




Article

Non-Financial Disclosure: Isomorphism Effect in the Face of New Regulation

Igor Álvarez-Etxeberria ¹, Miguel Marco-Fondevila ^{2,*} and Constancio Zamora-Ramírez ³

¹ Accounting Department, University of Basque Country, 48940 Leioa, Spain; igor.alvarez@ehu.eus

² Accounting and Finance Department, University of Zaragoza, 50018 Zaragoza, Spain

³ Accounting and Finance Department, University of Seville, 41080 Seville, Spain; constancio@us.es

* Correspondence: mmarcof@unizar.es

Abstract: The purpose of this paper is to study the mimetic isomorphism process among firms in a context of expectations of further non-financial disclosure regulation. From the new institutionalism theory approach, we study the effect that the 2014/95/EU Directive transposition into the Spanish law had on 120 companies over an eight-year period and the isomorphism determined by their activity and leadership in reporting before (expectations period) and after the law enactment. Before the law, a trend to increase disclosure was observed, especially among environmentally sensible sectors and low-level reporting firms, while afterwards, the trend was reversed except for leading companies, highlighting the prevalence of the mimetic and normative isomorphism. This work deepens understanding of the adoption processes of coercive norms based on mimetic behaviors and coercive isomorphisms and helps in predicting the effect of a given norm after its announcement and approval, supporting more efficient designs for future legislation.

Keywords: Spanish non-financial information law; isomorphism; expectations; disclosure leadership



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1. Introduction

In recent years, the number of companies publishing sustainability reports has skyrocketed [1]. These reports provide an accounting of company performance from a triple perspective: social, economic, and environmental [2]. Worldwide concern about global warming and stakeholder pressure, together with social, political, and regulatory characteristics, among other factors, have led companies to disclose the impact of their activities on the environment and community [3]. According to Gray, “Social disclosure is the process of communicating the company’s economic, social and environmental performance, and effects of those organization’s performances on their stakeholder’s situation and their future conditions” [4].

Despite the relevance and impact on the industry, most information on social and environmental aspects is published by companies on a voluntary basis, with standards such as the GRI being some of the most used by companies. The debate between the compulsory or voluntary nature of this type of corporate information has been highly relevant in academia. Although there have been different initiatives at the state level, possibly the most important legislative advance developed so far is the one led by the European Union, through the non-financial information directive.

In 2014, the Parliament of the European Union approved the Directive 2014/95 in response to the increasing dissatisfaction with corporate frauds [5] and the lack of trust in European firms [6]. The Directive aimed at legislating the disclosure of non-financial and diversity information, mostly among large companies and corporations. Although the regulation was mandatory only for ‘public interest companies’, it established a milestone reference for other companies and policymakers in the Member States. The companies subject to the regulation are not required to disclose in any particular format, extent, or

structure. Regardless, they are expected to disclose information about their performance and policies in the following areas: environmental, social, human rights, bribery, corruption, and diversity.

Being an EU Directive, Member States were required to transpose the piece of legislation into their own legal body, having had two years to adapt it to their national legislation to avoid information asymmetries within EU countries [5]. Consequently, in 2017, already out of time, the Spanish Government transposed the Directive into the Real Decree/Law 18/2017, which was later extended and improved into the final Law 11/2018 for non-financial information and diversity. This law, however, had a precedent in Law 2/2011's obligations in terms of disclosing good governance and sustainability reports addressing State-Owned-Enterprises [7], which were mandatory, regardless of their size [8]. Furthermore, those corporations with more than 1000 employees were also required to produce a sustainability report and submit it to the Spanish CSR council website [7,9].

With the Law 11/2018, companies and groups with more than 500 employees and those companies considered of public interest must produce a non-financial statement report informing about environmental, social, labor, human rights, corruption and bribery, and societal matters. Although several indications were suggested regarding the structure of the requested report (GRI and European Commission guidelines) and its format (within the financial statements report or as a separate piece), companies are free to choose their preferred way to produce the report. In any case, it must be verified through an assurance report and uploaded to the company website, where it shall remain accessible for the following five years.

In summary, in 2014, Spanish firms had a clear sign that they would soon be required to comply with their non-financial statement. Even though most of them had started reporting non-financial information, a more-than-likely increase in points reported was expected. During the 2014–2018 period, Spanish firms had a chance to increase quality and reported items in their statements without knowing the definite requirements of the law. By doing so, they would be proactive, standing out with better non-financial reports than firms with worse or no statements at all.

The need to issue a standard that regulates social and environmental reporting has traditionally been a subject of academic debate. Before the publication of the European standard, different studies analyzed whether increasing the obligation affects the quality of disclosure, either by exploring different regulatory contexts [10–13] by analyzing the effect of a national standard on the disclosure of companies in those countries [14–17] or by defining a comprehensive description of the sustainability dimension boundaries [18].

The new EU regulation and its transposition into state regulations has generated new studies aiming to provide empirical evidence to the debate [19,20], with the transposition in Italy being the most studied to date [21–24]. Some of these studies have found evidence that non-financial information has not increased [20,22] and that there are no lower levels of corporate irresponsibility [11].

Likewise, the adoption of the Spanish non-financial information law offers an opportunity to investigate how increased regulatory obligation influences the extent of non-financial information disclosure [25]. Indeed, over the last decade, most Spanish large companies have embraced sustainability reporting, as proved by the fact that Spain was one of the countries with the highest number of GRI reports issued, being the top one in 2009 [26], and was among the top countries regarding companies committed to the United Nations Global Compact initiative [27].

While the effects on the levels and quality of non-financial information provided by companies of this regulatory change have been investigated, the approval of the Directive has generated a unique context before the approval of the standard in each country, where companies would act mainly due to regulatory pressures. This context evolved after the approval of local regulations towards an environment marked by the influence of regulatory pressure. This background allows us to investigate whether the reporting levels reached by regulatory pressures would be maintained when a later stage of regulatory pressure

arises. Since Spain is the country where it took the longest to approve a law adopting the Directive, it offers a unique case to analyze these effects.

Given the current debate among scholars about the effect that developing new non-financial reporting regulations may have on the quantity and quality of reporting [22,28–33], our empirical work in the Spanish context contributes to clarifying which isomorphism prevails and how expectations, proactivity, and leadership may influence the companies' response to the law. Based on the new institutionalism theoretical assumptions, in this work we aimed to see if the emergence of the Spanish standard for non-financial information has generated an effect of coercive isomorphism. As a result of the emergence of the norm, companies reveal more social and environmental information, or else the effect is null and void due to a pre-existent normative/mimetic isomorphism that leads to the voluntary disclosure of such information, in line with the common values in business. A recent study in Spain from [34] concludes that the EU Directive has brought more transparency from companies, although the effect after the law enactment remains unknown. In this sense, we aimed to determine if the isomorphism effect is related to the company's previous reporting behavior (leadership).

Specifically, this study delves into how the leadership in adopting practices that will later be regulated determines the normative isomorphism in those contexts and the practices that will finally be adopted after the approval of the standard. Looking at the EU Directive, [35] found that larger and more profitable companies are more likely to disclose this sort of information in a sustainability report.

In another hand, although prior comparative studies analyzing the isomorphisms generated in different institutional frameworks are interesting, research in a specific context provides key information on the effect of supranational policies, providing empirical evidence of how companies behave in that specific context and of the relevance of this information for the regulator.

