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Corporate governance codes compliance and environmental, social and governance disclosures

El cumplimiento de los códigos de buen gobierno y la divulgación de información ambiental, social y sobre gobierno corporativo

Elena Moreno-Ureba* , Francisco Bravo-Urquiza

Universidad de Sevilla, España

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Abstract

This work aims to study whether the compliance with the recommendations contained in Corporate Governance Codes contributes to environmental, social and corporate governance disclosure practices. The results fail to show a relationship between the global compliance with the recommendations of the codes and the environmental, social and governance disclosures. However, the compliance with the recommendations regarding the board of directors positively influences the voluntary disclosure of this type of information. This evidence contributes to the debate on the role of Corporate Governance Codes and has direct implications for companies and regulators when designing corporate governance mechanisms.

JEL code: G34, G38, G39

Keywords: Corporate governance codes; Corporate governance; Boards of directors; Information disclosure; Environmental, social and governance disclosures

Resumen

Este trabajo pretende estudiar si el cumplimiento de las recomendaciones contenidas en los Códigos de Buen Gobierno contribuye a la divulgación de información voluntaria relativa a aspectos ambientales, sociales y de gobierno corporativo. Los resultados ponen de manifiesto que el cumplimiento de las recomendaciones de los códigos en su totalidad no guarda relación con la divulgación de información ambiental y social. Sin embargo, el cumplimiento de las recomendaciones sobre el consejo de administración influye positivamente en la divulgación voluntaria de este tipo de información. Esta evidencia contribuye al debate en torno al papel de los Códigos de Buen Gobierno y tiene implicaciones directas para empresas y reguladores a la hora de diseñar los mecanismos de gobierno corporativo.

Código JEL: G34, G38, G39

Palabras clave: Códigos de buen gobierno; Gobierno corporativo; Consejos de administración; Divulgación de información; Información ambiental, social y sobre gobierno corporativo

* Corresponding author.
E-mail address: *elenamoreno103@hotmail.com* (E. Moreno-Ureba).
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Introduction

Corporate governance is a key issue in understanding how companies work and has become especially important for companies, regulators, academics, and society in general. For this reason, legislators and regulators at the international and national levels express the need to manage corporate governance mechanisms properly. Notably, most developed countries have published numerous Corporate Governance Codes (hereinafter, CGC). The emergence of these codes has led to intense debate at the academic, professional, and regulatory levels on their effectiveness. The importance of these codes lies in the general conviction of listed companies of the importance of being managed adequately and transparently as a fundamental element for creating value in organizations, increasing economic efficiency and investor confidence (CNMV, 2015).

However, the impact that CGC compliance can have on companies is still an open question in the literature, with intense debate on whether compliance with CGC is an economic or ethical issue (Hooghiemstra and van Ees, 2011). Corporate Governance Codes focus on recommendations on corporate governance mechanisms and have gained significant visibility and importance in capital markets (Cicon et al., 2012). Generally, CGC compliance levels are high; however, most companies do not comply with all recommendations, possibly because the effects of CGC compliance remain mostly unexplored, and further research is needed (Kabbach de Castro et al., 2017). On the other hand, earlier research has focused on whether compliance with CGC has any effect on business performance and the valuation of a company in the market (Fernández-Rodríguez et al., 2004; Stiglbauer and Velte 2014; Kaspereit et al., 2017). Nevertheless, the results are not conclusive, and recent research has stressed the need to make further progress in the study of the consequences that CGC compliance could have for a company.

Cuomo et al. (2016) highlight the existence of two important gaps in current research. The first relates to the need for a more detailed analysis of compliance with these codes. The second one suggests the importance of studying the effect of compliance with the recommendations contained in the CGC on other types of issues. This article aims to contribute to previous literature and cover both matters. To this end, this study performs an in-depth analysis of CGC compliance, focusing not only on compliance at the global level, but also on the compliance with recommendations specifically related to the board of directors, and with those associated with the different board committees. The above means that this article considers three different levels of CGC compliance. Furthermore, other contributions of this study are the analysis of the relationship between the different levels of CGC compliance and the practices of disclosure of environmental, social, and corporate governance (ESG) information.

