indicate that firms are more likely to offer information on the topics mandated to report when they face the demands of multiple stakeholders [2].

<<Insert Table V here>>

Concerning H2, Model 2a and 2b show that MULT is positively and significantly related to the level at which environmental topics are reported (MULT=0.073, $p<0.01$), but not employee-related ones (MULT=0.016). Models 3a and 3b allow us to disentangle if there is a significant stakeholder type driving that effect. Specifically, we found that firms are more likely to report on the environmental aspects required by the Law at a greater level when environmentalists are part of their multiplicity of stakeholder demands (MULT_ENV=0.080, $p<0.01$). Yet,

employees are not significantly associated with their corresponding topic coverage ($MULT_EMPL=0.040$). These results corroborate H2. They show that companies facing multiple stakeholder demands are more likely to respond with a compromise strategy, bargaining the demands of their stakeholders and covering the relevant topics to one stakeholder type, environmentalists, more comprehensively than the topics of interest to the other stakeholders.

Regarding control variables, *SIZE* is positively associated with SRR compliance, while the coefficients of *ROA* and *LEV* are negative and significant. Finally, *OWN* is positively related to the dependent variable in all models but not at a statistically significant level.

5.4. Robustness analyses

We performed several additional analyses to check the robustness of the results. Table VI analyzes the effect of the multiplicity of stakeholders on the relative coverage of environmental respect to employee-related topics (*ENV/EMPL*). This variable was computed as the proportion of environmental indicators divided by the proportion of employee-related indicators. Model 4a shows that *MULT* does not significantly affect that ratio unless both environmental and employees are part of firms' relevant stakeholder configuration (Model 4b, $MULT_ENV\&EMPL=0.14$, $p<0.05$). When looking at the individual participation of each stakeholder type in the multiplicity variable, we observe that that effect is driven by environmentalists (Model 4c, $MULT_ENV=0.090$, $p<0.05$) and not employees (Model 4d, $MULT_EMPL=0.041$). The influence of environmentalists is also corroborated when disaggregating *MULT* into the three dichotomous variables that it combines – *ENV*, *EMPL*, *CUST* (Model 4e, $ENV=0.195$, $p<0.01$).

<<Insert Table VI here>>

To further explore the influence of environmentalists on the uneven coverage of environmental compared to employee-related topics, we studied the relationship between *ENV*, *EMPL*, *CUST* on *COMPL_LEVEL*, *COMPL_ENV*, and *COMPL_EMPL*. Although *EMPL* is positively and significantly correlated with the three dependent variables, *ENV* is positively associated with *COMPL_ENV* (Model 5b, $ENV=0.082$, $p<0.05$) but negatively related to *COMPL_EMPL* (Model 5c, $ENV=-0.074$, $p<0.05$). This finding corroborates that companies bargain the interest

of their relevant stakeholders when deciding what topics to cover more extensively and notes the importance of environmentalists in driving the disclosures of topics that are more relevant to them.

Finally, we use an alternative definition of environmental stakeholder pressure to rule out the possibility that our main results may be driven by using the industry's environmental sensitiveness classification as a proxy. In Models 6 and 7 (Table VII), we proxied for environmentalists by considering firms' environmental expenditures and amount of waste. The results show that the alternative proxies for environmental stakeholder pressure behave similarly to the previous models.

<<Insert Table VII here>>

6. Discussion

Our analysis provides evidence on the role of firms' multiplicity of stakeholders in shaping their response to SRR as a source of institutional pressure. In line with prior studies (Fernandez-Feijoo *et al.*, 2014; Huang and Kung, 2010), we found that companies facing multiple stakeholder demands publish more information on the topics requested by Law 11/2018. This finding may suggest that companies acquiesce to SRR (Oliver, 1991) when they have multiple relevant stakeholders. However, a more in-depth analysis of the relationship between companies' stakeholder types and the coverage of specific topics shows that firms actually adopt a compromise strategy (Oliver, 1991) that favors the particular demands of one stakeholder type and overlook the information that is significant for other constituencies. Specifically, we found that environmentalists are the most influential stakeholder in shaping how companies adjust their reporting practices when subject to regulatory pressure. The results indicate that the presence of environmentalists as part of firms' stakeholder mix increases the level of environmental information compared to employee-related information. The difference in the coverage of these topics aligns with Pizzi *et al.* (2021), who demonstrated that the NFRD fostered the disclosure of information for external stakeholders because companies are more likely to benefit from providing information to them than to internal stakeholders. Another aspect that may partly explain why companies are more inclined to address the information demands of environmentalists is that environmental disclosures have been regulated to a greater extent than social information in the EU (European Union, 2020).