From an empirical perspective, the research builds in the debate over the voluntariness of non-financial information, stating how effective new reporting obligations may be the ultimate goal of increasing the quantity of non-financial information reported by companies. With Spain being the last country to adapt to the Directive, we counted on an eight-year period scope. The research analyzes how reporting evolved during a five-year expectations-based period and the impact of the law enactment over that evolution on the following three-year period. The study of the companies' reporting before and after the law allows for the analysis of companies' behavior concerning their sensitivity to the regulatory changes (coercive isomorphism) or to their leadership and proactivity in adopting non-financial reporting (normative or mimetic isomorphism). Our results help in understanding how relevant institutionalism is for corporate reporting compared to the pressure exerted by mimetic isomorphism, thus clarifying the previous results obtained by [19,22] and bringing more clarity into the theoretical framework of corporate reporting, the actual effects of regulation, and to which level reporting transparency was increased after the law enactment, testing the observations of [34] for the EU Directive.

2. Theoretical Background and Hypothesis Development

2.1. Conceptual Framework

The non-financial information and, in particular, the disclosure of social and environmental information of companies has been studied under the prism of multiple theoretical perspectives, with the theory of stakeholders [36], the theory of legitimation [37,38], and the theory of new institutionalism [39] being the most commonly used. Although these three theories have multiple similar argumentative points, this study is based on the theoretical arguments derived from the new institutionalism to study the effect of the Spanish non-financial information standard on the issuance of non-financial information of Spanish companies.

The institutional theory has two branches—dissociation and isomorphism [40,41]. Isomorphism, which is most prevalent in social and environmental information research,

explains a situation in which an organization is institutionally affected by three types of pressures [42].

The effects of such pressures are called isomorphisms [39]. Ref. [43] understands these effects of isomorphism as processes by which “an obligation is generated for an organization to resemble other organizations that are in the same set of institutional conditions”, i.e., the pressures that occur in the environment of the organization generate a behavior assimilation process or an alignment with the behavior adopted by other organizations in the same society. Authors such as [44] consider that this alignment in the behavior of organizations aims to achieve legitimization by the society with which they coexist. As a result, this process of isomorphism helps us foresee and understand the behavior of companies and their adaptation to the environment in which they carry out their activity [16,17,45,46].

Neoinstitutional theory predicts that companies in different countries adopt different CSR priorities, the justification lying on the normative, and cultural elements that include socially accepted beliefs and norms [27]. Consequently, the specific context in which the organization is located shapes its actions [47] and, among them, the CSR practices [48], the application of codes, eco-management rules, and policies [49]. From this theoretical perspective, [39] established three isomorphism types: coercive, normative, and mimetic.

In the literature related to social and environmental information, numerous works highlight the importance of the legal environment in business disclosure and reporting [50–55]. In this context, the legal framework is an essential factor within coercive isomorphism. Indeed, [39] argue that Coercive isomorphism is intended to understand the effect on an organization derived from regulatory characteristics established by norms and laws.

Coercive pressures may be both formal and informal. They may be felt as compulsion or persuasion to do something, being one of the most relevant examples of these isomorphic pressures the norms developed by the regulatory institutions in every society [56]. The establishment of norms pushes companies to adopt a series of obligations that condition their behavior [17]. These coercive forces are strongly linked to the power of persuasion exerted by regulators through the possibility of imposing economic sanctions for noncompliance [57] or avoiding threats of future more restrictive regulations [17]. In this case, we would be talking about expectations of future standards to which companies anticipate in time. Similarly, [58] argue that the legal environment at a country level acts as a key determinant of coercive isomorphism.

Professionalization is interpreted as the collective struggle of members of a profession to define its conditions and methods and to establish a cognitive basis [39]. The normative isomorphism analyzes the non-formal pressures derived from the professional and business practice, i.e., pressures coming from informal rules that most professionals in that institutional environment have accepted and adopted in their decision-making [59]. The effect of such isomorphic pressure may vary depending on the company culture, the norms, and the values existing in the national context [60]. This process lies in the values and decisions made by the professionals of organizations that voluntarily agree on guides and sound practices when managing their companies [61,62]. These values, norms, beliefs, and assumptions are symbolically reinforced and transmitted through socialization and training of professionals from generation to generation [57]. The regulatory isomorphism has its origins in the fact that, quite often, professionals have similar training, thus conditioning their way of seeing the world and the spread of ideas through professional interaction and associations [39,63,64]. When these organizations’ leaders decide to participate in sustainability-related initiatives, it may not mean that they are committed to certain social conventions, but rather it implies that they are attentive and adaptable to new social norms [27].

Finally, mimetic isomorphism considers that organizations tend to homogenize their behavior due to a mimetic process. Due to the uncertainties of the environment, an organization will try to emulate or model itself based on the practice of other organizations perceived as more legitimate or successful [40,56]. Ref. [17] attributed the diffusion of sustainability reporting to mimicry of some trends. In this sense, [56] considers that

mimetic and coercive pressures may coincide rather than be totally different. This mimicry is generated as a process of imitation of the competitors' behavior, generally looking at organizations considered successful in their field [22]. According to [17], the practice of CSR presents a degree of mimetic convergence as organizations copy the practices of their peers. In this regard, [65] argue that mimetic isomorphism can influence companies' disclosure of environmental issues. The mimetic process can lead an organization to initiate the process of issuing environmental or social information because its competitors are doing so, thus looking for social legitimacy [27,66].

A different focus which has recently gained a lot of attention is the idea of compliance becoming a goal and guiding or influencing the companies' decisions over corporate reporting. With a similar approach to that of the current research, [66] studied how and why companies respond to regulation, highlighting the complexity and ambiguity of companies' behavior in connection to compliance. In a related line, [67] assessed if de facto standards or frameworks could be used by companies to comply with Directive 2014/95, questioning its actual suitability and its potential role as a façade despite a real push towards better sustainability reporting.

2.2. Hypothesis Development

The debate between voluntary information versus mandatory information has been discussed extensively in the literature [23,68]. However, the effects of mandatories on the quantity and quality of non-financial information have had varying results [22,28–33]. Specifically, there is a significant diversity of results when analyzing coercive isomorphism. Ref. [10] compared the behavior in disclosing CSR information in two different institutional contexts, one of the French companies with high regulatory pressures and the other of companies belonging to more liberal contexts such as the US. The authors confirm the theoretical approaches to coercive isomorphism, as the study showed that French companies presented higher-quality disclosure than US companies.

In 2020, [24] conducted a survey among those responsible for preparing companies' non-financial information and the auditors of those same companies. Respondents considered that the adoption of the Italian standard by companies brought in different positive aspects in the issuance of this information, including promoting board responsibility, the flexibility of the standard, and more homogeneous criteria that help its implementation. Ref. [19] studied the effect of the European Directive and its impact on 253 European companies. By studying their annual reports and CSR reports, they concluded that the emergence of the European Non-Financial Reporting Directive positively impacted the companies studied, particularly on their rate of disclosure of non-financial information, which improved by more than 69% from 2016 to 2017. Ref. [21] also analyzed the effect of the Italian standard through a comparative analysis of the information issued by companies listed on the Milan Stock Exchange market. Non-financial information showed a net improvement from 2015 to 2017. In particular, the quality of the information disclosed increased by 21.2%. The authors argued that the disclosure of information improved overall due to the emergence of the standard. This positive effect is most evident in those sectors considered environmentally sensitive. The explanation is that such sectors are often characterized by a lower willingness towards voluntary non-financial disclosure, i.e., no normative isomorphisms are generated.