Information disclosure is a crucial aspect within corporate strategies, and several studies highlight that improved corporate governance mechanisms should lead to better oversight of information disclosure processes and a reduction of information asymmetries in capital markets (Cerbioni and Parbonetti, 2007). ESG information has acquired particular relevance in recent years for investors, entities, regulators, creditors, and all types of interest groups or stakeholders of a company (Helfaya and Moussa, 2017; Dias et al., 2018; Yu et al., 2018). Environmental, social, and corporate governance disclosure has become a critical aspect of business strategy (Lokuwaduge and Heenetigala, 2017). One of the main reasons why companies disclose ESG information is because they are highly conditioned by existing regulations, although the absence of a mandatory and common framework leads to diversity in the reports presented, complicating comparisons (Lokuwaduge and Heenetigala, 2017). However, there is progress in the area of regulation. Proof of this is the European Union Directive 2013/50/EU, promoting transparency, and Directive 2014/95/EU on the disclosure of non-financial information.

There is an active debate regarding the relevance of the ESG reports disclosed by the companies to the information that interests the different economic agents of the capital markets. In this sense, recent studies reveal that most investors consider that the disclosure of this type of information needs improvement due to its importance for companies and investors (PriceWaterhouseCoopers, 2016). Indeed, many studies emphasize that ESG information is vital to investment decisions (Ioannou and Serafeim, 2017).

In this regard, previous literature considers that the disclosure of ESG information entails significant benefits in capital markets, as it allows for the reduction of agency conflicts and information asymmetries (Cheng et al., 2014). Consequently, the study of the determinants of voluntary disclosure practices of this type of information is relevant for companies, regulators, and academics, and remains an issue that needs more research (Galbreath, 2018). Theoretically, companies with better corporate governance practices are likely to more effectively supervise the information preparation process, seeking to minimize agency problems, and to this end, would also tend to improve the publication of social information. However, no studies link CGC compliance with ESG disclosure. This article is relevant and fills a significant gap in the previous literature considering active academic, professional, and regulatory debates on the role of CGC and the need to increase ESG information.

The companies listed on the IBEX-35 during the years 2013-2016 comprise the sample. Spain has certain characteristics, such as the concentration of ownership, the unitary board system, and the voluntary nature of corporate governance practices, which accentuate agency problems (Manzaneque et al., 2016). Therefore, the study of the Spanish context is relevant to understand the effectiveness of CGC compliance in formulating strategies that contribute to reducing information asymmetries. The results of this study indicate that only compliance with the recommendations relating to the boards of directors influences the practices of voluntary disclosure of ESG information. These results offer several contributions to previous literature. First, our evidence increases discussion of whether CGC compliance is an ethical or an economic issue. Second, the results highlight the need for a detailed analysis of the recommendations contained in the CGC, as not all blocks of recommendations appear to influence the disclosure of ESG information. Therefore, this article contributes to the previous literature by highlighting the fact that an analysis of global CGC compliance may be insufficient to understand the effectiveness of CGC. The analysis of three different levels of compliance makes it possible to observe differences in the relationships studied, which undoubtedly has implications for future research on the consequences of the application of CGC. Finally, the results provide new evidence on the determinants of ESG information, which is valuable for companies and regulators, given the ramifications of this type of information in capital markets.

The rest of this article is structured as follows: the second section includes a literature review; the third section refers to the methodology; and the fourth and fifth sections present the main results obtained and the most relevant conclusions, respectively.

Previous literature and hypothesis formulation

Corporate governance is the set of rules, principles, and procedures that regulate the structure and operation of the governing bodies of a company. It establishes the relationships between the management board, board of directors, stakeholders, and other interested parties by setting the rules that will guide decision-making in the company (CNMV, 2017). Corporate governance mechanisms are crucial to ensure stakeholder rights and efficiency in capital markets (Shleifer and Vishny, 1997). For this reason, since the 1990s there has been a succession of international CGC, which contain a wide range of recommendations aimed at strengthening the rights of investors and other stakeholders (Acero and Alcalde, 2010).