In contrast to previous studies analyzing the extent to which SRR improves reporting practices (Carini *et al.*, 2021; Larrinaga *et al.*, 2002; Luque-Vílchez and Larrinaga, 2016; Muserra *et al.*, 2020), we consider that companies may adopt different responses to regulation (Oliver, 1991). The results of our quantitative analysis connect with the findings of the qualitative studies of Aureli *et al.* (2020) and Criado-Jiménez *et al.* (2008), who also relied on Oliver (1991) to study the responses of companies to SRR. While Aureli *et al.* (2020) show that firms may acquiesce to SRR in the first year of its application, our results indicate that companies may follow a more active strategy – compromise – if they suffer from the demands of multiple stakeholders, especially environmentalists. The relevance of this factor is more salient when companies define the information they disclose in their non-financial statements or sustainability reports, documents that are of interest to a broader range of stakeholders, compared to the content of financial statements, the main audience of which are investors or regulators (Criado-Jiménez *et al.*, 2008; Neu *et al.*, 1998).

Additionally, our results add to previous studies reporting that the NFRD has influenced firms' coverage and disclosure levels across sustainability topics. Korca *et al.* (2021) found that the amount of information published by the Italian banking group analyzed in their case study increased for all the matters required by the Italian transposition, yet only the quality of social and employee disclosures improved. Carini *et al.* (2021) also reported that the NFRD shaped companies' coverage of sustainability matters. Particularly, their case study of an Italian oil firm shows the environment was the topic which coverage increased more after the enactment of the NFRD. Our findings contribute to this debate by providing evidence of the role of firms' stakeholder configuration in determining the different changes in the coverage of sustainable disclosures after the NFRD transposition. For the oil company studied by Carini *et al.* (2021), environmentalists are the most significant stakeholder, thereby driving the coverage of environmental matters. By contrast, environmentalists may not be a significant stakeholder for the banking group of Korca *et al.* (2021), which causes other sustainability topics relevant to other influential stakeholders of the firm (i.e., society and employees) to be covered more extensively after the Italian transposition of the NFRD.

Finally, our results relate to the academic debate on the extent to which the NFRD improves the quantity or quality of sustainability disclosures. Prior studies have investigated this issue in specific countries, such as Italy (Aureli *et al.*, 2020; Carini *et al.*, 2021; Muserra *et al.*, 2020; Pizzi *et al.*, 2021) or Poland (Matuszak and Róžańska, 2021). Our comparison of the coverage and level of sustainability reporting practices in 2013, 2016, and 2018 shows an increase in the

coverage of topics (i.e., quantity), while the improvement of their level was more limited. In so doing, our exploratory analysis aligns with the findings of prior authors reporting that SRR increases the quantity but not so much the quality of disclosures (Chauvey *et al.*, 2015; Costa and Agostini, 2016; Fallan and Fallan, 2009).

7. Conclusions

This study investigates the way in which firms' stakeholder configuration shapes how they respond to SRR. We analyzed this relationship in the sample of Spanish listed firms mandated to report sustainability information in the context of the NFRD transposition. The results show that companies facing the demands of multiple stakeholders are more likely to follow a compromise strategy through which they bargain to favor the coverage of matters relevant to a specific stakeholder type. Particularly, environmentalists are the most relevant stakeholder in influencing corporate disclosures.