However, some works show that there is no process of coercive isomorphism. In Spain, [69] considered that the application of accounting standard 437/98 (Environmental Declaration) did not generate the expected effect. The authors argued that there was a significant breach of the accounting standard by the obliged companies since 56 out of 70 companies analyzed did not disclose any of the information required by the Spanish standard. Ref. [14] conducted a series of interviews with managers in the CSR area of Canadian companies to know the influence of regulations when preparing their CSR reports. The study showed that the professionals responsible for the information had not been influenced by the emergence of the Canadian standard. This situation was caused by

a lack of concreteness of the content to be integrated, as well as how it was to be presented. Ref. [15] studied the effect of the French standard “Nouvelles Régulations Économiques (NRE 2001-420)”. They compared the information revealed in 2004 and 2010, concluding that the level of transparency in the information disclosed had not increased satisfactorily.

Recently, [22] analyzed the impact of the Italian non-financial information standard on a sample of 92 companies that were already disclosing this type of information voluntarily, highlighting that the appearance of the standard did not have an effect on the amount of information disclosed. Ref. [20] analyzed Baltic companies (Lithuania, Estonia, and Latvia), highlighting that regulatory and company-specific factors have a greater effect on this type of information than coercive factors derived from standards. The same results were achieved by [23], who considered that the adoption of CSR principles such as the GRI has had a greater impact on the disclosure of the Italian companies studied than the adoption of the regulations, concluding that the adoption of such principles affects the good quality and processing of non-financial information [12,13].

Ref. [11] contribution to companies belonging to 24 OECD countries is worth noting, as it compares the disclosure of information provided by countries where specific legislation exists (France, UK, and Denmark) with other OECD countries that have not developed a standard governing mandatory non-financial information. They concluded that the legislation does not lead to lower levels of business irresponsibility.

The aforementioned studies have focused on analyzing the net effects of the application of national adaptation rules to the European Directive 2014/95 and its determining factors. The process of adopting a European directive offers an opportunity for research on the behavior of organizations in the face of a certain regulatory change and, equally importantly, how this previous behavior determines their reaction after the approval of the standard.

The uncertainty of the stage prior to a certain regulatory change generates an environment where new actors willing to adapt in advance may emerge. In this context, there will also be organizations that have previously assumed these practices in a substantive manner, showing leadership behavior in disclosure. Thus, a context of strong regulatory pressure arises where the pre-existing practices of leading companies will determine the behavior of the companies looking to adopt them. Consequently, we can establish the following hypothesis:

H1. *The normative institutional pressure brought by law expectations positively affects the quantity of information disclosed.*

Some authors like [21] argue that the emergence of the standard has a stronger influence in those sectors considered to be environmentally sensitive, especially when environmental risks are present. Specifically for Spain, [70] claimed that companies with multiple stakeholders' pressure tend to favor disclosure of relevant topics, especially in the environmental realm. In order to test this possibility, we established a second hypothesis:

H2. *The activity of the company and its sensitivity to environmental impacts determines the effect of the Directive and the Law.*

Studying the EU Directive effect on reporting, [35] found that larger and more profitable companies are more likely to disclose non-financial information. However, with the law's enactment, regulatory pressure will emerge, and companies that did not take the lead in assuming CSR reporting practices will adapt to the new context. If regulation is not explicit or detailed enough, reporting levels may consequently decrease in non-leading companies since they will only react to the regulatory pressure and no longer to the normative pressure. However, companies that took the initiative from the beginning to substantively adopt the new practices will maintain high levels of reporting after the approval of the law or even increase them. Accordingly, we propose the following hypothesis.

H3. *The leadership (or non-leadership) in adopting new reporting practices prior to the approval of the regulation determines the level of reporting after the approval of the standard (or the accommodation to the levels of reporting required by the new regulatory standard).*

3. Research

3.1. Sample

Law 11/2018 states that the non-financial report must be prepared by “public limited companies, limited liability companies and share-limited companies that simultaneously have the status of public interest entities whose average number of workers employed during the financial year exceeds 500 and are considered large enterprises”. According to [71], these conditions apply to at least 1000 Spanish companies, a number that has from 2021 due to the lower threshold intended from that year.

As the object of this research was to assess the impact of the law on the quantity of non-financial information reported by large Spanish companies, we selected companies that were already providing voluntary non-financial information before the aforementioned law over the last few years. In this sense, all companies listed on the Spanish continuous market constitute a broad sample, representative of large Spanish companies.

On the other hand, to compare the information disclosed over several years homogeneously and systematically, we used the ESG Datastream database with all companies listed on the Spanish continuous stock market, with a final sample of 120 companies belonging to seven main sectors of activity according to the categorization of the Madrid Stock Exchange (Table 1).

Table 1. Sample companies per sector.

Sector	Energy	Basic Materials, Industry, and Construction	Consumption Goods	Consumption Services	Financial Services	Technology and Telecommunications	Real Estate Services
Nbr. companies	13	30	22	18	15	9	13

The Law 11/2018, which came into force on 28 December 2018, affecting 2019 reports, determines the two timeframes to study and the expectations period between the EU directive law approval and the post-law ‘certitude’ period (Figure 1).

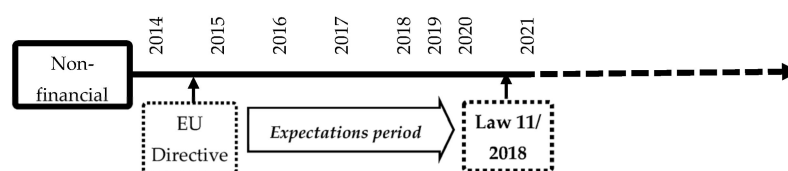


Figure 1. Research scheme.

This time frame of the Spanish case is especially interesting since it was the last country of the European Union and the European Economic Area to adopt the aforementioned directive. This allows us to have an extended time frame of data during the ‘expectations’ period and after the regulation adoption.

3.2. Methods

Law 11/2018 is clear about the topics to be reported, which are environmental issues (pollution, circular economy, waste prevention, and management, sustainable use of resources, climate change, and biodiversity protection), social and personnel issues (employment, labor organization, health and security, industrial relations, training, accessibility, equality), and information on human rights, corruption, and bribery, as well as on society (commitments to sustainable development, outsourcing and suppliers, consumers and tax information). However, given the voluntary nature of the information, on the one hand, and the adequacy to the specific characteristics of the activity in each company, on the other hand, no specific indicators are defined or requested to fulfill the report. Looking to apply a quantitative analysis of the companies’ reports under conditions of independence, homogeneity, and completeness; the environmental, social, and governance indicators

(ESGs) provided by the Thomson Reuters Datastream database were adopted to measure the disclosed information over the years.

Datastream provides a set of 257 ESG indicators linked to the topics required by the law (Table 2). Aiming at assessing the amount of information disclosed by the companies, a dichotomous analysis of the presence or not of each target indicator was performed so that the volume of information per topic could be compared before and after the law approval.

Table 2. Datastream quantitative indicators per category.

