Article

CSR Disclosure: The IPO Case

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Abstract: Corporate social responsibility (CSR) is one of the pillars of sustainable development. It is the key to operationalizing the strategic role of business in contributing towards the sustainability process. The fact that firms communicate their activities about economic sustainability, environmental sustainability, and social equity shows their commitment to society and their stakeholders. This paper analyzes the influence exerted by the composition of boards of directors on corporate social responsibility disclosure with reference to those companies that undertook an initial public offerings (IPO) in the Spanish capital market during the period 1998–2013. The empirical evidence provided by this study shows that ownership structure and board characteristics are relevant in the context of a firm's CSR disclosure. The independent directors, non-executive directors, and large shareholder representatives affect the way in which their companies voluntarily disclose information regarding CSR. Our results lend support for a non-linear relationship between the proportion of shares in the IPO belonging to the members of the board of directors and the level of CSR reporting. We also find that the underwriter's reputation has a positive and statistically significant influence on CSR disclosure for Spanish IPOs.

Keywords: CSR disclosure; sustainable development; corporate governance; board of directors; institutional ownership; IPOs (initial public offerings)

1. Introduction

Corporate social responsibility (henceforth CSR) has been the subject of numerous studies on a worldwide scale. Research in this field has mainly focused on the determinants of CSR, as well as on examining the effects of various aspects of corporate financial performance. The latter indicates that corporations tend to act in socially responsible ways if normative or cultural institutions are in place, thus creating the proper incentives to act responsibly.

CSR is one of the pillars of sustainable development. The 2030 Agenda for Sustainable Development, adopted by all United Nations Member States in 2015, recognizes the close relationship between CSR and the achievement of the Sustainable Development Goals. It is the key to operationalizing the strategic role of business in contributing towards the sustainability process.

There are several models that try to describe the concept of CSR and the processes involved in the adoption of CSR practices in firms. In general, CSR means that companies identify with their stakeholder groups and incorporate their needs into the daily decision-making process. The World Business Council for Sustainable Development defines corporate social responsibility as "the continuing commitment by business to behave ethically and contribute to economic development while improving the quality of life of the work force and their families as well as a local community and society at large" [1]. CSR is based on the belief that "the social responsibility of business encompasses the economic, legal, ethical, and discretionary expectations that society has of organizations at a given

point in time" [2]. Considering the evolution of CSR, the model developed by Niskala and Tarna [3] is perhaps the one that describes CSR most accurately. It is a multidimensional model for viewing CSR through three different perspectives: Economic sustainability, environmental sustainability, and social equity. In other words, the companies need to focus on economic, environmental, and social issues in a balanced and symbiotic manner when conducting business. Therefore, the fact that firms communicate their activities about these issues shows their commitment to stakeholders [4].

A CSR report includes the economic, environmental, and social impacts generated by a company's everyday activities, and demonstrates the link between its strategy and its commitment to a sustainable global economy. The report, therefore, helps companies to set goals and manage change in order to make their operations more sustainable. Since the decision to disclose financial and non-financial information depends on those who make decisions in companies, the ownership structure and the board composition must obviously play an important role in the decision to disclose CSR reports.

The present study endeavors to meet two objectives. First, the aim is to analyze how the ownership structure and the board composition influence CSR disclosure for those companies that made an initial public offering (henceforth IPO) in the Spanish capital market during the period 1998–2013. This represents an important distinction in relation to previous Spanish studies (see [5–9], among others). The key contribution of our paper to existing knowledge is that we study IPO firms. These companies have the particularity of presenting a higher degree of information asymmetry because they have never been quoted, so the value of information with respect to CSR disclosure is higher. With this research, we can determine the influence of that information in the valuation of the companies in the crucial moment that is the time of going public.

After controlling for other influences, such as the auditor's reputation or the underwriter's reputation, we wish to investigate the possibility of a non-linear relationship between the proportion of shares in the IPO belonging to members of the board of directors and the level of CSR reporting. Secondly, we aim to complete a more in-depth analysis with respect to the composition of the board, given that we have more data concerning the specific characteristics of IPO directors. Basing ourselves on the latter characteristics enables us to check whether the type of director is also relevant for CSR disclosure. Additionally, we wish to determine whether independent directors, non-executive directors, women, large shareholders, the size of the board, and CEO duality may affect the way in which companies disclose information regarding CSR.

Companies in Europe rely more on internal rather than external corporate governance mechanisms in relation to their Anglo-American counterparts, and, as such, we research whether this could influence CSR disclosure. Hence, the influence on IPO valuation and CSR exerted by the boards of directors in companies located in continental European countries such as Spain merits further attention.

This research is organized in the following way. In the second section, we present a literature review, while we postulate the hypotheses of our study in the third section. The descriptions of our database, the research methodology, and our model are presented in the fourth section. The fifth section is dedicated to the results of our estimations, while the conclusions are summarized in the final section.

2. Literature Review

The literature on CSR disclosure is extensive. The number of papers published on this subject begins to be considerable from 2011 onwards (see Figure 1). Researchers have explored the effects of different issues on CSR disclosure, such as corporate governance, board composition, institutional ownership, information asymmetry, or the types of firms. Moreover, the first contributions that studied these relationships were published no more than 10 years ago (see Figure 2).
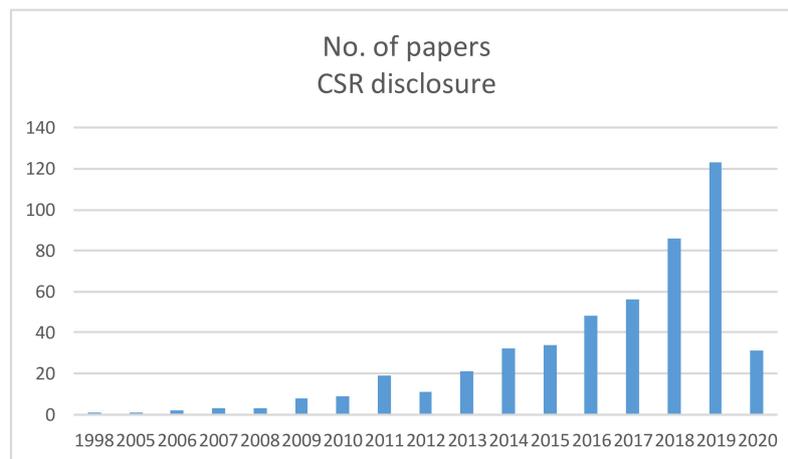
Figure 1. Published papers on corporate social responsibility (CSR) disclosure by year of publication (source: Scopus).
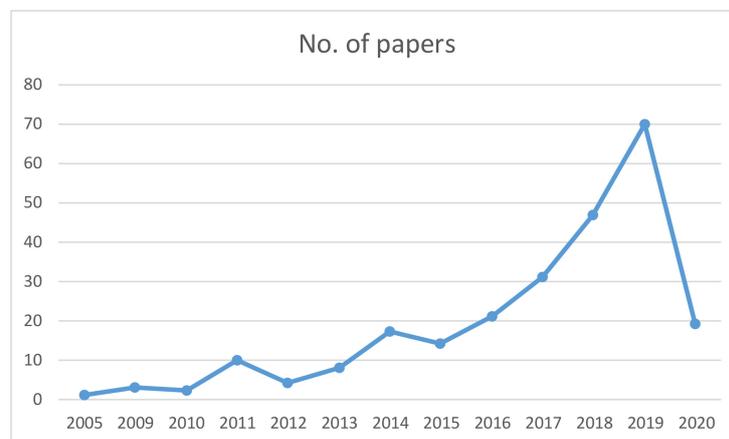

