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The influence of Corporate Governance and Corporate Social Responsibility on Corporate Performance: An Iberian Panel Data Evidence

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The influence of Corporate Governance and Corporate Social Responsibility on Corporate Performance: An Iberian Panel Data Evidence

Abstract

Purpose: The main goal of this paper is to study the influence of some Corporate Governance, Corporate Social Responsibility, and Corporate-specific characteristics on the performance of Iberian listed companies.

Design/methodology/approach: To achieve this aim, we have used data from 33 Portuguese listed companies, and 60 Spanish listed companies, for the period 2011 to 2018. To test our hypotheses we employed the Generalized Method of Moments (GMM) estimation method, developed by Arellano and Bover (1995) and Blundell and Bond (1998).

Findings: The results point out that the performance determinants vary depending on the country under analysis and the variable used to measure performance. Despite being neighbors and historically commercially close, these countries have differences in their governmental, social and economic structure that lead to different stakeholder perceptions on the determinants of corporate performance. Specifically, when we use Tobin's Q as a market performance variable, board independence and the existence of a CSR committee have different signs in the two countries. The same happens when ROA is used as an accounting variable for internal management, implying that both, managers and potential investors of the two countries have different understandings about the variables that influence their performance.

Originality/value: To the best of our knowledge, is the first study to comparatively analyze the two countries of the Iberian Peninsula, analyzing the effect of corporate governance and social responsibility characteristics on the performance. Our results show that managers and potential investors have different points of view regarding the importance of corporate governance and social responsibility characteristics in corporate performance.

Keywords: Corporate Governance; Corporate Social Responsibility; Corporate Performance; the Iberian Peninsula, GMM system

1. Introduction

Companies influence and are influenced by their external environment, so the company's objectives exceed profit-making and turn to value creation (Berman *et al.*, 1999; Cremers, 2017). Thus, the Corporate Governance (CG) characteristics, which dictate the relationship that the company maintains with its stakeholders, are considered essential tools for the success of companies. Simultaneously, the Corporate Social Responsibility (CSR) characteristics comprise the behaviors and actions that the company takes voluntarily, promoting its stakeholders' well-being.

In this sense, corporate governance protects shareholder interests and plays a key role in preserving and sustainable development of a company (Srivastava *et al.*, 2018). Recent literature has shown that adopting corporate governance principles and practices is considered an important determinant of the assessment of companies and, consequently, their performance levels (Ting *et al.*, 2019).

There is a growing concern regarding social and corporate initiatives, providing companies with a natural progression, focusing on improving the human dimension, preserving the environment, and social awareness. In addition, currently, companies are increasingly involved in plans whose objectives involve environmental, social, or governmental issues (Zhao *et al.*, 2018). This process benefits companies, allowing them to improve their performance (Rodriguez-Fernandez, 2016). There is still a long way to go in performance analysis considering societies' social challenges.

Thus, this study arises from the need to expand the literature on the subject, namely the Iberian territory, and aims to demonstrate how corporate governance, corporate social responsibility, and company-specific characteristics influence performance.

This analysis is made from two different perspectives, analyzing both the view of managers and the view of potential investors in the period between 2011 and 2018. It should be noted that this period comprises the intervention period of the Troika¹ in Portugal, with all restrictions imposed, and precedes the period of the crisis caused by COVID -19.

This study contributes in different ways to the literature. First, the Iberian peninsula as a whole is analyzed, given its geographic proximity and commercial and cultural relations; then, each country is analyzed individually to better understand the differentiating

¹ The Troika is the name assigned to the team composed by the International Monetary Fund, the European Central Bank and the European Commission. It is a team of consultants, analysts and economists who are responsible for negotiations with countries requesting financial assistance in order to consolidate and stabilize debts and public accounts.

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characteristics between Portugal and Spain in terms of business performance. Although the results of the global sample may be very similar to those obtained in Spain, given the greater weight in the sample, this fact only reinforces the need to study small countries separately to understand what still needs to be done in order to increase the value of companies (Neves, Proença, *et al.*, 2020).

Secondly, and to the best of our knowledge, this study is the first to analyze the different characteristics of corporate governance and social responsibility for the Iberian Peninsula, allowing us to investigate the effect of these determinants in comparative terms for each of the two countries.

Thirdly, our study allows us to analyze the results from the different perspectives of managers and potential investors, results that can be quite different, according to Vieira et al. (2019). Our results emphasize, in fact, that for Portuguese companies, it appears that the manager, internal to the organization, is concerned with the CEO's remuneration levels and is confident about the social expenses spent in the company to improve performance. However, a potential investor will consider the existence of audit and corporate social responsibility committees, while attending to CEO compensation.

For Spanish companies, managers emphasize the composition of the board of directors and social expenses as determinants of performance. On the other hand, a potential investor will attach importance to CEO compensation, social expenses, and independent board members as determinants of corporate performance levels. Considering the Iberian Peninsula as a single market, our results are in line with the individual results for Portugal and Spain.

This study is organized as follows. Section 2 presents the literature review and the development of hypotheses. Section 3 sets out the research design. In section 4, the main results obtained from the estimations are discussed. Finally, section 5 presents the conclusions, study limitations, and lines for future research.

2. Literature Review and Hypotheses

The companies performance has been measured in different ways, being essential for the survival of organizations. One of them has been through the Return on Assets (ROA), which allows us to perceive the vision of the company's manager, and the other through Tobin's Q, which indicates the organization's growth opportunities, that is, the vision of potential future investors, following Vieira *et al.* (2019). These determinants can

traditionally be divided into corporate governance, Corporate Social Responsibility, and specific determinants.

2.1. Corporate Governance Factors

Corporate governance allows the organization to gather tools that create value for the company and, at the same time, create conditions to involve the various stakeholders (Handriani and Robiyanto, 2018). The Corporate Governance mechanisms studied in the literature focus on the board of directors' size and its independence, shareholder structure, and the existence of the audit board.