Four Corporate Governance Codes have been created in Spain: the Olivencia Report (1998), the Aldama Report (2003), the Conthe Report—distinguished as the Unified Corporate Governance Code of Listed Companies (2006)—and the Corporate Governance Code of Listed Companies (2015). These Corporate Governance Codes group together the recommendations they contain in different blocks, among which are those that bring together recommendations relating to the board of directors and those that include recommendations on the boards committees (mainly on the audit committee). For this reason, this article analyzes CGC compliance not only overall compliance, but also at the level of recommendations relating to the board of directors and its committees. Table 1 identifies 64 recommendations in the current CGC, of which 11 relate to general aspects and questions of the general board of stakeholders, 25 focus exclusively on the board of directors, and 28 relate to the boards committees.

Table 1

Block recommendations

Block	Number of recommendations
1. General Aspects	5
2. General Board of Stakeholders	6
3. Board	25
4. Committees	28

Source: own elaboration

From an agency theory perspective (Jensen and Meckling, 1976), compliance with recommendations, both at the global level and with those relating to the board of directors and its committees, should contribute to protecting the interests of stakeholders, as well as reducing agency costs and information asymmetries. Concerning this issue, previous literature has pointed out that disclosure of ESG information is an essential tool in reducing agency problems (Cheng et al., 2014). In line with the Triple Bottom Line (Elkington, 1994), organizational performance should not be limited exclusively to financial performance but should also consider social and environmental performance (Visser et al., 2007). For this reason, ESG information has increased in relevance in recent years, and the demand for this type of information is increasing among investors and other stakeholders (Helfaya and Moussa, 2017). Many analysts and investors include this information when issuing opinions or carrying out valuation models of companies. ESG information is, therefore, currently crucial to reduce information asymmetries in capital markets (Ioannou and Serafeim, 2017).

Several studies have tried to find some association between certain characteristics of corporate governance and the disclosure of social information. However, although this is a relevant issue in financial markets, the previous literature has not yet explored the possible association between CGC compliance and ESG disclosure practices. This article aims to contribute to the literature by providing a new approach, analyzing whether compliance with CGC recommendations at the global level, at the level of the board of directors and at the level of its committees, affects ESG disclosure.

First, compliance with CGC recommendations at the global level should involve stable corporate governance structures (Cortés and Martos, 2017). Companies with better corporate governance structures are likely to implement more effective strategies to protect the interests of stakeholders (Hillman and Dalziel, 2003). There is a consensus in previous literature on the positive effect that corporate governance mechanisms have on the quality of information disclosure practices (Carcello et al., 2011). In line with the above reasons, given the relevance of ESG information to reducing agency conflicts, better corporate governance structures can be expected to increase the quality of ESG information disclosed by companies. Understanding that global compliance with CGC recommendations implies better corporate governance structures, the following hypothesis is formulated:

H1: Compliance with the global Corporate Governance Codes recommendations contributes to improving ESG information disclosure practices.

However, the board of directors is a fundamental mechanism of business decision making and exercises a supervisory function over essential corporate strategies (Fama and Jensen, 1983). In particular, compliance with the recommendations of the CGC concerning the board of directors would mean that the boards can more effectively fulfill their function of controlling their tasks, including the supervision of the reporting process (Donnelly and Mulcahy, 2008). Specifically, recent studies have emphasized that boards of directors are responsible for ESG disclosure policies (Galbreath, 2018; Salehi et al., 2018). Given that a more effective board of directors should strengthen links with stakeholders and reduce agency conflicts (Arayssi et al., 2016), those companies that comply with the most recommendations at board level are expected to improve their ESG disclosure practices. Consequently, the following hypothesis is formulated:

H2: Compliance with Corporate Governance Codes recommendations at board level contributes to improving ESG information disclosure practices.