Figure 2. Published papers on the effect of corporate governance, board composition, institutional ownership, information asymmetry, or the types of firms on the CSR disclosure by year of publication. (source: Scopus).

Table 1 presents some of these contributions in detail, reporting a brief summary of their main characteristics (country, period of study, and main variables considered). The results of these studies are presented in this section.

Table 1. Literature Review: The impact of corporate governance, board composition, institutional ownership, information asymmetry, and the types of firms on CSR disclosure.

Paper	Country	Period of Study	Main Variables	Main Result
Balabanis et al. [10]	Great Britain	1988–1989	G: Economic performance	Economic results affect CSR
Barakat et al. [11]	Palestine/Jordan	2011	G: Legal system, auditor	Higher levels of corporate social responsibility disclosure (CSRD) in Jordan
Bassam and Said [4]	Jordan	2013–2015	CG: Board size, diversity	Board size affects CSR
Bear et al. [12]	United States	2009	CG: Diversity on board	CSR positive impacts reputation
Cabeza-García et al. [9]	Spain	2009–2013	CG: Diversity on board	More women, better CSR disclosure

Table 1. *Cont.*

Paper	Country	Period of Study	Main Variables	Main Result
Cea-Moure [13]	EU-15	2007	CG: Type of OC in banks	No relation between CSR and OC type
Coulmont et al. [14]	40 countries	2012	G: Scores A to C in Global Reporting Initiative (GRI)	High individualism, lower A score
Cucari et al. [15]	Italy	2011–2014	CG: Board of directors	Diversity of board impacts CSR
Dienes and Velte [16]	Germany	2011	CG: Board composition	Gender diversity impacts CSR
El-Bassiouny and El-Bassiouny [17]	Egypt, USA, Germ.	2014–2015	CG: Diversity on board	Diversity in CG affects CSR
Fallah and Mojarrad [18]	Tehran	2014–2015	CG: Ownership Concentration	OC positively affects CSR
Fernández-Gago et al. [8]	Spain	2009–2014	CG: Board composition	Positive influence of independents
Gamerschlang et al. [19]	Germany	2008	G: Determinants of CSR	Shareholder structures affect CSR
García-Meca and Palacio [20]	9 countries	2004–2010	CG: Diversity on board	CSR affected by diversity
Garde-Sánchez et al. [21]	International	n.a.	CG: Gender and profile	No relation between CSR and gender
Guerrero-Villegas et al. [22]	International	2003-17	IO: Research meta-analysis	Influence on CSR disclosure
Gulzar et al. [23]	China	2008–2015	CG: Board gender diversity	Female members affect CSR
Herrera-Madueño et al. [24]	International	1976–2013	FS: Research many countries	Influence of size on CSR disclosure
Holder-Webb et al. [25]	United States	2004	G: Determinants of CSR	Type of industry affects CSR
Iadd et al. [26]	Jordan	2012	CG: Asymmetry information	Agency problems affect CSR
Khan [27]	Bangladesh	2007–2008	CG: Elements of Governance	No relation between women and CSR
Khan et al. [28]	Bangladesh	2005–2009	CG: Board independence	Board independence affects CSR
Kiliç et al. [29]	Turkey	2008–2012	CG: Board structure	Independent members affect CSR
Miras-Rodríguez, M. et al. [30]	BRICS countries	n.a.	CG: Mechanisms of CG	CG mechanisms affect CSR
Nurdiono et al. [31]	Indonesia	2014-16	G: Return on Equity (ROE), debt, stock return	CSR affects stock returns
Ong and Djajadikerta [32]	Australia	2012	CG: Types of directors	Type of directors affects CSR
Pham and Tran [33]	20 countries	2005–11	CG: Board independence	Board independence affects CSR
Pistoni and Songini [34]	Western countries	2000–13	G: Historical Analysis GRI	CSR is related to company size
Reverte [5]	Spain	2005–2006	G: Determinants of CSR	Large firms have CSR ratings
Safonchyk and Vitman [35]	EU member states	n.a.	G: Theoretical research	Better results in systematic CSR

Table 1. *Cont.*

Paper	Country	Period of Study	Main Variables	Main Result
Sahid et al. [36]	Malaysia	2006	CG: Board size, ownership	Government ownership affects CSR
Saleh et al. [37]	Malasya	2000–07	IO: Institutional ownership	Positive relation between IO and CSR
Venkataraman [38]	USA	2000–01	FS: Size of the company	No difference in CSR
Vintila [39]	Romania	2010	CG: Board size, leverage	CEO duality affected by CG
Zaid et al. [40]	Palestine	2013–16	CG: Board diversity, size	Board size/gender affects CSR
Zhou [41]	China	2010–16	CG: Ownership structure	Ownership structure affects CSR

G: General issues; CG: Corporate governance; IO: Institutional ownership; FS: Family status; OC: Organizational charts; n.a.: Not applicable.

Corporate governance is a key issue in a company and is influential for many aspects because it has to do with the direction and control of the firms. Boards of directors are responsible for the governance of their companies, and the CSR disclosure is affected by their decisions. The relation between corporate governance and CSR disclosure has been studied in the literature. Fallah and Mojarrad [18] investigate this relationship for quoted companies on the Tehran Stock Exchange. According to the results, the composition of the audit committee, the board tenure, and the concentration of ownership have a positive impact on CSR disclosure. In addition, for the Australian market, Ong and Djajadikerta [32] find positive correlations between the extent of sustainability disclosures and the proportions of independent directors and female directors on the board.

With an interesting approach, Zaid et al. [40] examine the relationships between corporate governance and CSR disclosure. Their results reveal that the level of CSR reporting is positively affected by board size and independence. Furthermore, CEO duality is negatively correlated with CSR disclosures. Zhou [41] investigates the effects of corporate governance on the decision to voluntarily disclose CSR reports and finds that ownership structure and board characteristics are related with firms' decisions to voluntarily disclose CSR reports.