2.1.1. Board size

The board of directors of companies is an essential internal control mechanism, as it represents the link between shareholders and the company's management. In addition, this board monitors the quality of financial information to ensure transparency in the disclosure of information and allow for the reduction of agency costs (Dias *et al.*, 2017; García-Sánchez *et al.*, 2019; Kalsie and Shrivastav, 2016; Merendino and Melville, 2019).

In Portugal, there is no recommendation about the ideal board size. However, Spain states in its Code of Good Governance that the number of members that compose the board of directors must be adequated to achieve an effective and participative functioning, defining the total number of members between five to fifteen.

Literature shows controversial results concerning board size and performance.

On the one hand, some studies support a positive effect on performance, justified by the fact that larger boards promote more effective controls and encompass a broad set of competencies and skills to meet the organization's diverse needs. Furthermore, a larger number of board members can dilute power decisions (e.g., Kalsie and Shrivastav, 2016; Pekovic and Vogt, 2021; Pucheta-Martínez and Gallego-Álvarez, 2020; Tulung and Ramdani, 2018).

On the other hand, according to agency theory, more managers negatively influence company performance (e.g., Merendino and Melville, 2019; Orozco et al., 2018; Palaniappan, 2017; Terjesen et al., 2016).

Vieira et al. (2019), who studied Portuguese listed companies, concluded that there is no significant relationship between the size of the board of directors and ROA.

 According to the non-consensual literature, we propose the first hypothesis (with no predicted signal):

H1: There is a significant relationship between board size and corporate performance.

2.1.2. Board Independence

A board member is independent if external to the organization, having arbitrary capacity in situations of divergence between managers, seeking to mitigate agency problems between managers and shareholders, and promoting the interests of different stakeholders (Fama, 1980; Sá *et al.*, 2017). Capital markets regulators in Portugal and Spain have the following definition of independent board size: in Portugal, independent directors must have a proportion greater than 25%, and in Spain, greater than 50% or a third if there is a shareholder with control greater than 30%.

Studies that analyze the relationship between board independence and performance expose different results. Thus, there are studies that identify a positive relationship, using ROA and Tobin's Q as performance proxy (e.g., Alqatan *et al.*, 2019; Ben Barka and Legendre, 2017; Handriani and Robiyanto, 2018; Manna *et al.*, 2016; Pucheta-Martínez and Gallego-Álvarez, 2020; Tulung and Ramdani, 2018). This positive relationship is justified because more independent administrators increase supervision and control in organizations, leading to better performances (Fernández-Temprano and Tejerina-Gaite, 2020).

However, other studies show a negative relationship between the independent elements and the company's performance, such as Cavaco *et al.* (2016) or Rashid (2018). Singh *et al.* (2018) conclude that the negative relationship is due to the close association between internal and external managers of the company, which leads to worse performance. Moreover, for the market, more independent members can affect the company's credibility.

According to the literature presented, the following hypothesis is proposed (with no predicted sign):

H2: There is a significant relationship between board independence and corporate performance.

2.1.3. Audit Committee

The audit committee, quite common in the Anglo-Saxon model, is ended of a part of the board of directors, who are non-executive directors. This committee acts as a supervisory body. Its functions include obtaining internal information, reporting, and supervising so that information disclosed to stakeholders is presented fairly and truthfully (Dakhlallh *et al.*, 2020; Zhou *et al.*, 2018). According to the Portuguese Commercial Companies Code, the audit committee must be composed of at least three members, the majority of which are independent. In Spain, the audit committee is present in the organizational structure of all companies.

Concerning studies that analyze the impact of the audit committee on the companies performance, there are uncertain results. Some studies verify a positive effect on performance measured by ROA or Tobin's Q since the audit committee will promote greater internal control, reduce risks and fraud in organizations, increasing the performance of companies (e.g., Dakhlallh *et al.*, 2020; Fauzi *et al.*, 2017; Hussein Mohammed *et al.*, 2019).

However, some authors report a negative relationship between these variables, such as Hassan *et al.* (2016) and Puni and Anlesinya (2020), justifying this relationship with a possible lack of independence and specialized knowledge of its members, or by the fact that companies only fulfill the requirement of having an audit committee (Zhou *et al.*, 2018).

According to the results of the literature described above, the following hypothesis is considered (with no predicted sign):

H3: There is a significant relationship between the presence of the audit committee and corporate performance.

2.1.4. Ownership concentration

Ownership concentration is an internal corporate governance mechanism that determines the power and control assigned to the management body and the owner, whose determination is the ownership structure. Jensen and Meckling (1976) concluded that the separation of ownership and control will lead to potential agency conflicts, affecting corporate performance. This situation is observed when managers act for their own benefit, rather than meeting the interests of shareholders (Belghitar *et al.*, 2011; Elbadry *et al.*, 2015).

Concerning the literature that studies the effect of property concentration on performance, the results are inconsistent. Some studies find a positive impact between concentration

and performance, as there will be greater control and supervision in the organization's management (e.g., Al Farooque *et al.*, 2020; Gaur *et al.*, 2015; Iwasaki and Mizobata, 2020; Mandacı and Gumus, 2010; Neves, 2014). In addition, the high concentration of ownership allows overcoming the agency problems present in the organization, leading to better business performance results (Waheed and Malik, 2019). In contrast, Altaf and Shah (2018) and Pekovic and Vogt (2021) find a negative impact of concentration on performance on performance, suggesting that concentration of ownership tends to increase information asymmetry, opportunistic behaviors, thus reducing performance. In light of previous reasons, we put the following hypothesis (with no predicted signal): H4: There is a significant relationship between ownership concentration and corporate performance.

2.2. Corporate Social Responsibility Determinants

The recognition of the direct relationship between CSR and companies' performance has attracted the interest of several authors. It can be measured through different proxies such as CEO remuneration, the Social and Corporate Responsibility Committee, and Social expenses.