Corporate Governance—99 Indicators	Society—43 Indicators
<p>Good Governance. Business model, organization, structure, evolution, CSR policies, goals and outcomes, risks, negative impacts and their management, etc.</p> <p>Corruption and Bribery. Prevention measures, transparency procedures, etc.</p> <p>Fiscal information. Profit per country, taxes, and public grants obtained</p>	<p>Sustainable Development and SDGs. Activity impact on local employment, development, and community</p> <p>Subcontracting and Suppliers. Inclusion of social and environmental matters in procurement policies</p> <p>Consumers. Initiatives to protect consumers, manage claims, and solve discrepancies</p> <p>Human Rights. HR procedures, prevention, and management</p>
Social—49 indicators	Environmental—66 indicators
<p>Employees and Labor. Number and distribution of employees by gender, age, skills, contract, wage, absenteeism, flexibility, family reconciliation, etc.</p> <p>Health and Security. H&S conditions in work premises, professional illnesses, categorization, etc.</p> <p>Training. Training policies, hours, access, etc.</p> <p>Disability and Equality. Universal accessibility for people with disabilities</p> <p>Social Relationships. Social dialogue, unions, and negotiation actions with employees</p>	<p>Pollution. Prevention, reduction, and recovery actions for all kinds of pollution, including acoustic</p> <p>Climate Change. Carbon and GHG emissions management and prevention. Monitoring, reduction, and compensation actions and long-term goals</p> <p>Circular Economy. Prevention, recycling, and re-use to recover waste, and to avoid waste of resources</p> <p>Use of Resources. Water, energy, and raw materials consumption and efficiency, use of renewables</p> <p>Biodiversity. Preservation and impact mitigation</p>

With a sample of 120 companies over seven years and 257 indicators per year, the set of observations is 215,880, with 30,840 per year. With this group of data, a discrete analysis of the non-financial information of companies was carried out, at an aggregate level and by sector, for all the information and for the different topics indicated in the law.

3.3. Statistical Model

In order to test the robustness of the discrete results, we constructed four dependent variables in line with [19], classifying items according to its main topic within the companies' report, with SOC being the mean of social-related items, CG being corporate governance, and ENV being environmental. The fourth construct, CSR, is the mean of the three previous components: SOC, CG, and ENV. These four variables are expressed in percentages.

Firstly, we performed a test of difference on means of CSR variable and its three components during our studied period 2014–2020. Secondly, we ran the following model specification for each dependent variable: SOC, CG, ENV, and CSR:

$$\text{SOC} = \beta_0 + \beta_1 \text{SIZE} + \beta_2 \text{ROA} + \beta_3 \text{TOBINQ} + \beta_4 \text{RISK} + \beta_5 \text{LAW} + \varepsilon \quad (1)$$

$$\text{CG} = \beta_0 + \beta_1 \text{SIZE} + \beta_2 \text{ROA} + \beta_3 \text{TOBINQ} + \beta_4 \text{RISK} + \beta_5 \text{LAW} + \varepsilon \quad (2)$$

$$\text{ENV} = \beta_0 + \beta_1 \text{SIZE} + \beta_2 \text{ROA} + \beta_3 \text{TOBINQ} + \beta_4 \text{RISK} + \beta_5 \text{LAW} + \varepsilon \quad (3)$$

$$\text{CSR} = \beta_0 + \beta_1 \text{SIZE} + \beta_2 \text{ROA} + \beta_3 \text{TOBINQ} + \beta_4 \text{RISK} + \beta_5 \text{LAW} + \varepsilon \quad (4)$$

The independent variables are defined in Table 3. Besides, counting panel data and controlling cross-sectional and time series, we ran OLS regressions by robust standard errors clustered by firm-year.

Table 3. Independent variables definition.

Variable	Definition
ROA	Return on assets. Calculated by earnings before interest and taxes divided by total assets at the end of fiscal year 2014 [72–77].
TOBINQ	Proxy of TobinQ, calculated as the market capitalization of the company with the addition of preferred shares, book value of long-term debt, and current liabilities, divided by book value of total assets at the end of the fiscal year 2014 [78–81].
RISK	Dummy variable, taking value 1 if the firm belongs to GICS sectors Petrol and Energy or Basics Materials [82–87].
LNCAP	N. logarithm of market value of the firm.
FOREIGN	Foreign sales as a percentage of total sales of the firm for the year [88].
LAW	Dichotomous variable being 1 when the firm has to fulfill the approved law or 0 otherwise.

4. Results

4.1. Descriptive Results

The first set of results, related to the average quantity of information reported, show how 2018 was the tipping point for a period of continuous increase in the quantity of information reported, with a significant fall in 2019 that continued in 2020. Indeed, among the total number of indicators included in ESG analysis, the percentage of indicators included in the sample companies' reporting dropped notably in 2019 (Table 4).

Table 4. Percentage of indicators included in reporting.

2014	2015	2016	2017	2018	2019	2020
33.6%	34.2%	34.3%	38.1%	53.9%	48.6%	48.2%

If the analysis is broken down into the three dimensions considered by ESG, it can be observed how the change in trend is consistent throughout the three dimensions (Figure 2).

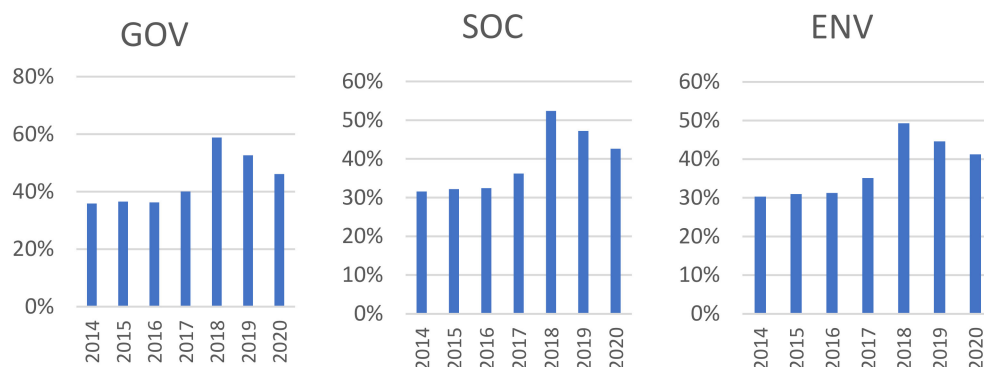


Figure 2. Quantity of information reported.

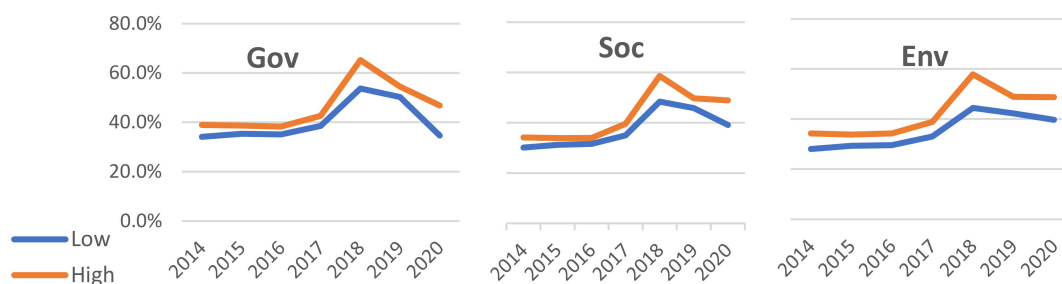
Looking at the company sector, there are slight differences in how the law has influenced the quantity of information reported and in which dimension the impact has been higher. As shown in Table 5, only Real Estate Services has increased the quantity of information between 2018 and 2019, especially in the social dimension. On a similar line, Consumption Services and Financial Services have remained just behind the previous year's quantity of information reported. The other four sectors, in contrast, have substantially decreased the amount of information reported, especially in the Governance dimension.