Finally, greater compliance with the CGC recommendations relating to board committees should minimize agency conflicts. These committees make decisions that generally contribute to increased control over corporate strategies (Rahmat et al., 2009). Specifically, the audit committee, on which most of the recommendations in this block focus, can have a direct effect on the supervision of the information preparation process (Ahmed and Anifowose, 2016). In this sense, the most recent research indicates that this committee should be directly involved in the implementation of non-financial and social disclosure strategies (Salehi and Shirazi, 2016). Although the other committees do not have a direct involvement in the information preparation process, they also contribute to improving the overall control capacity of corporate strategies. In line with the above, it is understood that compliance with committee recommendations can lead to improved ESG disclosure practices, bringing about the following hypothesis:

H3: Compliance with the Corpoate Governance Codes recommendations at the level of the committees of the board of directors contributes to improving ESG information disclosure practices.

Methodology

Sample and data

The sample consists of the companies listed on the IBEX-35 during the years 2013-2016, making a total of 130 observations. The 2017 entry into force of Directive 2014/95/EU in Spain regarding the disclosure of non-financial information motivates the selection of this period. The choice of previous years prevents this regulation from influencing ESG information disclosed by the companies, which would bias the results obtained. The empirical analysis requires data on the compliance with the recommendations contained in the CGC and ESG information disclosure practices. The data on compliance were obtained from the Spencer Stuart Index (Spencer Stuart Board Index 2013, 2014, 2015 and 2016). This index compiles information on the degree of monitoring of the CGC of companies belonging to the IBEX-35. Similarly to these codes, the recommendations are divided into different blocks. These indices identify the degree of global compliance of the CGC and the degree of compliance with the recommendations regarding the board of directors and its committees.

Additionally, the data of ESG information disclosure practices derive from Informe Reporta (2014, 2015, 2016, 2017). Deva Comunicación Financiera analysts prepare this report, which presents information on the quality of the information published by listed Spanish companies. Concerning Informe Reporta, this article focuses on the index titled “Commitment,” which measures information relating to environmental, social, and corporate governance (ESG) aspects.

Finally, the data necessary to calculate other types of variables included in the empirical analysis were obtained from Sistema de Análisis de Balances Ibéricos (SABI) database or directly from the annual accounts of the companies.

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Variables

First, the Commitment index provided by Informe Reporta was used to measure the quality of voluntary disclosure of ESG information (ESG info). This type of analyst assessment is common in studies examining the quality of company social information (Arayssi et al., 2016; Ioannou and Serafeim, 2017). This index is based on 14 indicators, which are based on the guidelines and recommendations of The Global Reporting Initiative (GRI), AA1000 AccountAbility, Dow Jones Sustainability Index (DJSI), FTSE4Good, and the International Integrated Reporting Council (IIRC), among others. A team of expert analysts evaluate the information supplied by the companies, following a rigorous process of preparation and supervision to guarantee independence and objectivity.

Second, the main independent or explanatory variables are those related to compliance with the recommendations of the CGC. The follow-up of the recommendations at a global level but also compliance with the recommendations relating to the board of directors and its committees are analyzed. Therefore, there are three different independent variables:

- Compliance with Corporate Governance Codes recommendations at a global level (C-General).
- Compliance with Corporate Governance Codes recommendations relating to the Board of Directors (C-Board).
- Compliance with Corporate Governance Codes recommendations relating to the committees of the Board of Directors (C-Committees).

Finally, some control variables were calculated, as the level of voluntary disclosure of ESG undoubtedly depends on other issues not related to corporate governance. Thus, based on previous literature (Chavent et al., 2006), company size, indebtedness, profitability, financial situation, sector, and year have been included in the study. Size (SIZE) is the logarithm of total assets; indebtedness (IND) is calculated as the ratio of debt to total assets; profitability (PROF) is calculated as the ratio

EBIT/Total assets, and the financial situation is measured using the indicator proposed by Zmijewski (1984) (ZMIJ). Finally, the sector of activity to which the company belongs (SECT) and the year under study (YEAR) are dichotomous variables also considered in the empirical analysis.