2.2.1. CEO's Remuneration

The CEO's compensation is the total amounts earned in the quality of salary, bonuses, compensation through shares, and other personal benefits (Hoi *et al.*, 2019). This remuneration can positively or negatively affect the performance of companies. Thus, higher CEO compensation can lead to more ethical conduct, improving organizations' performance (Bebchuk *et al.*, 2002; Bertrand and Mullainathan, 2003). In addition, Edmans *et al.* (2017) and Elsayed and Elbardan (2018) argue that a way to align managers' interests with shareholders' interests involves associating remuneration with performance, in line with agency theory. Also, Manna *et al.* (2016) and Rehman *et al.* (2021) find a positive effect between remuneration and company performance, as the highest-paid CEO may be more motivated to achieve corporate results.

However, high remunerations can mean agency problems that cause a decrease in business performance or CEO do not satisfy their duties (Carter *et al.*, 2016). Furthermore, executive members with high salaries may not be sufficiently motivated to increase market performance, as measured by Tobin's Q (Smirnova and Zavertiaeva, 2017). These authors also verify that only bonuses earned by the CEO increase ROA.

According to the literature, the hypothesis that proposes to test the following hypothesis (with no predicted sign):

H5: There is a significant relationship between CEO's remuneration and corporate performance.

2.2.2. Corporate Social Responsibility Committee

The existence of a Corporate Social Responsibility Committee shows the direction and commitment of the board of directors to sustainable development (Hussain *et al.*, 2018) and environmental issues (García Martín and Herrero, 2020). The presence of the CSR committee is considered a good governance practice, capable of avoiding corruption and exposing the company to possible failures in the scope of social responsibility, and, therefore, it must include at least one specialist in environmental and social issues in its constitution (García-Sánchez *et al.*, 2019; Gennari and Salvioni, 2019).

The literature that analyzes the effect of the social and corporate responsibility commission on performance shows an ambiguous relationship between the variables. Some studies show a positive impact, as this committee allows the creation of mechanisms that ensure more outstanding commitment to the company's social and economic responsibility, providing greater corporate performance (Martínez-Ferrero *et al.*, 2021; Spitzeck, 2009). However, this commission can also have a negative effect on performance (Sekhon and Kathuria, 2019) or have a non-existent effect (Cancela *et al.*, 2020), justified by the fact that managers or future shareholders do not consider this commission useful for corporate performance.

Taking into account the scarcity of empirical evidence about the relationship between Corporate Social Responsibility Committee and performance, the following hypothesis is formulated (with no predicted signal):

H6: There is a significant relationship between the Corporate Social Responsibility Committee and corporate performance.

2.2.3. Social Expenses

Employee remuneration is essential for organizational functioning, as employers depend on their human resources skills and professional performance to maintain their activity and respective competitiveness in the market (Gupta and Shaw, 2014) Thus, social expenses can have a positive or negative effect on business performance.

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On the one hand, higher remuneration can translate into greater employee motivation and effort, greater productivity, lower agency costs, greater business innovation, consequently leading to greater corporate performance (e.g., Cao and Rees, 2020; Edmans *et al.*, 2017; Iverson and Zatzick, 2011; Neves *et al.*, 2021; Wei *et al.*, 2020).

However, employees may behave contrary to the organization's interests, acting according to their own interests to obtain higher remuneration, which can lead to lower performances (Gupta and Shaw, 2014). Also, Kim and Jang (2020) show that in the short term, the effect of personnel expenses and performance is negative, but, in the long term, this relationship could be positive.

Given the lack of consensus about the relationship between these variables, we put forward our hypothesis, with no predicted signal:

H7: There is a significant relationship between social expenses and corporate performance.

2.3. Specific Determinants

Following the traditional literature, the specific characteristics of the companies can be considered as control variables. Two widely used variables are firm size and leverage.

2.3.1. Company size

Miralles-Marcelo *et al.* (2014), for a sample consisting of Portuguese companies, conclude that the company size positively influences corporate performance. Makridou *et al.*, (2019); Neves, Henriques, *et al.* (2021), and Zeitun and Saleh (2015) also found a positive effect. According to these authors, large companies have a greater capacity to diversify their investment, a greater possibility of reducing their default risk, greater ease of access to capital markets, and greater ease in reducing financing costs, leading to better performance.

Contrary to previous studies, Bikker and Vervliet (2018) or Proença *et al.* (2020) conclude that size is negatively related to business performance, adding that a high amount of assets does not necessarily guarantee more significant investments in development or greater stability. Similar to this result, Alqatan *et al.* (2019) demonstrated that the company's total assets significantly negatively impact the performance.

Finally, Vieira *et al.* (2019) found no relationship between the Portuguese companies' size and their level of performance.

Considering the literature, the following hypothesis, with no predicted signal, is proposed:

H8: There is a significant relationship between company size and performance.

2.3.2. Leverage

Leverage provides evidence about a company's dependence on third parties and may reveal its capacity to generate additional returns and maximize business performance.

According to Alshatti (2016), leverage positively affects the companies performance, suggesting that companies that can manage their debt efficiently can have better performances in the future, mainly for tax reasons. In agreement with previous results, Bărbută-Misu *et al.* (2019) and Neves, Henriques, *et al.* (2021) confirm the existence of a positive relationship between leverage and performance.

On the other hand, Zeitun and Saleh (2015) show that leverage has a negative effect on business performance. Similarly, Pais and Gama (2015), using a sample of Portuguese non-financial companies, attested to a significantly negative relationship between the level of financial debt and performance, measured through ROA. Miralles-Marcelo *et al.* (2014); Serrasqueiro and Nunes (2008) and Vieira *et al.* (2019) empirically show that there is a strong negative relationship between leverage and the performance of Portuguese companies, measured by profitability or market measures.

According to the non-consensual literature, we propose our last hypothesis (with no predicted signal)

H8: There is a significant relationship between leverage and corporate performance.

3. Data, Variables, and Methodology

3.1 Data

This study analyzes listed companies present on Euronext Lisbon and Madrid Stock Exchange between 2011 and 2018. This period comprises the intervention period of the Troika and the period before the Covid-19 pandemic crisis. The data were obtained from the database SABI (Iberian Balance Sheet Analysis System) and of the Corporate Governance Reports obtained from the companies' or Supervisor websites.