Our study enriches the academic debate on the influence of SRR, particularly the NFRD, on sustainability reporting by relying on Oliver's (1991) framework, an alternative theoretical lens compared to the most commonly applied to explore this issue (Korca and Costa, 2021). Oliver's (1991) framework allows us to consider a broad range of strategic corporate responses to SRR as a source of institutional pressure and investigate the factors that determine the one companies adopt. Particularly, the study contributes to prior literature on SRR by focusing on one specific factor, the multiplicity of stakeholders, relevant within the "assemblage" of factors (Duncan and Thomson, 1998) that define how firms adjust their reporting practices. More generally, the paper also connects to a broader discussion in the accounting literature on how firms address the regulatory information requirements on other topics beyond sustainability, such as corporate governance (Shrives and Brennan, 2017), stakeholder engagement (Cosma *et al.*, 2021), or full cost accounting (Haraldsson and Tagesson, 2014).

In terms of managerial implications, this study shows that companies unevenly cover the social and environmental matters they are mandated to report. The higher coverage of topics relevant to a particular stakeholder type could be the outcome of a materiality analysis (Jørgensen *et al.*, 2021). However, at least in the Spanish setting, this finding indicates that companies inadequately respond to SRR because the transposition of the NFRD does not allow companies to exclude information. Currently, no penalties are contemplated when firms fail to comply, but the Corporate Sustainability Reporting Directive (CSRD) proposal that will update the NFRD

aims to incorporate specific sanctions in case of non-compliance. Therefore, the pressure to cover all the non-financial topics required by SRR will increase for managers, regardless of the stakeholder to which those matters are relevant.

Additionally, our study could be insightful to policymakers, especially in the EU, where the abovementioned CSRD proposal seeks to extend the positive outcomes and overcome the shortcomings of the NFRD. As noted by previous literature, regulation does not necessarily cause a genuine change in sustainability disclosure practices (Peters and Romi, 2013). In this regard, the results of our study contribute to identifying aspects that EU regulators should consider to enhance the impact of the CSRD. Notably, they point to the importance of involving relevant stakeholders in its design and considering the feedback received from preparers in the CSRD consultation process to promote adequate compliance. Although Spanish companies do not fully comply with Law 11/2018, their compliance levels are higher than with previous SRR attempts (Criado-Jimenez *et al.*, 2008; Larrinaga *et al.*, 2002; Luque-Vílchez and Larrinaga, 2016). According to Bebbington *et al.* (2012), the low compliance with prior SRRs was partly driven by the limited involvement of stakeholders in their development. In the case of the NFRD transposition, the participation of experienced social and environmental accounting academics elaborating Law 11/2018 to foster its congruence with previous sustainability reporting practices (Garcia-Torea *et al.*, 2020) seems to have positively impacted the extent to which firms comply with its requirements. The broader participation of stakeholders could facilitate the incorporation of relevant stakeholders' views to evaluate the topics that companies will have to disclose to guarantee that their information demands could be adequately and equally met among organizational stakeholders. In addition to the abovementioned sanctions to encourage companies to comply adequately, this study highlights the importance of the forthcoming EU sustainability reporting standards. Although Law 11/2018 lists the topics that companies must report, it failed to suggest the specific disclosures companies have to provide to cover those issues. Therefore, it is paramount that the EU sustainability reporting standards offer clear guidance to companies on producing indicators that fulfil the CSRD requirements.

We note that our study is subject to limitations that suggest future research avenues. First, the sample consists of only 84 observations representing all the Spanish listed companies mandated to report under Law 11/2018. Prior studies performing similar research designs have used samples of similar size (Álvarez-Etxeberria and Aldaz-Odriozola, 2018; Schneider *et al.*, 2017). Future research could use larger samples and include non-listed companies. Second, this study analyzed the reports published in 2018, the year right after the introduction of Law 11/2018.

Future studies could develop a longitudinal study to analyze the evolutionary process of corporate strategic responses to SRR over time.