More recently, Garde-Sánchez et al. [21] analyzed the corporate governance and CSR disclosure for the Top 200 Universities in the Shanghai Ranking. Their results show that leadership team, the size of governance board, committees in the board, and stakeholder participation affect the disclosure of information on CSR. Others studies of corporate governance on CSR disclosure are present in many countries, such as those of Sahid et al. [36] for Malaysia, Khan [27] and Khan et al. [28] for Bangladesh, and Miras-Rodríguez et al. [30] for the BRICS countries (Brazil, Russia, India, China, and South Africa).

The board composition and the type of directors may also have an influence on CSR disclosure according to the financial literature. Iadd et al. [26] examine the impact of board composition on CSR disclosure for listed Jordanian firms, and their results are explained by the agency theory. In relation to the board composition, the role of women in CSR disclosure has also been explored in the financial literature. Bear et al. [12] find that CSR ratings had a positive impact on reputation and mediated the relationship between the number of women on the board and corporate reputation.

García-Meca and Palacio [20] analyze the relationship between board composition and firm reputation in Spain. Their findings evidence that, contrary to popular beliefs, directors with previous experience as politicians are not negatively viewed by stakeholders. Fernández-Gago et al. [8] show empirical evidence on how the background of independent directors helps to explain why companies disclose information about CSR following the standards of the Global Reporting Initiative (GRI). The results from a sample of Spanish listed companies confirmed that having independent directors with political backgrounds and diverse educational backgrounds has a positive impact on CSR reporting following the GRI guidelines. Finally, Cabeza-García et al. [9] find that a higher percentage of women

in boardrooms and in groups of outside and independent directors implied a better CSR disclosure for Spanish quoted companies.

Bassam and Said [4] investigate the influence of board composition and ownership structure on CSR disclosure. They find that there is considerable room for improvement in CSR disclosure. Similarly, Pham and Tran [33] analyze the effects of board model and board independence on CSR disclosure of multinational corporations. Their evidence confirms that the board model exerts a significantly positive effect on CSR disclosure. In the same line, we find other studies such as Cucari et al. [15] for Italy, Dienes and Velte [16] for Germany, Gulzar et al. [23] for China, or Kiliç et al. [29] for Turkey.

The role of the institutional ownership on CSR disclosure has also been analyzed because the participation of institutional investors in equity may have an influence in many companies' decisions. Saleh et al. [37] explore CSR disclosure and its relationship with institutional ownership in Malaysian publicly listed companies. The results confirmed that there are positive relationships between both variables. This suggests that Malaysian public quoted companies can attract and maintain their institutional investors while they engage in social activities. In consequence, companies should be encouraged to be involved in CSR activities. García-Torea et al. [7] analyze the influence of ownership structure on the transparency of CSR reporting, and they find a different relationship between each type of shareholder and the transparency of CSR information for a sample of Spanish listed companies.

The use of an institutional approach is the more modern way of trying to improve many key issues in the company. In economic theory, institutional approaches involve principles that can be effectively used for the development and improvement of many corporate decisions. Barakat et al. [11] characterize CSR disclosure practices in Palestine and Jordan to determine the formal institutional factors that influence CSR disclosure. They find that for all aspects, the level of CSR disclosure in Jordan is higher than for Palestine, albeit low in both when compared with Western countries.

The level of information asymmetry also has a role on CSR disclosure. For the Spanish capital market, Reverte [6] examines whether firms pertaining to the IBEX35 with less information asymmetry and higher CSR disclosure ratings are better valued by the capital market. He finds positive evidence for the period 2007–2011. On the other hand, Nurdiono et al. [31] analyze the effects of disclosed CSR information on the market performance in Indonesia. They find that CSR affects the stock return, the debt equity ratio, and the return on equity. A seminal paper in this sense is the one of Balabanis et al. [10] for Britain. Their results support that economic performance (past, concurrent, and subsequent) is related to both CSR performance and disclosure in British companies.

Finally, the types of firms could also have a role in CSR disclosure. Venkataraman [38] investigates this issue for large US companies, and he finds no significant difference in the likelihood of sustainability reporting between family and non-family firms of the Standard and Poors 500. However, there is a relationship between that likelihood and certain firm-specific and industry characteristic variables. For the Spanish capital market, Herrera-Madueño et al. [24] describe the evolution of research on social responsibility for small and medium-sized enterprises during the period 1976–2013 based on 321 papers.

Apart from these issues, other papers have analyzed, in general, the determinants of voluntary CSR disclosure, such as Reverte [5] for Spain, Holder-Webb et al. [25] for the United States, and Gamerschlang et al. [19] for Germany. Coulmont et al. [14] explore the determinants and impacts of sustainability disclosure together with its key tools and frameworks. The state of the art and the new directions adopted by sustainability disclosure have been deeply analyzed by Pistoni and Songini [34].

On the other hand, Safonchyk and Vitman [35] analyze the experience resulting from EU Member State regulations of corporate social responsibility policy, revealing the practices of respective EU national governments in the field of CSR. The most significant results have been achieved by those EU Member States that use the systemic approach to CSR development. El-Bassiouny and El-Bassiouny [17] explore the effects of organizational-level factors, specifically diversity and corporate governance structure, on the CSR reporting practices of companies operating in Egypt, Germany, and the USA. They find that the influence of those factors on CSR is highly dependent on the institutional context. With a

different approach, Cea-Moure [13] explores whether there is some relationship between organizational charts and CSR in banks. The analysis is based on contents disclosed in their CSR/sustainability reports. He found no solid evidence to accept or reject a possible relationship between both variables.

This literature review provides a backdrop for the hypotheses developed in this paper, which are in the next section.

3. Our Hypotheses for CSR Disclosure

In the literature, the most studied characteristics of boards of directors are independence, size, activity, and directors´ participation in company ownership [42–47]. According to Spanish law, the composition of the board of directors should be balanced and equilibrated [48]. The role of independent directors is to ensure better monitoring so they can bring information about the IPO and the value of the firm [49]. The independence of directors enhances information exchange, so this can affect IPO performance [50]. One method for improving corporate governance is to pay attention to CSR. Thus, IPO performance could be connected with CSR disclosure because it is part of the company's performance. Moreover, it is undeniable that a modern concept of company management must include CSR activities.