Table 2 lists the variables analyzed and explains how they have been calculated.

Table 2

Variable definition

Name	Definition	Calculation
Dependent variable		
ESG info	Quality of information on environmental, social, and corporate governance issues	Estimation based on the Commitment Index by *Informe Reporta*
Independent variables		
C-General		
C-Board	Variables expressing the degree of compliance with Corporate Goverance Codes recommendations	Percentage of recommendations implemented in each block
C-Committees		
Control variables		
SIZE	Size of the company	Total assets logarithm
IND	Indebtedness	Other liabilities/ Total assets
PROF	Profitability	EBIT/ Total assets
ZMIJ	Financial situation	Dichotomous variable which takes the value 1 if the company has a high probability of bankruptcy and 0 otherwise, based on the indicator of Zmijewski (1984)
SECT	Sector of activity to which the company belongs	Dichotomous variable for each sector according to the IGBM classification
YEAR	Year under study	Dichotomous variable for each year

Source: own elaboration

Statistic model

For the statistical model, a regression analysis using panel data is used to study whether the relationship between dependent and independent variables is statistically significant. The use of regression through panel data is particularly desirable in analyses that combine cross-sectional observations with time series, as it allows comparisons between the behavior of different organizations and between the same organization at different periods of time. Likewise, the panel data allow for control of the unobservable heterogeneity (Arellano and Bover, 1990). For this reason, this methodology has been commonly used in this type of study (García-Sánchez et al., 2011; Shahwan, 2015). In relation to our objetctive, we proposed three different models to observe the effect that each measure of compliance with CGC recommendations has on ESG information disclosure practices, which is considered the dependent variable in all models.

$$ESG\ info_{it+1} = \beta_0 + \beta_1 C\text{-}General_{it} + \beta_2 SIZE_{it} + \beta_3 IND_{it} + \beta_4 PROF_{it} + \beta_5 ZMIJ_{it} + \beta_6 SECT_{it} + \beta_7 YEAR_{it} \quad (1)$$

$$ESG\ info_{it+1} = \beta_0 + \beta_1 C\text{-}Board_{it} + \beta_2 SIZE_{it} + \beta_3 IND_{it} + \beta_4 PROF_{it} + \beta_5 ZMIJ_{it} + \beta_6 SECT_{it} + \beta_7 YEAR_{it} \quad (2)$$

$$ESG\ info_{it+1} = \beta_0 + \beta_1 C\text{-}Committees_{it} + \beta_2 SIZE_{it} + \beta_3 IND_{it} + \beta_4 PROF_{it} + \beta_5 ZMIJ_{it} + \beta_6 SECT_{it} + \beta_7 YEAR_{It} \quad (3)$$

$$i = 1, \ldots, N;\ t = 1, \ldots, T$$

Where i and t represent the transversal units and the period of time, respectively. The dependent variable refers to the ESG information published in year t+1. A common problem in this type of study is the existence of endogeneity between dependent and independent variables, related to the presence of inverse relationships to the ones expected (Adams and Ferreira, 2009). The above would imply that companies that disclose better ESG information comply more easily with specific CGC recommendations. The use of lagged independent and control variables with respect to the publication of ESG information, a dependent variable, rules out this option (Ben-Amar and McIlkenny, 2015). The Hausman test was used for each model to determine whether the most appropriate estimation model involved fixed effects or random effects.

Results

Descriptive and correlation analysis

Table 3 presents the descriptive values of the variables included in the empirical analysis.