Table 5. Change in quantity of information between 2018 and 2019.

Sector	Gov.	Soc.	Env.	Total
Energy	−7.3%	−3.6%	−7.7%	−6.2%
Basic materials, industry and construction	−12.2%	−10.3%	−9.6%	−10.7%
Consumption goods	−7.8%	−6.4%	−5.9%	−6.7%
Consumption services	−0.1%	0.2%	−1.6%	−0.5%
Financial services	−0.5%	−0.4%	−0.1%	−0.3%
Technology and telecommunications	−15.2%	−8.6%	−6.9%	−10.2%
Real estate services	0.0%	1.5%	0.2%	0.6%

In order to test potential mimetic isomorphisms, the sectors are grouped into two sub-groups according to the risk their activity entails [82,83,85–87], whether low or high, under the assumption that companies with higher society pressure may try to inform more [82,83,86,87] and equal their reporting standards to their peers [82,83].

Results show that riskier companies consistently report more information than the remaining sectors. However, that trend, which peaked in 2018, changed abruptly in 2019, with a much higher drop among riskier sectors, especially in Governance and Environmental indicators (Figure 3).

**Figure 3.** Quantity of information according to sector risk.

If we look specifically at the 2018 law requirements, the data obtained confirm the previous results, with a consistent increase in the quantity of information reported through the expectations years up to 2018 and a significant loss from 2018 to 2019 and 2020 in all categories and sub-categories (Table 6).

Table 6. Quantity of information reported according to the law sub-categories.

2018 Law Sub-Categories	2014	2015	2016	2017	2018	2019	2020
Good Governance	35.9%	36.5%	36.2%	40.0%	57.8%	51.8%	51.6%
Corruption and Bribery	39.2%	40.0%	40.0%	44.2%	63.8%	46.2%	45.9%
Fiscal Information	20.8%	21.0%	21.8%	26.2%	33.5%	26.2%	26.0%
Employees and Labor	23.4%	23.7%	24.2%	29.1%	43.8%	39.7%	39.7%
Health and Security	25.4%	25.7%	26.5%	29.2%	42.7%	40.0%	39.6%
Training	31.5%	32.0%	31.6%	34.2%	46.5%	41.0%	40.1%
Disability and Equality	32.8%	33.8%	33.5%	37.6%	52.3%	46.6%	44.9%
Social Relationships	32.7%	33.8%	34.0%	37.1%	55.2%	49.6%	47.8%
Sustainable Development—SDGs	39.2%	40.0%	40.0%	44.2%	64.2%	46.2%	46.2%
Subcontracting and Suppliers	38.1%	38.7%	38.8%	43.0%	61.5%	44.4%	41.9%
Consumers	33.6%	34.3%	34.3%	40.2%	54.2%	39.3%	37.5%
Human Rights	19.7%	20.8%	22.9%	25.3%	39.3%	32.5%	31.6%
Pollution	31.5%	32.4%	32.9%	36.8%	53.1%	48.0%	47.8%
Climate Change	30.8%	31.9%	32.3%	37.9%	51.8%	47.8%	47.7%
Circular Economy	27.6%	28.5%	28.6%	32.0%	45.5%	41.7%	41.8%
Use of Resources	28.3%	28.8%	29.6%	34.2%	46.8%	43.1%	40.2%
Biodiversity	39.2%	40.0%	40.0%	44.2%	64.2%	57.5%	54.3%

Table 7 shows the evolution of the score means in the four main topics constructs (SOC, CG, ENV, and CSR) throughout the sample. Significant increases can be noticed in 2017 and, especially, in 2018. Performing the *t*-test to compare means, they are significant

at 95%, while the means used present significant decreases in all information areas from 2019 just after the law enforcement.

Table 7. Means *t*-test from 2015 to 2020 (*t*-test year vs. year⁻¹).

Full Sample		2015	2016	2017	2018	2019	2020
SOC	mean	0.322 (0.94)	0.324 (1.40)	0.362 (2.67) ***	0.524 (5.64) ***	0.472 (−2.04) **	0.412 (2.13) **
CG	mean	0.365 (0.97)	0.362 (−2.25) **	0.400 (2.44) **	0.578 (5.66) ***	0.518 (−2.28) **	0.4611 (−2.19) **
ENV	mean	0.310 (1.08)	0.313 (1.33)	0.351 (2.82) ***	0.493 (5.46) ***	0.446 (−1.97) *	0.412 (−2.21) **
CSR	mean	0.332 (1.01)	0.333 (0.62)	0.371 (2.65) ***	0.532 (5.62) ***	0.479 (−2.11) **	0.428 (−2.09) **

t statistics in parentheses; * $p < 0.10$; ** $p < 0.05$; *** $p < 0.01$.

In order to test if leadership may be a relevant characteristic to define the companies' behavior, assuming leader companies could follow a different pattern based on the idea of a normative isomorphism, a sub-group is formed, consisting of the top quartile (25%) of companies reporting more non-financial information over the 2014–2018 period (leaders). To define this sub-group, the CSR coefficient of every company was weighted by multiplying the 2014 score by 4, 2015 by 3, and so on until 2017, the year prior to law approval.

Compared to the 75% remaining companies, the distinctive behavior of leader companies can be clearly seen in Figure 4, not only in terms of quantity of information reported but also in the different trend shown after 2018, which reflects continuity in the increase of information reported.

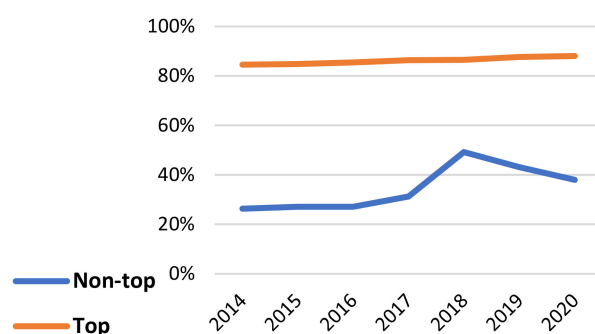


Figure 4. Quantity of information according to leader/non-leader company.

4.2. Econometric Models

A statistical study was conducted to test the robustness and reliability of the descriptive results, including a number of independent variables that could have affected the outcomes previously described. The first set of results is presented in Table 8.

Table 8. Descriptive results of the statistical model.

Variable	Obs	Mean	Std. Dev.	Min	Max
ROA	817	6.838	34.132	−201.051	497.591
TOBINQ	796	1.866	2.635	0.426	48.395
LNCAP	823	14.429	2.496	7.822	21.144
FOREIGN	732	7.520	21.260	0	104.920
RISK	840	0.358	0.480	0	1
LAW	840	0.429	0.495	0	1

As reflected by Pearson and Spearman correlation coefficients (Table 9), no significant levels of collinearity exist among the different variables of the model.

Table 9. Pearson–Spearman correlation matrix.

	ROA	TOBINQ	LNCAP	FOREIGN	LAW
ROA	1 (0)	0.3745 (0)	0.0034 (0.9281)	0.3335 (0)	0.2472 (0)
TOBINQ	−0.0497 (0.1886)	1 (0)	−0.2708 (0)	0.1025 (0.0066)	−0.0246 (0.515)
LNCAP	0.0059 (0.8766)	−0.3168 (0)	1 (0)	0.1206 (0.0014)	0.0177 (0.6404)
FOREIGN	0.4259 (0)	0.0123 (0.7453)	0.0352 (0.3512)	1 (0)	0.1895 (0)
LAW	0.2253 (0)	−0.0379 (0.316)	0.0137 (0.7179)	0.3723 (0)	1 (0)

Additionally, the variance inflation factor (VIF) has been tested between independent and dependent variables, with no observed cases over 2.20 and an average below 1.40.