The effect of a director's gender is also considered in our research. The presence of women on corporate boards (gender diversity) is important for most modern firms because they bring unique experiences, working styles, and perspectives to the board [51,52]. Empirical studies demonstrate that female directors are more interested in charitable and philanthropic activities, while men are driven toward profitable activities [53,54]. In relation to the size of the board, large companies with large boards may bring more information to the decisions, while on small boards, the decision-making is easier [55–57]. In this context, there is a direct relationship between larger boards and the intellectual capital [58]. Given that IPO valuation is based on informational differences, the level of asymmetric information should affect CSR disclosure, and this asymmetry should be lower in a large board.

The duality of the CEO and chairman position occurs when the same person holds both positions in a firm. In this situation, the effectiveness could be compromised [59]. The duality could negatively affect the board's governance role over corporate initiatives, including CSR initiatives and disclosures [4,60]. In addition, Vintila [39] reveals an important relationship between CEO duality and corporate governance. Namely, CEO duality is negatively associated with a board's independence and size. Moreover, Guerrero-Villegas et al. [22] found that CEO duality had a negative relationship with CSR disclosure, while the contrary occurs with board independence, board size, and women's representation. Their research revealed differences in the relationship between board attributes and CSR disclosure, and these differences were conditioned by the institutional contexts.

According to the previous ideas, we postulate the Board Composition Hypothesis (H1) with six sub-hypotheses related to different characteristics of the members of the board: Independence, executives, women directors, large shareholder representatives, size of the board, and CEO duality. Henceforth:

Hypothesis 1a (H1a). *The proportion of non-executive directors has a negative effect on CSR disclosure.*

Hypothesis 1b (H1b). *Independence in the board of directors has a positive effect on CSR disclosure.*

Hypothesis 1c (H1c). *The number of women on the board of directors has a positive effect on CSR disclosure.*

Hypothesis 1d (H1d). *A positive relationship exists between large shareholder representatives on the board of directors and CSR disclosure.*

Hypothesis 1e (H1e). *The size of the board of directors has a positive effect on CSR disclosure.*

Hypothesis 1f (H1f). *A negative relationship exists between the duality of the CEO and chairman positions and CSR disclosure.*

As far as the ownership structure and the influence on CSR disclosure is concerned, we have to consider the participation of directors in the ownership of the firm. In relation to this, the main explanation is related to the alignment/entrenchment hypotheses [20,61,62]. However, in the literature, there are mixed results. Due to the separation between ownership and control, conflicts of interest may arise within the company. For low-level managerial ownership, there should be a convergence of interests with those of other shareholders. However, above a given threshold, the managers may be entrenched and make decisions at the expense of other shareholders. Therefore, we propose an inverted U-shaped effect of director ownership on CSR disclosure.

On the other hand, the concentration of ownership has influence on CSR disclosure. Board ownership concentration occurs when stock is concentrated in the hands of a few directors and their close family members. Two contrary influences on CSR disclosure could be possible. The first way indicates that they can behave in the interests of shareholders and other powerful stakeholders [63]. This suggests a positive relationship between board ownership concentration and CSR disclosure level. In contrast, the second way and main opinion in the literature suggests a negative relationship between board ownership concentration and the CSR disclosure level based on the agency theory [64]. Moreover, a director who owns corporate stock may acquire information through means other than the annual report with different informal channels, and this reduces the need for formal CSR disclosure [65]. The empirical studies suggest a negative relationship between board ownership concentration and the CSR disclosure level [66,67].

Based on these ideas, the following Ownership Structure Hypothesis (H2) is suggested with two sub-hypotheses:

Hypothesis 2a (H2a). *The proportion of shares belonging to members of the board of directors in the IPO has a non-linear effect on CSR disclosure.*

Hypothesis 2b (H2b). *Board ownership concentration has a negative effect on CSR disclosure.*

The reputation of external agents may reduce the ex-ante uncertainty about the firm, and this may also affect the implications of the company with respect to its CSR strategy. The greater the prestige of the agents, such as the auditor and underwriter, the greater the implication for the CSR surrounding the offer. The financial literature has established that underwriters with greater reputations tend to cooperate with reputable auditors, so both agents signal the quality of the firm going public [68,69] and reduce ex-ante uncertainty about its value; this, in turn, affects CSR disclosure. The expected sign for these variables measuring the reputations of agents involved in the IPO is positive. We posit that reputable and prestigious firms should be associated with more CSR disclosure.

In consequence, we propose the following Signaling Quality Hypothesis (H3) with two sub-hypotheses:

Hypothesis 3a (H3a). *The reputation of the auditor has a positive effect on CSR disclosure.*

Hypothesis 3b (H3b). *The reputation of the underwriter has a positive effect on CSR disclosure.*

The literature has demonstrated that the business cycle affects IPOs [70–72]. The dynamics of the capital market will influence the IPO activity [73]. This is the reason to control in our research for the return on the pre-IPO market. The influence of the ex-ante uncertainty in IPOs is documented in the literature. Other studies explore the impact of investor sentiment on IPOs. In some models, the aftermarket price of IPO shares depends on information about the intrinsic value of the company and

investor sentiment [74–82]. The control measures connected to information asymmetry referred to IPO firms and offer characteristics as well as the effect of the market situation are considered in the model.

The more appropriate theories used to explain the CSR disclosure practices are legitimacy theory, stakeholder theory, social contract theory, and signaling theory [83,84]. Omran and Ramdhony [84] show that there is no universal theory applicable to CSR disclosure for all situations or societies. Although legitimacy theory and stakeholder theory are considered complementary rather than competing theories, their use will depend on the identified user group for CSR disclosures. According to the stakeholder theory, organizational management and business ethics account for multiple constituencies impacted by business entities, such as employees, suppliers, local communities, and creditors. On the other hand, legitimacy theory helps to understand the organization's behavior in implementing, developing, and communicating its social responsibility policies. The main assumption of legitimacy theory is fulfilling the organization's social contract, which enables the recognition of its objectives. This, in turn, requires, among other things, the adoption of a CSR strategy affecting various areas of activity, also including management accounting. Social contract theory is appropriate for developed/emerged economies, as CSR disclosure exists due to an implicit social contract between business and society, which implies some indirect obligations of businesses towards society. Signaling theory will suit a situation where firms are competing for resources. A firm willing to demarcate itself from other firms will engage in more CSR practices. It is also important that the signal reaches the target audience by reporting on CSR [84]. Our hypotheses in this research fit better with the legitimacy theory rather than the stakeholder theory, and also with the signaling theory, because these hypotheses have to do with the fact of signaling to the investors and the society the quality of the company that goes public as well as its CSR strategy.

4. Methodology

This section is dedicated to presenting the sample and data of our research as well as the explanatory and control variables considered in the model for our empirical analysis.