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Notes

[1] We performed untabulated regression analyses for the 252 firm-year observations corresponding to the 84 companies in 2018, 2016 and 2013, in which we added two independent variables, LAW and INTER, to control for the influence of the state of the NFRD transposition in each year. LAW takes the value of one for the observations corresponding to the year 2018 (the first year of Law 11/2018 application) and zero otherwise. INTER takes the value of one for the observations corresponding to the year 2016 and zero otherwise. The models including only LAW as an additional independent variable shows that it has a positive and significant coefficient for both COMPL_COV and COMPL_LEVEL, thereby indicating that the coverage and level of non-financial reporting are higher compared to the baseline observations (e.g. those in 2013 and 2016). The positive and significant effect of LAW is maintained when also controlling for INTER in the same regressions. Overall, the additional analyses reinforce our findings that the Law had a significant impact on firms’ sustainability reporting practices.

[2] These results are similar when performing an untabulated panel data analysis for the 252 firm-year observations corresponding to the 84 firms in 2018, 2016 and 2013. We ran the analysis with random effects because our variable of interest (MULT) was time-invariant for most firms. MULT coefficient is positive and significant when regressing COMPL_LEVEL and COMPL_COV. We run additional models controlling for the enactment of Law 11/2018 by adding a variable (LAW) that takes the value of one in 2018 (first year of Law 11/2018 application) and zero otherwise. These models show that the NFRD transposition (LAW) positively influenced firms’ sustainability disclosures. Finally, we incorporated LAW_MULT (LAW*MULT) to specifically capture the effect of MULT for the observations in 2018. The effect of LAW_MULT is positive and significant, while MULT loses its significance, indicating that the significant impact occurs after the implementation of Law 11/2018.

Appendix: Examples of content analysis codification

Following Cormier et al. (2005), each indicator was scored on 0-3 scale: 0 when the indicator was not provided, 1 when the indicator was covered partially by disclosing general and vague information, 2 when the indicator was comprehensively covered by providing narrative information, and 3 when the indicator was comprehensively covered by providing monetary or quantitative information.

The following table provides an example of an indicator to describe the criteria considered for each score.

Indicator	0	1	2	3
Training programs to improve employee´s abilities and transition assistance programs	The indicator was not provided.	The firm only explains that it provides training to employees to improve their careers and increase value to customers. No information is provided on the type of training, the number of employees benefiting from it, or results. (Secuoya Grupo de Comunicación, S.A., Non-Financial Statement, 2018, pp. 19-20) ¹	The firm provides a detailed narrative description of its training programs and explains the training methods used. (Cellnex Telecom Non-Financial Statement, 2018, pp. 75-76) ²	The firm provides a detailed narrative description of its training programs, complemented with the number of employees that have been trained, training hours, and the amount of money invested in these issues. (AENA SME S.A. 2018, Non-Financial Statement, pp. 91-93) ³

¹ Secuoya Grupo de Comunicación, S.A. (2018). *Informe Grupo ejercicio 2018*. Granada. Available at: https://gruposecuoya.es/wp-content/uploads/2019/04/20190430_Informe-anual-2018_Secuoya.pdf

² Cellnex Telecom. (2018). *Informe anual integrado. Informe de gestión consolidado y cuentas anuales consolidadas*. Barcelona. Available at: https://www.cellnextelecom.com/content/uploads/2019/02/Informe-Anual-Integrado-2018-Cellnex-ESP_DEF_entero_alta-calidad.pdf

³ Aena, SME S.A. (2018). *Estado de información no financiera. Informe de responsabilidad corporativa*. Madrid. Available at: <https://portal.aena.es/csee/ccurl/930/468/Informe-RC3-2018-ES.pdf>

Table I. Distribution of indicators per blocks and topic

Blocks	# indicators
Topics	
Environment	25
Introduction	5
Pollution	5
Circular Economy and Waste Prevention and Management	2
Sustainable Use of Recourses	5
Climate change	5
Biodiversity	3
Personnel	21
Employment	7
Work organization	3
Health and security	3
Labor relations	2
Training	2
Accessibility	1
Equality	3
Human rights	4
Corruption	1
Entity	14
Commitment to Sustainability Development	7
Outsourcing and Suppliers	3
Consumers	2
Fiscal Information	2
TOTAL	65