The sample data were purified as follows: initially, all financial institutions and insurance companies were removed from the sample, given the uniqueness of the accounting system and the specificity of the activity and capital structure. Subsequently, all Sports Limited Companies were dissolved, as they were not engaged in commercial activities. After that, all companies in technical bankruptcy were withdrawn. Finally, companies that did not present information for 4 consecutive years were extracted (a necessary condition for

 using the GMM system estimation method (Neves, 2018). The final sample is composed of 93 companies, 60 Spanish companies listed on the Madrid Stock Exchange, and 33 Portuguese companies listed on Euronext Lisbon, shown in Tables A1 and A2 in Appendix A.

3.2. Variables

3.2.1. Dependent Variables

Since there is no consensus on the measures that best explain the performance of companies (Vieira *et al.*, 2019), we use the ROA (an accounting ratio, intrinsic to management) and Tobin's Q (a market ratio, variable in the interest of potential investors and stakeholders external to the company) as performance proxy.

Table 1 shows the dependent variables under study.

Variable	Proxy	Authors
Return On Assets (ROA)	EBIT Total Assets	Neves and Branco, (2020); Neves, Serrasqueiro, <i>et al.</i> , (2020); Vieira <i>et al.</i> (2019)
Tobin's Q	Equity Market Value + Debt Total Net Assets	Palaniappan (2017); Pekovic and Vogt (2021); Pucheta- Martínez and Gallego-Álvarez, (2020); Vieira <i>et al.</i> (2019)

Fable 1 - Dependent variables Descr.	iption
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ROA is a profitability indicator that allows the assessment of management quality (Vieira et al., 2019). Thus, the greater the ROA value, the greater the corporate performance in the use of its assets. Tobin's Q is a market indicator that exposes the relationship between the market value of a company's assets and its replacement cost. This ratio reveals a company's investment opportunity/growth opportunities, indicating whether its value is undervalued or overvalued (Sá et al., 2017). When it presents values above one, it suggests that companies feel motivated and have the necessary investment conditions.

3.2.2. Independent Variables

According to the previous section, the explanatory variables of this study are those in Table 2.

Table 2 - Independent variables description							
Variable	Codename	Proxy	Authors				
Corporate Gove	Corporate Governance Determinants						
Board Size	BSize	Number of members of the board	Orozco <i>et al. (</i> 2018); Pucheta-Martínez and Gallego-Álvarez (2020); Vieira <i>et al. (</i> 2019)				
Board independence	BInd	Independent members Board members	Fernández-Temprano and Tejerina-Gaite (2020); Pucheta-Martínez and Gallego-Álvarez (2020)				
Audit committee	AudCom	Dummy variable that represents the existence (1) or not (0) of the audit committee	Hussein Mohammed <i>et al.</i> , (2019); Puni and Anlesinya (2020)				
Ownnership Concentration	OwnC	% concentration by the largest shareholders	Al Farooque <i>et al. (</i> 2020); Iwasaki and Mizobata (2020); Neves (2014)				
Corporate Socia	l Responsibility	Determinants					
CEO's Remuneration	CEORem	Ln (Total remuneration earned annually)	Elsayed and Elbardan (2018); Rehman <i>et al.</i> (2021)				
Corporate social responsibility committee (CSR)	CSRCom	Dummy variable that represents the existence (1) or not (0) of the CSR committee	Cancela <i>et al. (</i> 2020); Martínez-Ferrero <i>et al.(</i> 2021)				
Social expenses	SE	Ln (Total personnel expenses)	Kim and Jang (2020); Neves, Baptista, Dias and Lisboa (2021) Wei <i>et al.</i> (2020)				
Specific Determi	inants		0				
Company size	Size	Ln (Total Assets)	Neves, Henriques, <i>et al.</i> (2021); Vieira <i>et al.</i> (2019)				
Leverage	Lev	Total Debt Equity	Bărbută-Misu <i>et al. (</i> 2019); Neves, Henriques, <i>et al.</i> , (2021); Vieira <i>et al.(</i> 2019)				

3.3. Methodology

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The estimation method used in this study, whose data are panel, was the Generalized Method of Moments (GMM), developed by Arellano and Bover (1995) and Blundell and Bond (1998). The GMM System uses instrumental variables produced through lagged values of the dependent and independent variable, which may eventually suffer from endogeneity (Cancela *et al.*, 2020). Thus, endogeneity is corrected, and unobservable heterogeneity is controlled (Badu and Appiah, 2017; Neves, 2018). The authors argue that this dynamic model cancels out unobserved effects, despite omitted variables, enhancing the reliability of the results. To assess the validity of this methodology, three tests are analyzed – Sargan, Autocorrelation, and Wald tests (Neves, Gouveia, *et al.*, 2020).

The Sargan Test allows evaluating the validity of instruments, verifying whether the chosen instruments are independent of the error term (Arellano and Bond, 1991; Blundell and Bond, 1998). Thus, the null hypothesis underlying this test is the validity of the instruments used. The first or second autocorrelation error tests have as a null hypothesis the absence of autocorrelation between the past (one lagged or two lagged, respectively) and present residuals. These two tests are designated as AR(1) and AR(2) (Arellano and Bond, 1991). The Wald test has the null hypothesis that the coefficients of the variable are jointly different from zero, so if the model is valid, it will be adjusted to the data under study and has high explanatory power.