Table 3

Descriptive statistics

Variable	Mean	Median	Standard Dev.	Minimum	Maximum
ESG info	23.48	24.20	4.88	3.10	32.3
C-General	91.18	93.54	9.09	50.25	100
C-Board	90.75	94.44	9.07	61.90	100
C-Committees	90.91	94.12	9.31	53.57	100
SIZE	7.05	6.85	0.81	5.67	8.70
IND	0.63	0.69	0.30	0.05	2.00
PROF	4.55	2.53	14.19	-97.05	63.10
ZMIJ	0.15	0	0.36	0	1

Source: own elaboration

First, the descriptive results show that there is a high variability in the values referring to the disclosure of ESG information. Although the companies studied are large and subject to high social pressures, ESG disclosure practices are very disparate. Second, regarding the main independent variables, the companies analyzed tend to comply, the vast majority of the recommendations from the CNMV contained in the CGC. Despite this, there are companies with a low level of compliance, which can affect the effectiveness of corporate governance mechanisms. On the other hand, the degree of follow-up is similar in the three levels of recommendations studied, ruling out that the differences found in the results may be due to divergences in the degree of compliance of each levels. Finally, a detailed analysis of the descriptions of each variable demonstrates that there is no presence of extreme values that could condition empirical analysis.

Table 4 presents the correlations between each of the variables that make up the statistical models. This table aims to show individual relationships between the variables in the study and rules out the existence of multicollinearity problems derived from particularly high significant relationships.

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Table 4

Correlation matrix

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1) ESG info	1.000						
(2) C-General	0.008	1.000					
(3) C-Board	0.159*	0.640**	1.000				
(4) C-Committees	0.040	0.773***	0.509***	1.000			
(5) SIZE	0.327***	0.148*	0.106	0.127	1.000		
(6) IND	0.040	-0.104	-0.069	-0.054	0.441***	1.000	
(7) PROF	0.012	0.324***	0.216**	0.254***	-0.189**	-0.427***	1.000
(8) ZMIJ	-0.129	-0.094	0.005	-0.056	-0.102	0.279***	-0.415***

The asterisks represent the level of significance: * p<0.1→ level of significance at 10%; ** p<0.05→ level of significance at 5%; *** p<0.01→level of significance at 1%.

Source: own elaboration

First, there is a positive relationship between the disclosure of ESG information and CGC compliance, although it is only significant in terms of the follow-up of the specific recommendations of the Board of Directors (significance at 10%). Consequently, compliance with the recommendations concerning the board of directors and the social commitment of companies are associated in terms of ESG information disclosure. On the other hand, as it can be observed, there is a positive and significant association between the disclosure of ESG information and companies size, therefore companies with the best disclosure practices are those which may have greater visibility and more significant social pressures given their size. As was expected, the relationship between the degrees of compliance with the different levels of recommendations is positive and significant, indicating that the company that tends to comply with more recommendations at a general level also does so specifically for recommendations regarding the board of directors and its committees.

In general, none of the correlations between the independent variables exceeds 0.700 (except from the association between the variables C-Committees‒C-General, which would not enter jointly in any model), confirming that there are no multicollinearity problems in the econometric models used in the empirical analysis (Cooper and Schindler, 2003).

Regression analysis

Table 5 displays the results of regression analysis using panel data and contains information for each of the models presented in the methodology section. This table shows the associations between the disclosure of ESG information and the independent and control variables. In particular, model 1 includes compliance with the recommendations at the global level contained in the CGC as the main explanatory variable, while in models 2 and 3, the explanatory variables are the follow-up of the recommendations relating to the board of directors and its committees, respectively.

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Table 5

Regression models

	Model 1	Model 2	Model 3
Constant	25.573*** (2.81)	10.150 (1.05)	24.532*** (2.74)
C-General	-0.040 (-0.74)		
C-Board		0.131** (2.35)	
C-Committees			-0.028 (-0.53)
SIZE	0.935 (0.83)	0.901 (0.80)	0.927 (0.82)
IND	-0.480 (-0.22)	-0.360 (-0.17)	-0.476 (-0.21)
PROF	0.007 (0.23)	-0.014 (-0.48)	0.003 (0.11)
ZMIJ	-1.390 (-1.30)	-1.792* (-1.71)	-1.413 (-1.32)
SECT	included	included	included
YEAR	included	included	included
Adjusted R2	0.304	0.330	0.304
F test	27.53**	32.91***	27.08**

The asterisks represent the level of significance: * $p<0.1$ →level of significance at 10%; ** $p<0.05$ →level of significance at 5%; *** $p<0.01$ →level of significance at 1%.