Table II. Definition of variables and related main models

Variable	Definition	Main models
<i>Dependent variables</i>		
Compliance level (COMPL_LEVEL)	The proportion of the sum of the indicators' scores of a firm respect to the maximum value it could get (195=65 indicators*3). Each indicator is scored from 0 to 3 as follows: 0 if the indicator was not provided, 1 if the indicator was partly covered by disclosing general and imprecise information, 2 if the indicator was comprehensively covered by providing narrative information, and 3 if the indicator was comprehensively covered by also providing monetary or quantitative information.	Model 1
Compliance coverage (COMPL_COV)	Proportion of disclosed indicators, regardless of their level, respect to the total number of indicators that companies must publish.	Model 1
Compliance level of environmental topics (COMPL_ENV)	Proportion of the sum of the environmental indicators' scores respect to the maximum possible score for the environmental 75=25 indicators*3)	Models 2 and 3a
Compliance level of employee-related topics (COMPL_EMPL)	Proportion of the sum of the employee-related indicators' scores respect to the maximum possible score for the employees (63=21 indicators*3)	Models 2 and 3b
<i>Independent variables</i>		
Multiplicity of stakeholders (MULT)	The number of stakeholder's type (environmentalists, employees or customers) exerting pressure on firms. It value ranges from 0 to 3.	Models 1 and 2
Multiplicity of stakeholders conditional to environmentalists (MULT_ENV)	The influence of the other type of stakeholders when environmentalists are a relevant stakeholder. It takes the value of <i>MULT</i> minus one if environmentalists are one of the relevant stakeholders of a firm, a zero otherwise	Model 3a
Multiplicity of stakeholders conditional to employees (MULT_EMP)	The influence of the other type of stakeholders when employees are a relevant stakeholder. It takes the value of <i>MULT</i> minus one if employees are one of the relevant stakeholders of a firm, a zero otherwise	Model 3b
<i>Control variables</i>		
Firm Size (SIZE)	The logarithm of total assets	All
Ownership structure (OWN)	Free float as the percentage of common shares	All
ROA (ROA)	Profit before taxes divided by total assets	All
Leverage (LEV)	Total debt (measured by total liabilities) divided by total assets	All

Table III. Descriptive statistic and Pearson pairwise correlations

	Mean	Standard Deviation	Min.	Max.	COMPL_LEVEL	COMPL_COV	MULT	MULT_ENV	MULT_EMPL	SIZE	OWN	ROA	LEV
COMPL_LEVEL	0.542	0.166	0.000	0.892	1.000								
COMPL_COV	0.637	0.186	0.000	0.969	0.987***	1.000							
MULT	1.655	0.736	0.000	3.000	0.463***	0.432***	1.000						
MULT_ENV	0.512	0.703	0.000	2.000	0.342***	0.315***	0.812***	1.000					
MULT_EMPL	0.560	0.700	0.000	2.000	0.454***	0.418***	0.847***	0.684***	1.000				
SIZE	9.383	1.249	5.145	12.164	0.455***	0.412***	0.392***	0.141	0.482***	1.000			
OWN	0.552	0.259	0.033	0.999	0.185	0.187	0.127	-0.011	0.070	0.184	1.000		
ROA	0.047	0.125	-0.410	0.708	-0.312***	-0.343***	-0.210	-0.205	-0.162	-0.115	-0.180	1.000	
LEV	0.720	0.281	0.216	2.110	-0.113	-0.097	-0.029	-0.084	0.075	0.077	0.212	-0.393***	1.000

Note: significance levels: ***p < 0.01, **p < 0.05, *p < 0.10

COMPL_LEVEL: level of the information that companies disclose to comply with SRR

COMPL_COV: coverage of the topics that companies disclose to comply with SRR

MULT: multiplicity of stakeholders

MULT_ENV: multiplicity of stakeholders that including environmentalists

MULT_EMPL: multiplicity of stakeholders that including employees

SIZE: firm size

OWN: ownership structure

ROA: return on assets

LEV: leverage

Table IV. Evolution of the coverage and level of the topics listed in Law 11/2018