3.4. Empirical Model

In line with what was described and using the GMM system estimation method, the estimated models were:

 $ROA_{it} = \beta_0 + \beta_1 ROA_{it-1} + \beta_2 BSize_{it} + \beta_3 BInd_{it} + \beta_4 AudCom_{it} + \beta_5 OwnC_{it} + \beta_6 CEORem_{it} + \beta_7 CSRCom_{it} + \beta_8 SE_{it} + \beta_9 Size_{it} + \beta_{10} Lev_{it} + \varepsilon_{it} + v_i (1)$

 $\begin{aligned} QTobin_{it} &= \beta_0 + \beta_1 QTobin_{it-1} + \beta_2 BSize_{it} + \beta_3 BInd_{it} + \beta_4 AudCom_{it} + \beta_5 OwnC_{it} \\ &+ \beta_6 CEORem_{it} + \beta_7 CSRCom_{it} + \beta_8 SE_{it} + \beta_9 Size_{it} + \beta_{10} Lev_{it} + \varepsilon_{it} + v_i (2) \end{aligned}$

where Greek letters denote parameters, *i* and *t* are, respectively, individual- (company-) and time-indices and variables' notation are expressed in Tables 1 and 2 - ROA_{it} , QTobin_{it} are the performance variables. Regarding the independent variables, they are given by BSize (Board Size), BInd (Board Independence), AudCom (Audit Committee), OwnC (Ownership Concentration), CEORem (Chief Executive Officer Remuneration),

CSRCom (Corporate Social Responsibility Committee), EmpComp (Employee Compensation), Size (Firm size) and Lev (Leverage).

4. Results

4.1. Descriptive Statistics

Descriptive statistics for Portugal and Spain are presented in Tables 3 and 4. According to Table 3, all variables have, on average, positive values for Portugal. Noteworthy is the variable with the greatest dispersion (Lev), which shows that debt has a significant weight in the capital structure of companies (66.308%), suggesting that it is the primary source of financing for Portuguese companies.

Variables	Mean	Minimum	Maximum	Standard Deviation
ROA	3.914	-45.285	157.423	12.796
QTobin	0.513	0.007	6.864	0.99
BSize	8.603	2	21	4.06
BInd	0.252	0	1.714	0.304
AudCom	0.344	0	1	0.476
OwnC	2.05	1	4	1.12
CEORem	12.655	9.962	15.875	1.064
CSRCom	0.117	0	1	0.322
SE	10.918	2.04	13.593	1.566
Size	13.392	7.869	17.602	1.803
Lev	66.308	2.261	244.083	29.625

 Table 3 - Descriptive Statistics for Portugal

Similar to what happens in the descriptive statistics in the previous Table, the information regarding the Spanish sample (Table 4) also shows that the mean of the dependent and independent variables appear with positive values. Once again, the variable leverage has the highest dispersion value (26.569), showing the dependence of bank financing of these countries on the civil law system. Regarding the characteristics of Corporate Governance, in Spain, the board of directors must have five to fifteen members in its constitution, which effectively happens with an average of 10.341, but the minimum number (3) is below the defined threshold and the maximum number (19) is above what is recommended. All the companies have an audit committee.

 Table 4 - Descriptive Statistics for Spain

Variables	Mean	Minimum	Maximum	Standard Deviation	
ROA	5.621	-57.958	425.396	22.399	

QTobin	0.854	0	7.418	1.123	
BSize	10.341	3	19	3.423	
BInd	0.366	0	0.889	0.169	
AudCom	1	1	1	0	
OwnC	2.346	1	6	1.596	
CEORem	13.287	8.294	16.503	1.357	
CSRCom	0.123	0	1	0.328	
SE	11.505	4.478	16.221	2.353	
Size	13.975	8.704	18.681	2.282	
Lev	60.861	3.993	271.64	26.569	

In Table A3, Appendix B, we can see the statistics for the Iberian Peninsula, as a single market².

4.2. Discussion of Results

This section presents the results obtained for the sample of Portugal, Spain, and the Iberian Peninsula, using ROA and Tobin's Q as a proxy to performance, and raised in Tables 5, 6, and 7, respectively.

4.2.1. Portugal

tugal. Table 5 presents the results for Portugal.

² It should be noted that this Peninsular market is frequently used in the international media as a single market, as if it were the same country, given the small economic dimension of Portugal.

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Table 5 - Results of the estimation models 1 and 2 - ROA and Tobin's Q as the dependent variables for Portugal

		ROA				Tobi	n's Q	
	Coefficient	Standard error	Z	<i>P</i> -value	Coefficient	Standard error	Z	<i>P</i> -value
Constante	114.191	11.705	9.76	0.000 ***	-0.7	1.112	-0.63	0.529
L1	-0.188	0.001	-278.34	0.000 ***	0.356	0.005	71.63	0.000 ***
BSize	-0.139	0.202	-0.69	0.492	0.072	0.013	5.35	0.000 ***
BInd	11.87	3.68	3.23	0.001 ***	-0.601	0.17	-3.53	0.000 ***
AudCom	-129.367	11.562	-11.19	0.000 ***	6.028	0.741	8.14	0.000 ***
CEORem	-4.083	0.34	-12.01	0.000 ***	0.236	0.015	15.49	0.000 ***
CSRCom	-27.211	6.84	-3.98	0.000 ***	0.911	0.18	5.07	0.000 ***
SE	22.041	0.465	47.4	0.000 ***	-0.021	0.083	-0.25	0.804
Size	-14.698	0.596	-24.64	0.000 ***	-0.322	0.156	-2.07	0.039 **
Lev	-0.908	0.003	-302.27	0.000 ***	-0.001	0.003	-0.51	0.613
Sargan			22.345	0.616	2 U		23.972	0.521
Wald			9.29E+06	0.000		0	455053.57	0.000
m1			-1.105	0.269		J/ .	-2.246	0.025
m2			-0.587	0.557			-0.891	0.373

Regression is performed using an unbalanced data panel. It should also be noted that: i) *, **, and *** indicates significance levels at 10%, 5%, and 1% respectively; (ii) The Sargan test with a p-value greater than 5% shows that the instruments are valid, and the values in parentheses of the test represent degrees of freedom; (iii) The Wald test has a p-value of less than 5% which means that the joint significance and the coefficients are significant asymptotically distributed as χ^2 under a null hypothesis without significance, with degrees of freedom in parentheses; iv) The m1 test has a normal distribution N (0,1) and tests the null hypothesis of the absence of the first-order autocorrelation; v) The test m2 has normal distribution N (0,1) and with a p-value higher than 5% accepts the null hypothesis of the absence of second-order autocorrelation; vi) The OwnConc variable was included in the model but was removed by exact collinearity.