Source: own elaboration

First, all the models studied are significant and have an adequate explanatory capacity. Model 1, which analyzes the effect of compliance with the global recommendations contained in the CGC on the voluntary disclosure of ESG information, shows that there is no relationship between these variables since the p-value of the coefficient of variable C-General (0.462) is higher than 0.10. This seems to indicate that compliance with the recommendations of the CGC does not correlate to improvement in the disclosure of this information; therefore, hypothesis H1 is not accepted. These results are in line with other studies which indicate that CGC compliance does not have a direct impact on corporate decisions (Stiglbauer and Velte, 2014), and that compliance with CGC recommendations could be more related to moral and reputational issues (Rhode and Packel, 2014). However, the results do not support the theoretical arguments and suggest that while compliance with the CGC recommendations at the global level should ensure that the interests of different stakeholders are protected, this has no bearing on specific ESG disclosure policies.

Concerning Model 2, compliance with the recommendations relating to the board of directors and the disclosure of ESG information have a positive relationship. The coefficient of variable C-Board has a positive sign and a significance level of 5% (p-value= 0.019). The above means that companies that comply with a higher percentage of recommendations related to the board of directors tend to be more committed to society and sustainable development, as far as ESG information disclosure is concerned, validating hypothesis H2. These results reinforce the evidence found by other studies on the vital role that boards of directors play in voluntary disclosure practices of this type (Helfaya and Moussa, 2017; Galbreath, 2018). Conversely, these results demonstrate that the effectiveness of CGC may depend on the type of recommendations being evaluated, contributing to the debate about the effect of CGC compliance (Cuomo et al., 2016). In line with the theoretical arguments, compliance with the recommendations regarding the board of directors does contribute to reducing agency problems by improving ESG information disclosure practices, which is probably due to the responsibility that boards have in establishing such strategies.

Model 3 studies the relationship between the compliance with CGC recommendations related to the board of directors committees and the disclosure of ESG information. The coefficient of variable C-Committees is not statistically significant, with the p-value (0.597) being greater than 0.10, which indicates that there is no significant association between these variables; therefore, hypothesis H3 is not accepted. Although this result is contrary to the theoretical arguments, it reinforces the idea presented above on the role of the boards of directors. In particular, this evidence makes it possible to resolve a relevant question in the literature about the mechanisms that can improve ESG information practices. Although board committees, specifically the audit committee, can be useful mechanisms for reducing agency conflicts and supervising the implementation of certain corporate strategies, the results show that it is the board of directors which influences policies on ESG disclosure.

Regarding the effect of the control variables, it is noteworthy that only the relationship between compliance with the recommendations related to the board of directors and the probability of bankruptcy (significance at 10%) is significant, resulting in a negative relationship, which means that as the risk of bankruptcy increases, the quality of the ESG information decreases. The absence of other relationships may be due to the specificity of the measurement of the information used. Thus, previous studies indicate that, when specific information attributes are measured, business characteristics may not be determinant of the disclosure of such information (Bravo et al. 2010).