The econometric results of the model for the period 2014–2020 are shown in columns 1 to 4 of Table 10. Columns 4 to 8 present the same model results, only substituting variable LAW by TDIR, the latter being the number of days since the EU Directive was approved (22 October 2014) until the non-financial report. With this analysis, we get an indicator of the company's expectation about the final transposition into a law, which was higher as the EU established deadline got closer. A logarithmic transformation avoids issues with the units used [89].

As for the control variables, the ROA gets significant to 95%, although it is negative in all CSR disclosure dimensions. The largest companies are more prone to increase their non-financial reporting, with a significant coefficient at 99%, confirming Weneger et al.'s idea [90] that the higher the pressure received, the higher the level of reporting. Likewise, its positive and significant result implies that companies with higher Tobin's Q tend to report more information [80,81,90]. The remaining control variables do not present conclusive coefficients.

The existence of a law regulating financial disclosure encourages companies to disclose higher levels of non-financial information, given the positive and 99% significant result in LAW variable. Similarly, as the likelihood of new regulation in time increases (TDIR), the quantity of information reported does also increase, as observed in columns 5 to 8 of Table 10.

The change in trend observed after the law approval was analyzed by substituting LAW by TDIR. To empirically check if the increase in disclosed information could have a tipping point after which a decrease will follow, a squared TDIR variable is also included in the model.

$$\text{SOC} = \beta_0 + \beta_1 \text{SIZE} + \beta_2 \text{ROA} + \beta_3 \text{TOBINQ} + \beta_4 \text{RISK} + \beta_5 \text{TDIR} + \beta_6 \text{TDIR}^2 + \varepsilon \quad (5)$$

$$\text{BG} = \beta_0 + \beta_1 \text{SIZE} + \beta_2 \text{ROA} + \beta_3 \text{TOBINQ} + \beta_4 \text{RISK} + \beta_5 \text{TDIR} + \beta_6 \text{TDIR}^2 + \varepsilon \quad (6)$$

$$\text{ENV} = \beta_0 + \beta_1 \text{SIZE} + \beta_2 \text{ROA} + \beta_3 \text{TOBINQ} + \beta_4 \text{RISK} + \beta_5 \text{TDIR} + \beta_6 \text{TDIR}^2 + \varepsilon \quad (7)$$

$$\text{CSR} = \beta_0 + \beta_1 \text{SIZE} + \beta_2 \text{ROA} + \beta_3 \text{TOBINQ} + \beta_4 \text{RISK} + \beta_5 \text{TDIR} + \beta_6 \text{TDIR}^2 + \varepsilon \quad (8)$$

In columns 9 to 12 of Table 10, the results of this second model show similar behaviors for control variables, except for foreign revenues (FOREIGN), for which positive significance of 90% indicates more environmental disclosure as foreign revenues grow. When the model considers companies' environmental risk, no significant differences are observed.

Table 10. Regression models results for the period 2014–2018 (*t* statistics in parentheses; ** $p < 0.05$; *** $p < 0.01$).

Panel A					Panel B							
	(1) SOC	(2) BG	(3) ENV	(4) CSR	(5) SOC	(6) BG	(7) ENV	(8) CSR	(9) SOC	(10) BG	(11) ENV	(12) CSR
ROA	0.000129 (0.41)	0.000174 (0.46)	0.00018 (0.59)	0.00016 (0.49)	0.00018 (0.59)	0.00024 (0.63)	0.00023 (0.75)	0.00022 (0.66)	0.000124 (0.39)	0.000173 (0.46)	0.00017 (0.57)	0.00015 (0.47)
TOBINQ	0.0260 ** (2.38)	0.0297 ** (2.28)	0.026 ** (2.53)	0.027 ** (2.39)	0.025 ** (2.34)	0.028 ** (2.25)	0.025 ** (2.50)	0.026 ** (2.35)	0.0255 ** (2.34)	0.0292 ** (2.25)	0.025 ** (2.49)	0.026 ** (2.35)
LNCAP	0.122 *** (15.55)	0.136 *** (15.82)	0.121 *** (14.70)	0.126 *** (15.45)	0.122 *** (15.48)	0.135 *** (15.75)	0.121 *** (14.65)	0.126 *** (15.38)	0.122 *** (15.47)	0.135 *** (15.73)	0.121 *** (14.64)	0.126 *** (15.37)
FOREIGN	0.00009 (0.15)	0.000009 (0.01)	0.0003 (0.60)	0.0001 (0.24)	0.0005 (0.95)	0.0005 (0.81)	0.0007 (1.32)	0.0006 (1.02)	0.00007 (0.12)	0.00001 (0.03)	0.0003 (0.51)	0.0001 (0.21)
LAW	0.110 *** (3.65)	0.115 *** (3.39)	0.101 *** (3.56)	0.109 *** (3.54)	0.027 *** (2.85)	0.026 ** (2.41)	0.026 *** (2.91)	0.026 *** (2.72)	−0.251 ** (−2.35)	−0.269 ** (−2.25)	−0.228 ** (−2.24)	−0.249 ** (−2.29)
_cons	−1.431 *** (−11.79)	−1.585 *** (−11.91)	−1.44 *** (−11.69)	−1.48 *** (−11.86)	−1.56 *** (−11.67)	−1.70 *** (−11.58)	−1.56 *** (−11.76)	−1.61 *** (−11.73)	−0.783 *** (−2.75)	−0.878 *** (−2.76)	−0.85 *** (−3.13)	−0.83 *** (−2.89)
Control year/sector	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
N	702	702	702	702	702	702	702	702	702	702	702	702
F	46.54	48.03	43.76	46.35	46.35	47.85	43.89	46.29	40.47	41.23	38.66	40.39
r2	0.466	0.467	0.488	0.476	0.455	0.458	0.479	0.466	0.458	0.460	0.482	0.469
N_clust	119	119	119	119	119	119	119	119	119	119	119	119

In this second model, the TDIR dependent variable has a much higher positive coefficient than in the previous model, confirming that regulation can work as a strong incentive for non-financial information. However, the negative and 99% significant coefficient for TDIR2 suggests that the incentive reaches a tipping point, after which a decrease follows.

Table 11 shows the model 2 results after the environmental risk sub-groups (risk 0 vs. risk 1) for the 2014–2020 period. In all dimensions of CSR information, risk 1 shows higher coefficients, implying that these sectors are more sensitive to the likelihood of new regulations approval. Once approved, the decrease in the quantity of information is more significant. Even though TDIR and TDIR2 present the same signs as in the general model (Table 10), the coefficients for low risk are not significant, suggesting that the decreasing

trend after 2018 is less relevant in low-risk companies. Consequently, this behavior is not statistically conclusive (inverted U-shaped).

Table 11. Model 2 results for low and high environmental risk sub-groups (Risk 0 vs. Risk 1) in the 2014–2020 period (*t* statistics in parentheses; * $p < 0.10$; ** $p < 0.05$; *** $p < 0.01$).