As shown in Table 5, the sign and significance of the explanatory variables vary according to the performance measure following Vieira et al. (2019).

Starting the analysis with the Corporate Governance variables, it appears that the board size (BSize) has a positive effect on Tobin's Q, allowing to corroborate hypothesis 1, according to Kalsie and Shrivastav (2016); Manna *et al.* (2016); Pekovic and Vogt (2021); Pucheta-Martínez and Gallego-Álvarez (2020). This result is in line with the Agency Theory, since an increase in the number of directors leads to the dilution of decision-making powers, enhancing rigor in the company's management, and consequently, providing a better image in the market. This result reinforces that Tobin's Q is a variable of external interest to the company and that, eventually, potential investors appreciate this characteristic. On the other hand, managers do not see this as being relevant in achieving higher levels of economic performance, through ROA.

The variable of independence of the board of directors (BInd) is significant for both models 1 and 2; however, its effects on the two performance measures are the opposite. The positive relationship when ROA is used as a performance measure is in line with the results obtained by Barka and Legendre (2017); Fernández-Temprano and Tejerina-Gaite (2020); Tulung and Ramdani (2018). This result suggests that the presence of external and independent members of the company can represent an added value since these members can suggest good different management methods and perspectives that foster performance. However, the opposite result is verified from a market perspective, suggesting that independent members have little credibility and trust towards investors. External members may not be sufficiently competent in developing their functions, as they perform simultaneous functions outside the company. Thus, hypothesis 2 is corroborated, according to the studies by Rashid (2018) and Singh *et al.* (2018).

Concerning the presence of the audit committee in companies (AudCom), once again there is an antagonistic relationship in both models. The presence of this committee has a negative relationship with ROA, which allows us to corroborate hypothesis 3, according to Hassan et al. (2016) and Puni and Anlesinya (2020). This result can be explained, from the point of view of internal management, by the high costs it entails and by the existence of this body solely for regulatory reasons. On the other hand, there is a positive relationship in model 2, using a market variable to capture performance, corroborating hypothesis 3, according to Dakhlallh et al. (2020) and Fauzi et al. (2017). This result suggests that the market appreciates the company's investment in managerial bodies, revealing transparency in the disclosure of financial information.

Regarding the Corporate Social Responsibility determinants, the CEO's remuneration (CEORem) is statistically significant in both models, corroborating hypothesis 5. However, for model 1, the CEO's remuneration negatively influences ROA, according to Carter *et al.* (2016). This result accedes that an excessive increase in the CEO's remuneration can lead to an overvaluation of their work and thus become inefficient for corporate performance. At the same time, it can reveal an unnecessary additional expense as more salaries may not mean better business management. On the contrary, from the investors' perspective, the CEO's remuneration positively impacts Tobin's Q, corroborating the results of Elsayed and Elbardan (2018) and Manna *et al.* (2016). This result proposes that potential investor understands CEO compensation as a way to recognize his effort and as an incentive for him to achieve better results in the future.

The corporate and social responsibility committee (CSRCom) is statistically significant in both models but with opposite signs. According to model 1, the presence of this body in the organizational structure negatively influences the ROA, which suggests that the presence of this committee can lead to high costs for the company, significantly affecting its performance, according to the results of Cancela *et al.* (2020). Conversely, when we use a market variable to measure performance, these are positively related. This result is expectable since Portugal is taking its first steps in the area of social responsibility and, therefore, in the investors' view, the existence of this body in the organizational structure shows the concern and commitment that the organization assumes towards society about corporate sustainability. Thus, we also corroborate hypothesis 6, according to the literature presented by Martínez-Ferrero *et al.* (2021) and Spitzeck (2009).

Social expenses (SE) positively influence ROA. Indeed the increase in remuneration leads to greater motivation on the part of staff to effectively exercise their functions, acting following the company's objectives and, consequently, providing better performance. This result is in line with Iverson and Zatzick (2011); Kim and Jang (2020) and Wei *et al.* (2020), corroborating hypothesis 7.

Regarding the control variables, company size (Size) negatively influences performance, on both models, corroborating the studies by Alqatan *et al.* (2019); Bikker and Vervliet

(2018), and Proença et al. (2020). Thus, we concluded that the greater the total assets held by the company, the lower its corporate performance. This result may imply that the more assets the company has, the fewer management skills there will be and that this can lead to worse performance levels. This understanding belongs to both managers and potential shareholders. Regarding leverage (Lev) negatively impacts ROA. This result suggests that more indebted companies present lower economic performance, in the manager's view. These results are consistent with Miralles-Marcelo et al. (2014); Pais and Gama (2015); Serrasqueiro and Nunes (2008); Vieira et al. (2019) and Zeitun and Saleh (2015), suggesting that more debt implies more commitments made to third parties that involve capital disbursements and, therefore, lead to lower results and less performance.

Finally, the lagged variable in both models is essential, which justifies the elaboration of a dynamic model. Thus, we conclude that an increase in ROA in the previous period does not necessarily indicate higher levels of ROA in the current period. In contrast, high values taken by Tobin's Q in the previous year predict high values for the current year. These results may suggest that external stakeholders, more attending to Tobin's Q than to ROA, recognize that a company's performance levels have to be maintained so that the , of an. values of one year will have to influence those of another.

4.2.2. Spain

Table 6 presents the results for Spain.