Discussion

According to the agency theory (Jensen and Meckling, 1976), CGC compliance should contribute to protecting stakeholder interests, as well as reducing agency costs and information asymmetries. This study seeks to explore the relationship between compliance with CGC recommendation by Spanish listed companies and the practices of voluntary disclosure of ESG information. This article represents a step forward in the literature on corporate governance and sustainability and corporate social responsibility. On the one hand, the literature on corporate governance indicates that CGC compliance has an effect on investor perceptions, which can translate into positive market reactions to share values (Goncharov et al., 2006; Chavez and Silva, 2009; Kaspereit et al., 2015; Kaspereit et al., 2017) and an increase in corporate reputation (Hooghiemstra and van Ees, 2011; Rhode and Packel, 2014; McCahery et al., 2016). These studies assume that corporate reputation is the "increase of perception of the different participants of the degree to which the responses of the organization will satisfy the demands and expectations of stakeholders" (Pucheta, 2010), and they consider that CGC compliance improves that perception. Moreover, another branch of stiudies argues that CGC compliance affects the strategic decisions of companies, impacting business performance. Thus, several studies reveal that a greater degree of CGC compliance positively influences different measures of financial performance, such as the market-to-book ratio, Tobin's Q or the financial profitability of companies (Fernández-Rodríguez et al., 2004; Bassen et al., 2006; Stiglbauer, 2010; Luo and Salterio, 2014; Rodríguez-Fernández, 2016).

This article, therefore, contributes to the literature on the role of CGC by deepening the study of the consequences that compliance with these codes may have on strategies related to the disclosure of ESG information.

Alternatively, in the literature on corporate social responsibility and sustainability, recent studies indicate that the disclosure of social information, in particular ESG, may be conditioned by certain business and corporate governance factors. Lee et al. (2016) state that there is a significant negative relationship between the indebtedness of a company and ESG disclosure. They also state that the size of the organization and R&D expenditure negatively impact ESG disclosure. Conversely, Arraysi et al. (2016) highlight a negative association between ESG disclosure and financial performance when there are low levels of gender diversity on the board of directors. Yu et al. (2018) suggest that companies with higher levels of assets, greater investment in R&D, and good past financial results tend to be more transparent in ESG disclosure.

Concerning corporate governance mechanisms, Helfaya and Moussa (2017) find that the most independent and gender-diverse boards of directors tend to disclose higher quality ESG information. Jizi et al. (2014) highlight the existence of a positive association between independence and board size and corporate social responsibility disclosure. Therefore, this study contributes to the literature regarding the determinants of disclosure of this type of information.

Conclusions

This article provides new empirical evidence on the relationship between CGC compliance and voluntary ESG disclosure practices. The results show that only compliance with the recommendations relating to the board of directors is associated with voluntary disclosure of ESG information practices. These results may have implications both at the theoretical level and at the level of companies and regulators.

On the one hand, the evidence provided contributes to the literature on the effectiveness of CGC in two distinct ways. First, this study advances previous research by analyzing three different levels of CGC compliance. In this sense, it is clear that the effect of CGC compliance depends on the type of recommendations studied, which has implications for future CGC compliance research. Second, this study examines a new relationship, analyzing the impact of CGC on ESG disclosure practices. The results provide further insight into the effects of CGC compliance and the determinants of disclosure of this type of information, which has become key in capital markets. Previous literature has suggested that the board of directors and its committees may have a responsibility in ESG disclosure processes. In this regard, this study confirms that the board of directors plays a vital role in the development of strategies related to the disclosure of such information. Compliance with the recommendations helps to increase the effectiveness of the board of directors, which is a fundamental mechanism for reducing information asymmetries related to the disclosure of ESG information.

On the other hand, legislators, companies, and professional bodies maintain a significant interest in knowing both the effectiveness of the CGC and the factors that contribute to improving the ESG information and, therefore, the transparency of information of companies. Our evidence has direct implications for regulatory bodies, which can guide their actions regarding the elaboration of future CGC. Additionally, it has implications for companies, which can better understand how corporate governance mechanisms help to increase the quality of ESG information associated with important business benefits.

This article has certain limitations that may be considered in further investigations. First, the study is limited to a country in a given period, and although the results can be extrapolated to countries with similar characteristics, future research could focus on different institutional contexts or periods. Furthermore, this study focuses exclusively on ESG information. However, it offers interesting lines for future studies that may seek to analyze the influence of CGC on different business strategies relating to corporate social responsibility. Additionally, in Spain, IBEX-35 companies mostly respect the recommendations issued by the CNMV contained in the CGC. Future research could examine specific recommendations depending on the context analyzed.

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