4.1. Sample and Data

The database of this research includes the companies that went public on the Spanish capital markets—Continuous Market or AIM (Alternative Investment Market)—during the 16 year period of 1998–2013. The AIM is a secondary market for small- and medium-sized firms [85]. The final number of companies going public in that period is 72 IPOs: 49 on the Continuous Market and the other 23 on the AIM. With this database, the results of our research are representative not only of the situation for small companies (23), but also for large companies, which is, traditionally, the type of company more common in the Spanish capital market. The distribution of the database is given in Table 2.

Table 2. Number of initial public offerings (IPOs) every three-year period except for the last one.

1998–2000	18
2001–2003	3
2004–2006	13
2007–2009	13
2010–2012	23
2013	2
N	**72**

Our data come from the reports that firms must submit before going public. We hand-collected our set of data from these prospectuses, which are available at the Spanish Stock Exchange Commission (CNMV). The reason for selecting this type of company is that the level of information asymmetry is higher than for the rest of the companies in the quoted market. Hence, the relation with CSR disclosure could prove more informative and could thus grant additional value to our research.

4.2. Explanatory Variables

CSR has to do with the fact that firms contribute to sustainable development. We propose CSR disclosure as the dependent variable (namely corporate social responsibility disclosure (CSRD)), which takes a value of one if a company issues a report about CSR in the IPO, and zero otherwise. Now, we describe the selection of variables to test the proposed hypotheses.

The variables to test the Corporate Governance Hypothesis (H1) are the following: NONEXE is the proportion of non-executive directors on the board. As for the independence on the board, we select the variable INDEPD, which is the number of independent directors. In order to test the sensitivity of the board and its influence on the CSR strategy, we include the variable WOMEN, which is the number of women on the board of directors. The presence of large shareholders on the board of directors could also affect CSR disclosure, so we include the variable LARGE as the number of directors representing large shareholders. Finally, larger companies have bigger boards of directors. This is defined with the variable TOTNUM, which is the size of the board (total number of members). Finally, to test this hypothesis, we have included the dummy variable CEODUAL, which takes value 1 if the CEO and chairman posts are the same, and 0 otherwise.

As for the Ownership Structure Hypothesis (H2), the variable DIREPROP refers to the percentage of shares in the IPO in the hands of the board's members, while the inclusion of DIREPROP2, which is the square of the previous variable, has the aim of testing the non-linear relationship. The proportion of shares in the hands of the first three shareholders prior to the offer (C3) is expected to have a negative relation with CSRD. We also consider alternative concentration indexes, such as the Herfindahl–Hirschman concentration index (HERF) and the Cubbin–Leech concentration index (CUBIN). The expected relation for them with CSRD is negative [86].

In order to test the Signaling Quality Hypothesis (H3), the variables are the following: AUD, to control for the effect of the external agent's reputation. The variable AUD takes the value of 1 for a prestigious auditor and 0 otherwise. These auditors are named the "Big Five" before 2002 and the "Big Four" after the failure of Arthur Andersen in 2002. The expected sign for this variable is positive because of the decisions of firms choosing more reputable auditing firms and better CSR compared to other firms [68]. The reputation of the underwriter is estimated according to the underwriters' market share in all IPOs in this research. The variable UREPUT equals 1 if the underwriter belongs to the prestigious group of underwriters in the IPO market, and 0 otherwise. The expected sign for this variable and its influence on the CSR disclosure is positive, because more prestigious companies will be more interested in CSR strategies that enable them to become more competitive and prove more interesting to investors.

4.3. Control Variables

In order to control other firms' characteristics, we include measures of the solvency and the size of the company, assuming that said characteristics could exert a positive influence on CSR disclosure. The solvency ratio measures an enterprise's ability to meet its debt obligation, and it indicates whether a company's cash flow is enough to meet its short-and long-term liabilities. We include the variable SOLV as the relationship between assets and liabilities, predicting a positive relationship in terms of CSR disclosure. Moreover, larger companies have more resources to develop CSR strategy, so we include SIZE as the total asset value (in logarithm) in the year before the IPO, also predicting a positive relationship with the dependent variable, as stated before. Another control variable is the age of the firm, AGE, measured as the number of years (in logarithm) since the foundation of the firm to the IPO (in logarithm). Older firms are expected to develop CSR disclosure more than newer firms. On the other hand, we have also incorporated a control variable related to the size of the IPO, which is OFFER, as a ratio between the size of the company and the size of the IPO, also with an expected positive relationship with CSR disclosure.

In our research, we control for the market situation prior to the IPO [71,72]. The variable MARKET has been calculated as the buy-and-hold return of the general index during the one month before the

IPO. We also control for the type of market with the CONT dummy, which equals 1 when the firm goes public in the continuous market and 0 if it is on the AIM market, where newer and smaller companies are quoted. The expected sign for the coefficient of this variable is negative. Additionally, we control for time effects via a set of dummy variables. All models include these time dummy variables. As far as industry effects are concerned, these have been seen to have no influence on CSR, and, thus, we finally decided to exclude them.

We propose the following Probit model to test the previous hypotheses:

$$CSRDi = a_0 + \beta\ X_i + D_t + \mu_i, \tag{1}$$

where i is the firm, X_i denotes the explanatory and control variables of firm i, and D_t is a set of dummy time variables included in the regression. Finally, μ_i is the error term. In this model, we are explaining an annual issuance of CSR disclosure at a given time, which is the year prior to the IPO, so the Probit model is appropriate due to the characteristics of the dependent variable. In this research, our analysis is done for companies that go public with a higher degree of information asymmetry.

The summarized hypotheses and variables in our research and the sign for each coefficient are presented in Table 3.

Table 3. Hypotheses and control variables.

	Variable	Definition	Code	Prediction
Dependent Variable	Corporate Social Responsibility Disclosure	Dummy variable that takes a value of 1 if a company issues a CSR report in the IPO; 0 otherwise.	CSRD	
Corporate Governance (H1)	Non-Executive Ratio Independent Directors Women Directors	Proportion of non-executive directors. Number of independent directors. Number of women in the board.	NONEXE INDEPD WOMEN	Negative Positive Positive
	Large Shareholders	Number of director representatives of large shareholders.	LARGE	Positive
	Size of the Board	Total number of board members.	TOTNUM	Positive
	CEO Duality	Dummy that takes value 1 if CEO and chairman are the same; 0 otherwise.	CEODUAL	Negative
Ownership Structure (H2)	Directors in the IPO	Proportion of IPO shares in the hands of the board of directors.	DIREPROP	Negative
	Directors in the IPO (square)	Square proportion of IPO shares in the hands of the board of directors.	DIREPROP2	Positive
	Major shareholder ownership	Proportion of shares for the first three shareholders prior to the IPO.	C3	Negative
	Herfindahl–Hirschman index	Herfindahl Index.	HERF	Negative
	Cubin–Leech index	Cubin–Leech Index.	CUBIN	Negative
Signaling Quality (H3)	Auditor Dummy	Dummy variable equal to 1 for a high-reputation auditor (0 otherwise).	AUD	Positive
	Underwriter Reputation	Dummy variable equal to 1 for a high-reputation underwriter (0 otherwise).	UREPUT	Positive
	Control variables			
Market Situation	Market Return	Buy-and-Hold Return of general index prior to the IPO.	MARKET	+/-
Firm and IPO Characteristics	Solvency Ratio	The relation between assets and liabilities.	SOLV	Positive
	Size	Logarithm of asset value in the year before the IPO.	SIZE	Positive
	Age	Logarithm of number of years since the foundation of the company until the IPO.	AGE	Positive
	Offer Size	Ratio between the size of the firm and the size of the offer.	OFFER	Positive