	ROA					To	bin's Q	
	Coefficient	Standard error	Z	P-Value	Coefficient	Standard error	Z	P-Value
Constante	38.738	24.361	1.59	0.112	-5.689	0.653	-8.71	0.000 ***
L1	0.058	0.013	4.49	0.000 ***	0.143	0.021	6.7	0.000 ***
BSize	1.074	0.403	2.67	0.008 ***	-0.012	0.011	-1.08	0.279
BInd	-8.437	6.262	-1.35	0.178	0.566	0.158	3.57	0.000 ***
CEORem	0.524	0.829	0.63 🔪	0.527	0.047	0.012	3.77	0.000 ***
CSRCom	91.866	75.703	1.21	0.225	-5.21	2.284	-2.28	0.023 **
SE	29.173	1.444	20.2	0.000 ***	0.817	0.044	18.36	0.000 ***
Size	-36.151	2.238	-16.16	0.000 ***	-0.237	0.045	-5.28	0.000 ***
Lev	1.787	0.035	51.26	0.000 ***	0.008	0.001	11.76	0.000 ***
Sargan			33.616	0.116			32.752	0.137
Wald			13555.36	0.000		R.	1370.66	0.000
m1			-1.446	0.148			-1.712	0.087
m2			-0.031	0.976		457	1.154	0.249

Table 6 - Results of the estimation models 1 and 2 - ROA and Tobin's Q as the dependent variables for Spain

Regression is performed using an unbalanced data panel. It should also be noted that: i) *, **, and *** indicates significance levels at 10%, 5%, and 1% respectively; (ii) The Sargan test with a p-value greater than 5% shows that the instruments are valid, and the values in parentheses of the test represent degrees of freedom; (iii) The Wald test has a p-value of less than 5% which means that the joint significance and the coefficients are significant asymptotically distributed as χ^2 under a null hypothesis without significance, with degrees of freedom in parentheses; iv) The m1 test has a normal distribution N (0,1) and tests the null hypothesis of the existence of the first-order autocorrelation; v) The test m2 has normal distribution N (0,1) and with a p-value higher than 5% accepts the null hypothesis of the absence of second-order autocorrelation; vi) The OwnConc variable was included in the model but was removed by exact collinearity.

According to the results in table 6, for the Spanish sample, the CG and CSR variables are more relevant for investors than for managers.

Concerning Corporate Governance characteristics, the board size (BSize) positively affects the ROA. This result suggests that the increase in the number of directors will increase the attention given to the management strategy adopted by the company, seeking to improve some aspects to increase organizational results and, consequently, the company's performance. Thus, the results allow us to accept hypothesis 1, corroborating the results of Kalsie and Shrivastav (2016); Manna *et al.* (2016), and Tulung and Ramdani (2018).

The independence of the board of directors (BInd) has a positive relationship with Tobin's Q. This result is in line with Alqatan *et al.* (2019); Handriani and Robiyanto (2018); Manna *et al.* (2016) or Pucheta-Martínez and Gallego-Álvarez (2020), allowing to corroborate hypothesis 2. It shows that a greater number of independent members on the board will transmit security to the market since Independent members have the arbitrary capacity in conflict situations and contribute to impartial and transparent management.

Regarding the characteristics of Corporate Social Responsibility, the CEO's remuneration (CEORem) has a positive impact on Tobin's Q. Thus, hypothesis 5 is confirmed, according to Elsayed and Elbardan (2018) and Manna *et al.* (2016).

An increase in CEO compensation may suggest that the company is economically sound and concerned about the social and economic well-being of its internal bodies. This compensation will lead to greater motivation, which translates into better decisions capable of increasing performance, visible both internally and by external stakeholders.

The existence of the CSR committee (CSRCom) has a significantly negative relationship with the market variable. The results are in line with Cancela et al. (2020). Thus, from the investors' point of view, this figure is not decisive as it is mandatory, being understood as mere compliance with legal requirements.

Social expenses (SE) positively influence both the ROA and Tobin's Q. Thus, we corroborate hypothesis 7, according to Edmans *et al.* (2017); Iverson and Zatzick (2011); Kim and Jang (2020), and Wei *et al.* (2020). The results suggest that an increase in social expenses will be reflected in the well-being of employees, making them feel more motivated to perform their duties in the company, which will lead to better results and, consequently, greater corporate performance. From a market perspective, stakeholders

consider that this scenario shows social concern and care on the part of the organization towards its human resources.

Regarding the specific characteristics of the companies, the firm size (Size) presents a negative relationship both for ROA and for Tobin's Q, as already verified for the Portuguese market. Leverage (Lev) positively influences ROA and Tobin's Q. This result indicates that leverage can contribute to more productive investment that will lead to better results and higher performance levels, corroborating the results of Bărbută-Misu *et al.* (2019) or Neves, Henriques, *et al.* (2021).

Finally, in both models under analysis, lagged dependent variables positively influence performance, confirming the dynamic character of the models. Thus, it is concluded that an increase in ROA in the previous period will increase ROA in the present period. In the same sense, the higher the values taken by Tobin's Q in the last year, the higher the values assumed by them in the current year.

will h. y Tobin's Q

4.2.3. Summary

In summary, our results highlight that although the countries under analysis are very close, both geographically and through their commercial and financial transactions, some of the determinants of their companies' performance are quite different between them.

Let's start with the similarities: For both countries, the total assets held by the company are negatively related to corporate performance, both with management variables and with market variables. This result may suggest that, in Iberian territory, the larger the companies, the less efficient the management of resources.

Likewise, both countries agree that investing in improving employees' living conditions through salaries and social benefits leads to greater performance. Also, CEO compensation is a key factor in increasing corporate performance levels in these two neighboring countries, in particular for external stakeholders.

Explicitly considering the determinants that strongly influence corporate performance in Portugal, the existence of the social responsibility committee is also noteworthy, as it is a relatively recent body and has shown to have an immense influence on investment decisions by members outside the company. Thus, according to the interested parties theory, this committee allows safeguarding all organizational elements' interests, leading to the generation of gains for the company and consequently enabling an increase in its corporate performance.

A variable with the opposite result between countries is the board size. Understood several times as a critical variable in performance, our results illustrate that stakeholders external to Portuguese companies are the only ones who believe that more elements in the board can imply more performance. Could this suggest that external stakeholders distrust the effective functioning of our Corporate Governance system? This result is even more interesting if we realize that an audit committee only positively influences performance when assessed by external parties in Portugal. Will this commission come to "rearrange" some transparency in the functioning of listed companies?