Year	2013	2016	2018	2013-2016	2016-2018
# reporting firms	62	74	82	Kruskal-Wallis chi-square	Kruskal-Wallis chi-square
Panel A: COMPL_COV					
All	0.352	0.431	0.637	3.016*	25.858***
Environment	0.358	0.428	0.604	2.266	16.244***
Employees	0.376	0.475	0.757	3.708*	47.780***
Human Rights	0.161	0.155	0.259	0.004	5.874**
Corruption	0.25	0.274	0.607	0.071	13.917***
Entity	0.366	0.461	0.628	3.918**	12.310***
Panel B: COMPL_LEVEL					
All	0.297	0.371	0.542	3.391*	21.465***
Environment	0.286	0.347	0.482	2.774*	12.121***
Employees	0.327	0.42	0.666	4.390**	43.999***
Human Rights	0.113	0.116	0.178	0.009	5.363**
Corruption	0.222	0.25	0.468	0.087	10.296***
Entity	0.332	0.424	0.573	4.271**	10.542***

Note: significance levels: ***p < 0.01, **p < 0.05, *p < 0.10

COMPL_LEVEL: level of the information that companies disclose to comply with SRR

COMPL_COV: coverage of the topics that companies disclose to comply with SRR

Table V. Main analyses

VARIABLES	Model 1a	Model 1b	Model 2a	Model 2b	Model 3a	Model 3b
	COMPL_LEVEL	COMPL_COV	COMPL_ENV	COMPL_EMPL	COMPL_ENV	COMPL_EMPL
MULT	0.047** (0.023)	0.045* (0.026)	0.073*** (0.026)	0.016 (0.024)		
MULT_ENV					0.080*** (0.026)	
MULT_EMPL						0.040 (0.027)
SIZE	0.042*** (0.013)	0.041*** (0.015)	0.036** (0.015)	0.025* (0.013)	0.045*** (0.014)	0.0175 (0.014)
OWN	0.057 (0.057)	0.066 (0.065)	0.045 (0.065)	0.040 (0.067)	0.065 (0.066)	0.047 (0.066)
ROA	-0.380*** (0.118)	-0.476*** (0.143)	-0.264* (0.141)	-0.566*** (0.142)	-0.224 (0.149)	-0.559*** (0.139)
LEV	-0.142** (0.064)	-0.154** (0.074)	-0.116 (0.071)	-0.211*** (0.070)	-0.102 (0.072)	-0.217*** (0.066)
Constant	0.161* (0.092)	0.278*** (0.102)	0.099 (0.115)	0.568*** (0.106)	0.070 (0.110)	0.642*** (0.115)
R-squared	0.367	0.336	0.276	0.267	0.295	0.286

Note: robust standard errors in parentheses.

Significance levels: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$

COMPL_LEVEL: level of the information that companies disclose to comply with SRR

COMPL_COV: coverage of the topics that companies disclose to comply with SRR

COMPL_ENV: level of the environmental information that companies disclose to comply with SRR

COMPL_EMPL: level of the employee-related information that companies disclose to comply with SRR