Table 3. *Cont.*

	Variable	Definition	Code	Prediction
Type of Market	CONTINUOUS Market Dummy	Dummy equal to 1 when company goes public in CONTINUOUS Market, 0 in the Alternative Investment Market (AIM).	CONT	Negative

The following Table 4 is dedicated to presenting the main descriptive statistics for the 72 companies that made an IPO in the Spanish capital market from 1998–2013.

Table 4. Descriptive statistics.

	Mean	*Std. Dev.*	*Minimum*	*Maximum*
IPO Shares of Board Members (DIREPROP) (%)	22.59%	19.56%	0.00%	100.00%
Square proportion of IPO Shares of Board Members (DIREPROP2) (%)	887.71%	1541.78%	0.00%	1000.00%
Equity of the first three shareholders (C3)	0.68	0.18	0.61	0.69
Herfindahl Index (HERF)	0.66	0.22	0.32	1.00
Cubin–Leech Index (CUBIN)	0.75	0.18	0.45	1.00
Non-Executive (NONEXE)	0.73	0.16	0.33	1.00
Independent (INDEPD)	1.19	0.62	0.00	2.31
Women (WOMEN)	0.39	0.52	0.00	1.61
Large Shareholder (LARGE)	1.25	0.82	0.00	3.04
Total Number of Members (TOTNUM)	9.49	4.30	7.50	12.00
Auditor dummy (AUD)	0.75	0.43	0.00	1.00
Underwriter Reputation (UREPUT)	0.53	0.50	0.00	1.00
Market Return (MARKET)	−0.00	0.02	−0.06	0.12
Solvency Ratio (SOLV)	9.06	32.51	−59.05	244.77
Assets Value (SIZE)	19.28	2.73	17.08	20.19
Natural logarithm of age of the firm (AGE)	2.45	1.14	0.69	4.62
Size of the firm related to size of the offer (OFFER)	5.22×10^8	9.13×10^8	0.00	4.07×10^9

N = 72. Spanish IPOs between 1998 and 2013. Summary statistics. See variables in Table 3.

According to the data in Table 4, with the descriptive statistics for the main variables in our sample, the firms have 73% of non-executive directors and the size of the board is close to 10 members on average, but women are only 0.39. In general, women on boards are not experts, but representatives of large shareholders. Taking these numbers into account, the board of directors' ownership is close to 23% on average. We control for potential correlation problems in our econometric estimations. The correlation matrix is presented in Table 5 as well as the variance inflation factor (VIF) test results in order to check the multicollinearity issues. For those cases where we find correlations between the variables (VIF higher than 10), these are considered in alternative estimations so that our results are not affected by correlation problems.

Table 5. Correlation matrix for listed variables and the variance inflation factors (VIF).

	(I)												
	CSRD	NONEXE	INDEPD	WOMEN	LARGE	TOTNUM	CEODUAL	DIREPROP	DIREPROP2	C3	HERF	CUBIN	AUD
CSRD	1												
NONEXE	−0.1843	1											
INDEPD	0.0747	0.1615	1										
WOMEN	−0.0554	0.3246	0.3369	1									
LARGE	−0.0809	0.5745	0.1495	0.2806	1								
TOTNUM	−0.2995	0.5535	0.4056	0.4971	0.6056	1							
CEODUAL	0.1650	−0.2341	0.1066	0.0706	−0.0959	−0.1484	1						
DIREPROP	0.1483	−0.1466	−0.2504	−0.0963	−0.1808	−0.3053	0.1368	1					
DIREPROP2	0.1749	−0.1836	−0.2854	−0.1221	−0.2218	−0.3350	0.1259	0.9041	1				
C3	−0.0328	−0.2172	0.2173	−0.0741	−0.1944	−0.0943	0.1138	−0.1644	−0.1754	1			
HERF	−0.0102	0.0343	0.1287	0.0252	−0.0834	−0.0468	−0.0456	0.0433	0.0605	0.4809	1		
CUBIN	−0.0345	0.0522	0.0748	−0.0324	−0.0888	−0.0542	−0.0885	0.0519	0.0605	0.3961	0.9760	1	
AUD	−0.3048	0.1749	0.1059	0.1699	0.2231	0.4245	−0.1448	−0.0671	−0.0248	−0.1276	−0.0525	−0.0279	1

	(II)												
	CSRD	NONEXE	INDEPD	WOMEN	LARGE	TOTNUM	CEODUAL	DIREPROP	DIREPROP2	C3	HERF	CUBIN	AUD
UREPUT	−0.2520	0.2572	0.2130	0.1450	0.3563	0.4849	−0.2001	0.0870	0.0171	−0.0850	−0.0718	−0.0734	0.5461
MARKET	−0.0287	0.0827	0.0918	−0.0036	−0.1533	−0.1028	0.0684	−0.0478	−0.0470	−0.1588	−0.0507	−0.0860	0.0468
SOLV	−0.1135	−0.0187	0.0026	0.1463	0.0971	0.1816	0.0809	−0.1126	−0.0554	0.1522	−0.0125	−0.1017	0.0555
SIZE	−0.0465	0.2468	0.3140	0.3337	0.3615	0.4222	0.1259	−0.0910	−0.0928	0.0674	0.1198	0.0563	0.2701
AGE	−0.0847	0.0828	0.0661	0.2307	0.0057	0.0660	−0.0155	0.1485	0.0820	−0.0008	0.0495	0.0304	0.1437
OFFER	−0.0661	0.3095	0.3819	0.3075	0.3930	0.4769	−0.0859	−0.1738	−0.1568	0.1485	0.2129	0.1672	0.3223
CONT	−0.5471	0.2723	0.2006	0.2048	0.2352	0.6220	−0.2117	−0.0264	−0.0801	0.0619	0.0683	0.0738	0.6363
VIF		1.7800	1.4200	1.4300	1.8900	2.4400	1.1500	5.7300	5.5300	1.1900	28.460	28.730	1.8200
1/VIF		0.5613	0.7063	0.6985	0.5301	0.4102	0.8690	0.1744	0.1807	0.8370	0.0351	0.0348	0.5491