Panel A. Risk 0 Firms				
	(9) SOC	(11) BG	(13) ENV	(15) CSR
ROA	0.0000259 (0.08)	0.0000504 (0.12)	0.0000688 (0.20)	0.0000484 (0.13)
TOBINQ	0.0201 ** (2.37)	0.0231 ** (2.33)	0.0202 ** (2.37)	0.0211 ** (2.36)
LNCAP	0.116 *** (11.78)	0.130 *** (11.78)	0.111 *** (11.26)	0.119 *** (11.66)
FOREIGN	0.000825 (1.16)	0.00104 (1.26)	0.00123 * (1.76)	0.00103 (1.40)
TDIR	−0.115 (−0.89)	−0.134 (−0.94)	−0.101 (−0.82)	−0.117 (−0.89)
TDIR2	0.0110 (0.94)	0.0125 (0.97)	0.00984 (0.89)	0.0111 (0.94)
_cons	−1.017 *** (−2.97)	−1.121 *** (−2.98)	−1.025 *** (−3.14)	−1.054 *** (−3.04)
Control year/sector effects	yes	yes	yes	yes
N	429	429	429	429
F	28.67	30.02	29.27	29.45
r2	0.471	0.480	0.494	0.484
N_clust	78	78	78	78
Panel B: Risk 1 Firms				
	(10) SOC	(12) BG	(14) ENV	(16) CSR
ROA	−0.0000406 (−0.07)	−0.000109 (−0.17)	0.0000491 (0.09)	−0.0000337 (−0.06)
TOBINQ	0.0836 *** (3.60)	0.102 *** (3.80)	0.0742 *** (3.88)	0.0867 *** (3.78)
LNCAP	0.138 *** (12.78)	0.151 *** (13.70)	0.144 *** (13.85)	0.144 *** (13.62)
FOREIGN	−0.000742 (−0.68)	−0.00103 (−0.87)	−0.000632 (−0.60)	−0.000801 (−0.72)
TDIR	−0.450 ** (−2.43)	−0.464 ** (−2.20)	−0.411 ** (−2.32)	−0.442 ** (−2.32)
TDIR2	0.0418 ** (2.45)	0.0428 ** (2.21)	0.0382 ** (2.35)	0.0409 ** (2.34)
_cons	−0.646 (−1.26)	−0.767 (−1.32)	−0.813 * (−1.68)	−0.742 (−1.42)
Control year/sector effects	yes	yes	yes	yes
N	273	273	273	273
F	32.24	37.59	37.24	36.37
r2	0.468	0.462	0.493	0.476
N_clust	49	49	49	49

Finally, the model was tested once more, including the sub-group of leader companies which gathers the top quartile of non-financial disclosing companies. Table 12 shows the 2018–2020 period results, discarding the TDIR2 variable since variable TDIR is not expected to present a U behavior. According to normative isomorphism, the leader companies should not present opportunistic behavior. If they were anticipating the regulatory change, they should not re-adapt their behavior ‘downwards’ after the law approval but continue the increasing trend.

Table 12. Model 2 results for 2018–2020 period for leading and non-leading sub-groups (*t* statistics in parentheses; * $p < 0.10$; ** $p < 0.05$; *** $p < 0.01$).

Panel A. No leader firms				
	(17)	(19)	(21)	(23)
	SOC	BG	ENV	CSR
ROA	0.00311 (0.13)	0.00137 (0.05)	0.00503 (0.25)	0.00317 (0.14)
TOBINQ	0.0361 ** (2.24)	0.0403 ** (2.32)	0.0382 *** (2.73)	0.0382 ** (2.42)
LNCAP	0.115 *** (8.71)	0.127 *** (9.01)	0.117 *** (9.78)	0.120 *** (9.22)
FOREIGN	0.105 (1.01)	0.124 (1.10)	0.128 (1.41)	0.119 (1.17)
TDIR	−0.412 ** (−2.36)	−0.471 ** (−2.54)	−0.384 ** (−2.34)	−0.422 ** (−2.42)
_cons	1.750 (1.30)	2.047 (1.44)	1.476 (1.17)	1.758 (1.31)
Control year/sector effects	yes	yes	yes	yes
N	235	235	235	235
F	28.47	30.69	35.84	32.32
r2	0.341	0.350	0.392	0.362
N_clust	92	92	92	92
Panel B. Leader firms				
	(18)	(20)	(22)	(24)
	SOC	BG	ENV	CSR
ROA	0.0679 *** (3.04)	0.00698 (0.52)	0.0847 ** (2.25)	0.0532 *** (2.99)
TOBINQ	−0.0365 *** (−4.26)	−0.00373 (−0.64)	−0.0361 ** (−2.07)	−0.0255 *** (−3.68)
LNCAP	0.0130 ** (2.31)	0.00538 (1.51)	0.0142 ** (2.11)	0.0109 *** (3.02)
FOREIGN	−0.0161 (−0.53)	0.0324 (1.65)	0.0688 (1.55)	0.0284 (1.16)
TDIR	0.0928 *** (3.92)	−0.00302 (−0.20)	0.0739 * (1.83)	0.0546 ** (2.78)
_cons	−0.0276 (−0.12)	0.851 *** (6.99)	0.0132 (0.04)	0.279 (1.47)
Control year/sector effects	yes	yes	yes	yes
N	82	82	82	82
F	7.172	1.380	2.490	4.308
r2	0.379	0.207	0.311	0.379
N_clust	36	36	36	36

The results in Table 12 confirm that non-leading companies present a change in trend, decreasing the quantity of information after the law, while the positive coefficients of leading companies reflect their commitment to maintaining a moderate increase of information disclosure, which is consistent with a substantial adoption of the regulation.

5. Robustness Checks

In order to test the robustness of our results, we conducted different analyses to contrast the validity of our sample and methodology. First, we did not winsorize our variables in order not to lose any data. We repeated all regressions, obtaining similar results to those exhibited in Tables 10–12. Second, we ran our models using OLS (Ordinary Least Square) regressions and the variables showed similar significance levels. Additionally, we did not appreciate significant D-Cook distance in our sample. Third, to test the validity of our firm size measure, we substituted firm market capitalization by total assets with no difference in the significance levels. Finally, we re-ran our regressions with CSR as a

dependent variable. Our CSR variable is constructed as a mean of SOC, CG, and ENV with the same weight, one-third each, in the same way as [19]. We also rebuilt the CSR variables considering alternate weights of 40% for SOC, CG, and ENV, and 30% for the other ones. In all CSR regressions, the obtained significance levels were similar to those shown in our tables.

Another problem that might arise with our methodological approach might be an endogeneity issue about firm performance and the level of CSR disclosure [91]. To control this problem, we performed Model 1 under a system GMM using variables levels lagged as instruments [92], using the Stata command developed by [93]. The Hansen test validates the instruments used—the validation of over-identifying restrictions. The Wald test validates the joint significance of the coefficients and dependent variables to explain the dependent variable adequately. The Arellano and Bond AR(2) coefficient indicates the absence of second-order serial autocorrelation of errors. As shown in Table 13, we also obtained similar significance levels in our variable of interest and control variables, and their coefficients levels are close to our baseline model (Table 10, Panel A). Our results are robust in the face of endogeneity issues.

Table 13. System GMM results (Model 1) for the period 2014–2018 (*t* statistics in parentheses; * $p < 0.10$; ** $p < 0.05$; *** $p < 0.01$).