MULT: multiplicity of stakeholders

MULT_ENV: multiplicity of stakeholders that including environmentalists

MULT_EMPL: multiplicity of stakeholders that including employees

SIZE: firm size

OWN: ownership structure

ROA: return on assets

LEV: leverage

Table VI. Robustness analyses: the influence of stakeholder types

VARIABLES	Model 4a	Model 4b	Model 4c	Model 4d	Model 4e	Model 5a	Model 5b	Model 5c
	ENV/EMPL	ENV/EMPL	ENV/EMPL	ENV/EMPL	ENV/EMPL	COMPL_LEVEL	COMPL_ENV	COMPL_EMPL
MULT	0.058 (0.038)							
MULT_ENV&EMPL		0.140** (0.054)						
MULT_ENV			0.090** (0.037)					
MULTI_EMPL				0.041 (0.042)				
ENV					0.195*** (0.054)	0.015 (0.029)	0.082** (0.037)	-0.074** (0.029)
EMPL					0.013 (0.063)	0.093*** (0.035)	0.106*** (0.040)	0.077* (0.039)
CUST					-0.044 (0.059)	0.023 (0.032)	0.021 (0.038)	0.039 (0.035)
SIZE	0.017 (0.023)	0.017 (0.022)	0.021 (0.021)	0.018 (0.025)	0.037* (0.021)	0.034*** (0.013)	0.033** (0.015)	0.009 (0.013)
OWN	-0.021 (0.104)	0.012 (0.108)	-0.005 (0.105)	-0.006 (0.107)	-0.027 (0.101)	0.056 (0.054)	0.041 (0.065)	0.042 (0.059)
ROA	0.139 (0.265)	0.146 (0.279)	0.247 (0.286)	0.069 (0.268)	0.231 (0.329)	-0.392*** (0.107)	-0.238* (0.133)	-0.633*** (0.140)
LEV	0.110 (0.114)	0.091 (0.115)	0.144 (0.116)	0.083 (0.119)	0.158 (0.128)	-0.169*** (0.063)	-0.126* (0.067)	-0.261*** (0.075)
Constant	0.490** (0.193)	0.538*** (0.201)	0.459** (0.185)	0.564** (0.228)	0.274 (0.203)	0.266*** (0.098)	0.139 (0.126)	0.759*** (0.106)
R-squared	0.050	0.083	0.083	0.038	0.194	0.396	0.307	0.380

Note: robust standard errors in parentheses.

Significance levels: ***p < .01, **p < 0.05, *p < 0.10

ENV/EMPL: relative coverage of environmental respect to employee-related topics

COMPL_LEVEL: level of the information that companies disclose to comply with SRR

COMPL_ENV / COMPL_EMPL: level of the environmental/employee-related information that companies disclose to comply with SRR

MULT: multiplicity of stakeholders

MULT_ENV&EMPL: multiplicity of stakeholders that including both environmentalists and employees

MULT_ENV: multiplicity of stakeholders that including environmentalists
MULT_EMPL: multiplicity of stakeholders that including employees
ENV: environmentalist as a significant stakeholder
EMPL: employees as a significant stakeholder
CUST: customers as a significant stakeholder
SIZE: firm size
OWN: ownership structure
ROA: return on assets
LEV: leverage

Table VII. Robustness analyses: alternative proxies to environmental stakeholder pressure

	Model 6a	Model 6b	Model 7a	Model 7b
VARIABLES	COMPL_LEVEL	COMPL_ENV	COMPL_LEVEL	COMPL_ENV
ENV_EXPENDITURES_B	0.062*** (0.012)	0.081*** (0.018)		
WASTE_M			0.006*** (0.002)	0.010*** (0.003)
SIZE	0.071** (0.025)	0.082** (0.036)	0.006 (0.018)	-0.003 (0.028)
OWN	-0.038 (0.069)	-0.078 (0.110)	0.072 (0.077)	0.092 (0.103)
ROA	-0.745 (0.434)	-0.678 (0.526)	-1.015*** (0.310)	-0.953*** (0.316)
LEV	-0.319** (0.129)	-0.275* (0.141)	-0.346*** (0.116)	-0.326** (0.142)
Constant	0.182 (0.237)	0.005 (0.363)	0.835*** (0.212)	0.841** (0.322)
R-squared	0.600	0.457	0.355	0.261

Note: robust standard errors in parentheses.

Significance levels: ***p < .01, **p < 0.05, *p < 0.10

COMPL_LEVEL: level of the information that companies disclose to comply with SRR

COMPL_ENV: level of the environmental information that companies disclose to comply with SRR

ENV EXPENDITURES B: firm environmental expenditures

WASTE_M: firm amount of waste

SIZE: firm size

OWN: ownership structure

ROA: return on assets

LEV: leverage