	(III)						
	UREPUT	MARKET	SOLV	SIZE	AGE	OFFER	CONT
UREPUT	1						
MARKET	−0.1360	1					
SOLV	−0.0500	0.0769	1				

Table 5. *Cont.*

				(III)			
SIZE	0.2137	−0.0569	0.3408	1			
AGE	0.2974	0.0083	−0.0595	0.0577	1		
OFFER	0.3116	−0.1380	0.3275	0.6914	−0.0244	1	
CONT	0.7243	−01564	0.1626	0.3264	0.2569	0.3919	1
VIF	2.6000	1.1500	1.5100	2.0800	1.1700	2.300	3.0200
1/VIF	0.3853	0.8722	0.6640	0.4799	0.8543	0.4343	0.3314

5. Results

The results of the model estimation by Probit together with the alternative measures and independent variables considered are shown in Tables 6–8, considering the correlation levels between them. In Table 6, we display the results with the alternative variables to test the Corporate Governance Hypothesis. In Tables 7 and 8, the results for the other two hypotheses and control variables are shown.

Table 6. Results (I).

Variable	Model (1)	Model (2)	Model (3)
Intercept	2.9829	4.4029	3.6565
	(0.550)	(0.850)	(0.420)
NONEXE	−11.5481 ***	−10.3005 **	−9.7452 **
	(−2.390)	(−2.210)	(−1.910)
INDEPD	4.9499 **	5.5747 **	6.5519 **
	(2.150)	(2.31)	(2.17)
WOMEN	−1.0641	−0.8029	−1.3257
	(−0.920)	(−0.750)	(−0.980)
LARGE	2.8898 **	3.3020 ***	3.6116 ***
	(2.240)	(2.440)	(2.500)
TOTNUM		−2.2503	−3.2859
		(−0.750)	(−0.960)
CEODUAL			1.2917
			(0.860)
DIREPROP	−0.2362	−0.2533	−0.3088
	(−1.460)	(−1.550)	(−1.430)
DIREPROP2	0.0049 *	0.0053 *	0.0063
	(1.620)	(1.690)	(1.490)
AUD	0.4026	0.8886	1.5513
	(0.360)	(0.710)	(1.000)
UREPUT	2.7353 *	2.5199	3.6924
	(1.720)	(1.580)	(1.420)
MARKET	−16.7818	−21.8886 *	−33.7763 *
	(−1.470)	(−1.610)	(−1.690)
CONT	−9.0951 ***	−8.4458 ***	−9.6607 **
	(−2.610)	(−2.570)	(−2.170)
Annual effect considered	YES	YES	YES
Pseudo R^2	78.55%	79.10%	80.11%
Log-likelihood	−10.6978	−10.4230	−9.9188
Chi-squared	78.36 ***	78.91 ***	79.92 ***
No. observations	72	72	72

N = 72. Spanish IPOs between 1998–2013. Probit estimations. STATA package. See variables in Table 3. Time dummy variables included. ***, **, and * indicate significance at 1%, 5%, and 10%. (t-statistic).

The results in Table 6 confirm the Corporate Governance Hypothesis (H1). In particular, these results support hypotheses H1a, H1b, and H1d, but not H1c (WOMEN), H1e (TOTNUM), and H1f (CEODUAL). We find support with respect to the influence exerted by the proportion of non-executive directors and independent directors on CSR disclosure. Moreover, large shareholders also have a significant influence on CSR disclosure. In consequence, both the number of independent directors and the number of large shareholder representatives positively influence CSR reporting. This first result is in line with [8], while the second result for large shareholder representatives lends support to the studies who proposed that ownership structure is characterized by the presence of large shareholders and is related to CSR activities. On the other hand, contrary to the literature [4,12,40,87], among others, our results do not reveal any influence on CSR disclosure for Spanish IPO firms in terms of women directors, duality of CEO and chairman positions, or board size. In order to explain the result for women directors and because it is a hand-collected sample, we know that women on Spanish boards of directors in our database are generally selected because they are representatives of large shareholders,

but not for being experts. This is a bias in the criteria for selecting women capable of making positive decisions for the company, such as improving the CSR disclosure, and is also an explanation for not finding a statistically significant coefficient for this variable.

Table 7. Results (II).

Variable	Model (1)	Model (2)	Model (3)	Model (4)
Intercept	2.9829	7.2819	2.1939	−9.9586 **
	(0.550)	(0.590)	(0.490)	(−2.370)
NONEXE	−11.5481 ***	−18.4837 *	−11.6886 **	−12.2197 **
	(−2.390)	(−1.720)	(−2.41)	(−2.390)
INDEPD	4.9499 **	7.4087 **	4.8269 **	4.9505 **
	(2.150)	(1.930)	(2.18)	(2.130)
WOMEN	−1.0641	−2.6045	−0.6684	−0.5562
	(−0.920)	(−1.170)	(−0.560)	(−0.460)
LARGE	2.8898 **	3.7662 **	2.7921 **	2.8483 **
	(2.240)	(2.170)	(2.340)	(2.370)
DIREPROP	−0.2362	−0.2131	−0.2206	−0.2250
	(−1.460)	(−1.560)	(−1.430)	(−1.380)
DIREPROP2	0.0049 *	0.0046 *	0.0048	0.0050
	(1.620)	(1.780)	(1.580)	(1.440)
C3		−105.6020		
		(−1.030)		
HERF			1.4572	
			(0.60)	
CUBIN				2.3209
				(0.790)
AUD	0.4026	−0.7865	0.5879	0.6111
	(0.360)	(−0.460)	(0.490)	(0.470)
UREPUT	2.7353 *	3.5259	3.0735 *	3.2590 *
	(1.720)	(1.580)	(1.710)	(1.730)
MARKET	−16.7818	−30.4796 *	−14.4497	−12.7429
	(−1.470)	(−1.620)	(−1.240)	(−1.070)
CONT	−9.0951 ***	−10.0282 ***	−9.6367 **	−9.6607 **
	(−2.610)	(−2.570)	(−2.52)	(−2.170)
Annual effect considered	YES	YES	YES	YES
Pseudo R^2	78.55%	80.11%	78.93%	79.28%
Log-likelihood	−10.6978	−9.9221	−10.5086	−10.3365
Chi-squared	78.36 ***	79.91 ***	78.74 ***	79.08 ***
No. observations	72	72	72	72

N = 72. Spanish IPOs between 1998–2013. Probit estimations. STATA package. See variables in Table 3. Time dummy variables included. ***, **, and * indicate significance at 1%, 5%, and 10%. (t-statistic).