	(1) SOC	(2) BG	(3) ENV	(4) CSR
Dep. Var. t^{-1}	3.1 *** (3.61)	3.51 *** (3.56)	3.06 *** (3.36)	3.24 *** (3.37)
ROA	0.5 (1.1)	−0.369 (1.41)	−0.259 (1.67)	0.200 (1.85)
TOBINQ	0.424 ** (2.64)	0.3903 * (2.16)	0.336 ** (2.45)	0.113 ** (2.89)
LNCAP	0.298 *** (3.152)	0.126 *** (3.072)	0.271 *** (2.772)	0.016 ** (2.402)
FOREIGN	−0.289 (0.26)	−0.489 (0.19)	−0.169 (0.51)	0.481 (0.61)
LAW	0.31 *** (3.86)	0.075 *** (2.93)	0.581 *** (3.9)	0.129 *** (3.61)
_cons	−2.562 *** (16.523)	−2.752 *** (16.623)	−2.912 *** (16.903)	−2.452 *** (17.253)
Control year/sector	yes	yes	yes	yes
Hansen test	32.521	32.201	31.771	32.051
Wald test	79.526	79.966	79.716	79.506
AR(2) (<i>p</i> -value)	0.56	0.89	0.72	0.74
N	702	702	702	702
Groups	119	119	119	119

6. Discussion

This research aimed to analyze whether the Spanish standard had positively affected the quantity of social and environmental information disclosed in Spanish companies bound by the standard. This study was carried out under the prism of the new institutionalism theory that allows us to understand the isomorphic effect that has modified the behavior of companies.

The study highlights that Spanish companies had increased non-financial information since 2014, when the Directive was issued. Although Spanish companies were not legally obliged to issue this type of information, a process of isomorphism is evident, impacting the amount of information disclosed. However, this process changes drastically in 2018/2019 after the issuance of the Spanish standard, when a significant decrease in the amount of information disclosed can be observed.

Several previous studies have questioned the efficiency of the adoption of Directive 2014/95/EU in European countries, highlighting a gap in research that must be solved.

Ref. [22] conclude that the Italian standard did not affect the amount of information disclosed, and [23] consider that the adoption of CSR voluntary principles (like GRI) has had a greater impact on the disclosure than the adoption of the Italian rule. However, [24] highlights a positive effect over information of the Italian rule, and [19] concluded that the European non-financial reporting directive positively impacted the companies' rate of non-financial disclosure. Again, while [11] argued that countries with specific legislation are not led to lower levels of business irresponsibility, [21] argued that the disclosure of information improved overall due to the emergence of the standard.

Our results show that the issuance of the directive, together with the effect of the transposition announcement and the subsequent expectations, has had a positive effect on the disclosure of companies, just until the transposition has led to an actual law, when the effect has reversed into a decrease in disclosure for most of the companies, in line with [22] results for Italy. Consequently, we can assume that the mimetic and normative isomorphisms affecting companies during the 'expectations' period have had a much clearer impact on disclosure than the coercive isomorphism brought by the law, which highlights [23] results on the higher relevance of voluntary standards over regulation. The setback in level of information observed after the law enactment does not confirm [34] results over increased transparency.

The study's second objective was to analyze whether the isomorphism process was different among companies especially sensitive to environmental issues. Companies with higher environmental impact might not be prone to voluntarily disclose non-financial information. Consequently, the issuance of the standard may force them to disclose more information. Our results show that those sectors with higher environmental risk consistently reported more information than all remaining sectors during the 'expectations' period, with its highest in 2018. However, the trend was abruptly changed in 2019, with a much clearer drop among riskier sectors. Our second hypothesis (H2) predicted that the company's activity and its sensitiveness to environmental impacts would determine the effect of the Directive and the law, following [70] results concerning information from companies facing multiple-stakeholders pressure. Our results support this hypothesis with a relevant increase in disclosure, but only while the upcoming law level of requirement was unknown, and not once the law was published, since it led to a drastic decrease to the minimal required level of disclosure.

The third objective of our research, which to the best of our knowledge has not been studied, analyzes the effect of the law on companies' reporting behavior according to their previous leadership in disclosing non-financial information. The research results prove that leader companies show a consistently increasing trend maintained after the enforcement of the law. Since the law does not affect these companies' disclosing behavior, we may assume they already considered it a strategical activity to inform their stakeholders. Among the non-leader companies, however, the increase in disclosure during the 'expectations' period and the significant drop observed after the issuance of the law, suggest an opportunistic behavior, driven by the threat of new regulatory standards, rather than by voluntary or normative motivations. Our third hypothesis (H3) predicted that leadership in non-financial reporting would determine the effect of the law. Our results support this hypothesis, with markedly different trends among leaders and non-leaders which are not necessarily defined by their size or their profitability, as stated by [35].

7. Conclusions

The issuance of the EU directive in 2014 and its final transposition to the Spanish law in 2018 opened the door to an 'expectations' period, where companies could only guess the final requirements of the law. As shown by our results, this uncertainty framework is clearly related to the companies' proactivity in disclosing information. The resulting isomorphism process cannot be considered coercive but is rather mimetic or normative. Most potentially obliged companies were already disclosing voluntary information through sustainability reports (mainly GRI and UNGC).

In that sense, the results of our research show that the enforcement of the law has not led to an increase in the quantity of information disclosed since the institutional impulse has had less influence than the market/stakeholders' pressure during the 'expectations' period. On the contrary, the mimetic (imitation of competition behaviors) and normative (professional and business practice) processes have clearly defined the isomorphic process in Spanish companies. This result is consistent with the Spanish context, where voluntary reporting standards, since the first proposals (2001, in the case of the GRI), have had a high degree of acceptance among companies through time [26,61]. Therefore, we could consider that, after more than 20 years of reporting tradition, the Spanish reporting situation of maturity may have impacted the coercive effects of the standard. On the other hand, the law's lack of concreteness and detail about the indicators to be used and the amount of information to be disclosed paved the way to downwards corrections on information that was already disclosed previously, especially among environmentally sensitive sectors and non-leader companies, which were likely expecting more exigent requirements. Our results prove that the voluntary versus mandatory reporting debate is far from settled.

In summary, once the EU Directive was approved, companies started to prepare themselves for the unknown law requirements and to gain (or not lose) a competitive advantage. Once transposed into Spanish law, the coercive effect has not generated more information about social and environmental performance than the one already available. This is especially true in sectors where there is increased stakeholders' pressure (environmental risk) and a higher likelihood of being subject to institutional pressure (once the law was issued). However, the approval of the law has had an unintended effect, where companies have stopped their trend or even reversed it. This fact suggests that expectations and uncertainty, together with the competition with leading companies, may have a much more positive effect on the volume of information companies disclose than the actual law requirements.

Some limitations affecting this research must be noted. Although the sample of companies is rather large, their different activities and sectors are relevant to assess their level and quality of reporting. In that sense, we have limited our sectoral approach to the environmental sensitivity of companies, leaving a more specific study linked to their particular activity, risks, and exposure to further research. On the other side, the period of reporting after the enactment of the law could have been extended to 2021 so that our results would have a stronger basis. However, the relevant impact that COVID 19 pandemics had on companies' performance and reporting discouraged us from including the data from that particular year. Finally, we acknowledge that data from Datastream may not be the only or more accurate source to measure corporate reporting. However, since the same source was used for data before and after the law enactment, we believe the differences found are reasonably solid, and give us the possibility to compare our results with previous studies.

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