As for the Ownership Structure Hypothesis (H2), the results in Tables 6 and 7 show that DIREPROP and DIREPROP2 have coefficients with different signs. These results confirm the non-linear effect on the level of CSR disclosure for IPO firms because of the change in sign. The inverted U-shaped effect of director ownership on CSR disclosure is confirmed according to our results. In the case of CSR disclosure, the negative relation for low levels is not significant, while the positive relation is statistically significant. This result indicates that, at this level, the compromise with CSR disclosure is higher. However, we do not find support for any measure of ownership concentration, since the coefficients for C3 and for the two alternative concentration indexes (Herfindahl–Hirshman Index and Cubin–Leech Index) are not statistically significant.

Table 8. Results (III).

Variable	Model (1)	Model (2)	Model (3)
Intercept	2.9829	2.7322	3.0400
	(0.550)	(0.700)	(0.130)
NONEXE	−11.5481 ***	−13.7679 **	−11.0645 **
	(−2.390)	(−2.220)	(−2.000)
INDEPEND	4.9499 **	5.7142 **	5.8461 **
	(2.150)	(2.220)	(1.780)
WOMEN	−1.0641	−1.129	−1.198
	(−0.920)	(−0.940)	(−0.990)
LARGE	2.8898 **	3.4379 **	3.0773 **
	(2.240)	(2.180)	(2.000)
DIREPROP	−0.2362	−0.2604	−0.2568
	(−1.460)	(−1.440)	(−1.490)
DIREPROP2	0.0049 *	0.0054 *	0.0054 *
	(1.620)	(1.610)	(1.620)
AGE		0.1419	
		(0.230)	
OFFER		-0.6610^{E-9}	
		(−0.870)	
SIZE			-0.4330^{E-9}
			(−0.700)
SOLV			0.0122
			(0.530)
AUD	0.4026	0.4474	0.7858
	(0.360)	(0.380)	(0.600)
UREPUT	2.7353 *	2.8966 *	3.6263
	(1.720)	(1.750)	(1.380)
MARKET	−16.7818	−16.4864	−23.6782
	(−1.470)	(−1.410)	(−1.260)
CONT	−9.0951 ***	−8.6911 ***	−11.2467 *
	(−2.610)	(−2.710)	(−1.710)
Annual effect considered	YES	YES	YES
Pseudo R^2	78.55%	79.21%	79.01%
Log-likelihood	−10.6978	−10.3681	−10.4697
Chi-squared	78.36 ***	79.02 ***	78.82 ***
No. observations	72	72	72

N = 72. Spanish IPOs between 1998–2013. Probit estimations. STATA package. See variables in Table 3. Time dummy variables included. ***, **, and * indicate significance at 1%, 5%, and 10%. (t-statistic).

In relation to the Signaling Quality Hypothesis (H3), this is also confirmed because of the result for the UREPUT variable with a positive and statistically significant sign. This hypothesis postulates that the reputations of the auditor and underwriter could reduce the asymmetry of information. There should thus be a positive relationship between these two variables and the quality of the firm, the CSR disclosure, and strategy. Thereby, the reputation of this agent helps signal the quality of the firm going public and reduces ex-ante uncertainty about its value; this, in turn, affects CSR disclosure. The positive sign found for this variable indicates that the reputation of the company should be directly connected with CSR. The firm going public also uses the underwriter's reputation to eliminate part of the ex-ante uncertainty not dealt with in the IPO prospectus. We found that reputable and prestigious firms are associated with more CSR disclosure. Hence, the relationship between the variable measuring the underwriter's reputation and the CSR disclosure is positive and statistically significant. Taking into account this result, we find partial support for the Signaling Quality Hypothesis (H3). However, the coefficient for the AUD variable is not statistically significant, and this result is contrary to the literature [4].

As for the control variables, the result for the size of the company (SIZE) is not statistically significant. According to this result, the effect of the asymmetry of information is not conclusive, and

we cannot conclude that larger firms perform better CSR disclosure. The same occurs with the solvency (SOLV) and the age (AGE) of the firm and with the offer size (OFFER). Note that the control variables are not affecting our results, but, instead, controlling them.

The pseudo R2 coefficient is approximately 78% in all of the regressions. This result is in favor of the quality of model´s fit.

6. Conclusions

In this paper, we analyze the influence of the board of directors on CSR disclosure. We delve deeper than prior research because we analyze the influence of board composition and ownership structure on CSR disclosure for those companies that undertook an IPO in the Spanish capital market during the period 1998–2013. This marks an important difference with respect to the previous studies because IPO firms present a higher degree of information asymmetry. They have never been quoted in the capital market, so the informative value for CSR disclosure is higher. After controlling for other influences, such as the auditor's reputation or the underwriter's reputation, we explore the possibility of a non-linear relationship between the proportion of shares in the IPO belonging to members of the board of directors and the level of CSR reporting. In relation to the composition of the board and CSR disclosure, a more complete analysis is provided given that we have more detailed data with respect to the differing characteristics of IPO directors. Additionally, we analyze whether independent directors, non-executive directors, women, large shareholders, the size of the board, and CEO duality affect the way in which companies disclose information concerning CSR.

Our research is based on the companies that made an IPO during that period, both on the Continuous Market and on AIM. Our results confirm that the members of the board and the types of directors have real relevance in CSR disclosure: Independent directors, non-executive directors, and large shareholder representatives affect the ways in which their companies disclose information about CSR. However, we do not find influence of women directors on CSR disclosure. In this research, we use a hand-collected sample, so we know that women on Spanish boards of directors are generally selected because they are representatives of large shareholders, but not for being experts. This is a bias in the criteria for selecting women capable of making positive decisions for the company, such as improving the CSR disclosure.

Our results lend support for a non-linear relationship between the proportion of shares in the IPO belonging to members of the board of directors and the level of CSR reporting. Finally, the underwriter's reputation has a positive and statistically significant influence on CSR disclosure for Spanish IPOs. The reputation of this agent helps to signal the quality of the firm going public and to reduce ex-ante uncertainty about its value; this, in turn, affects CSR disclosure. According to this research, the firm going public uses the underwriter's reputation to eliminate part of the ex-ante uncertainty not dealt with in the IPO prospectus. Reputable and prestigious firms are associated with more CSR disclosure. Hence, the relationship between the variable measuring the underwriter's reputation and the CSR disclosure is positive and statistically significant. However, we do not find support for the influence of the reputation of the auditor on CSR disclosure.

The institutional approach is an interesting issue to be considered in future research about CSR disclosure.

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