Regarding the characteristics that explain the corporate performance of Spanish companies, we can see that, from a management perspective, personnel expenses have a positive influence. Likewise, external stakeholders also attach importance to how the organization takes care of employees and the CEO. As for the existence of a social and corporate responsibility committee, the result obtained raises the following questions: is

this result only due to the discredit given to a body whose existence is mandatory? or do the external stakeholders really believe that the concern with the social and environmental environment entails several expenses and generates unrest capable of reducing business performance?

Finally, our results allow us to corroborate the study by Vieira *et al.* (2019) insofar as the determinants of company performance vary depending on the variable considered as a measure of performance. In this case, ROA is an intrinsic variable to the management itself, and Tobin's Q, as a market measure of interest to stakeholders outside the organization.

The results for the Iberian Peninsula, as a whole, are presented in Table A4 (Appendix), and, as can be seen, the conclusions are in line with those referred for Portugal and Spain reinforcing the interest in studying individual countries to capture the various perceptions of stakeholders and allow better decisions to be made towards a fairer and more equitable society

5. Conclusion

This paper aimed to study the corporate performance determinants from management and the market perspectives, specifically analyzing the Corporate Governance and Corporate Social Responsibility characteristics. Our research was carried out for Portugal and Spain, covering 33 Portuguese companies and 60 Spanish companies. Despite their geographical and historical commercial proximity, these countries have different economic, social, and governance structures, hence the importance of studying them, both separately and together.

In line with Vieira *et al.* (2019), our results establish that the determinants of company performance vary depending on the variable used to quantity performance.

Specifically, our results show that Portuguese managers consider the number of independent members on the board as well as the remuneration of their employees to be relevant for the increase in corporate performance. On the other hand, a potential investor in the Portuguese market will take into account the board size, the existence of an audit committee and a social responsibility committee, as well as the CEO's remuneration.

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In Spain, managers place more emphasis on board size and social expenses in determining performance. Regarding potential investors, the characteristics that they most value are the weight of the independent directors and the CEO's remuneration.

In an era in which the aim is to eradicate poverty in the world and care not only for economic issues but for social well-being, this work shows that these two countries consider it important to take care of their workers and that this condition raises performance, both in terms of from the management point of view and from the investor's point of view, increasingly attentive to these issues.

Our results may be of interest to several different stakeholders: to managers because they can understand the impact that their decisions have on economic profitability (ROA), which is a measure that allows comparability of management between companies in the same sector; to investors who understand the variables that best suit their view of performance and to the entire civil society, which is interested in understanding the determinants of companies' performance globally.

Despite the interest that this article may arouse in academia, we had some limitations, namely because not all companies had complete information for the entire period under analysis and also because non-financial variables were difficult to collect given the difference in disclosure in the reports of corporate governance.

For future works, it would be interesting to research by sectors using different independent variables, such as cultural variables for different institutional environments, where legal investor protection, market development, and financing systems are different. In addition, it would be interesting to use hybrid methodologies to understand which variables will influence the efficiency of more sustainable companies, for example, using GMM with DEA.

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References

Alqatan, A., Chbib, I. and Hussainey, K. (2019), "How does board structure impact on firm performance in the UK?", *Corporate Board Role Duties and Composition*, Vol.

15 No. 2, pp. 18–27.

- Alshatti, A.S. (2016), "Determinants of banks' profitability The case of Jordan", *Investment Management and Financial Innovations*, Vol. 13 No. 1, pp. 84–91.
- Altaf, N. and Shah, F.A. (2018), "Ownership concentration and firm performance in Indian firms: does investor protection quality matter?", *Journal of Indian Business Research*, Vol. 10 No. 1, pp. 33–52.
- Arellano, M. and Bond, S. (1991), "Some Tests of Specification for Panel Data: Monte Carlo Evidence and an Application to Employment Equations", *The Review of Economic Studies*, Vol. 58 No. 2, pp. 277–297.
- Arellano, M. and Bover, O. (1995), "Another look at the instrumental variable estimation of error-components models", *Journal of Econometrics*, Vol. 68 No. 1, pp. 29–51.
- Badu, L.A. and Appiah, K.O. (2017), "The Impact of Corporate Board Size on Firm Performance: Evidence from Ghana and Nigeria", *Research in Business and Management*, Vol. 4 No. 2, pp. 1–12.
- Bărbută-Misu, N., Madaleno, M. and Ilie, V. (2019), "Sustainability Analysis of Risk Factors A ff ecting Firms ' Financial Performance — Support for Managerial Decision-Making", *Sustainability*, Vol. 11 No. 18, pp. 1–19.
- Ben Barka, H. and Legendre, F. (2017), "Effect of the board of directors and the audit committee on firm performance: a panel data analysis", *Journal of Management & Governance*, Vol. 21 No. 3, pp. 737–755.
- Bebchuk, L.A., Fried, J. and Walker, D. (2002), Managerial Power and Rent Extraction in the Design of Executive Compensation, Vol. 1, Cambridge, MA, available at: https://doi.org/10.3386/w9068.
- Belghitar, Y., Clark, E. and Kassimatis, K. (2011), "The prudential effect of strategic institutional ownership on stock performance", *International Review of Financial Analysis*, Vol. 20 No. 4, pp. 191–199.
- Berman, S.L., Wicks, A.C., Kotha, S. and Jones, T.M. (1999), "Does Stakeholder Orientation Matter? The Relationship Between Stakeholder Management Models and Firm Financial Performance", *Academy of Management Journal*, Vol. 42 No. 5, pp. 488–506.

- Bertrand, M. and Mullainathan, S. (2003), "Enjoying the Quiet Life? Corporate Governance and Managerial Preferences", *Journal of Political Economy*, Vol. 111 No. 5, pp. 1043–1075.
- Bikker, J.A. and Vervliet, T.M. (2018), "Bank profitability and risk-taking under low interest rates", *International Journal of Finance & Economics*, Vol. 23 No. 1, pp. 3– 18.
- Blundell, R. and Bond, S. (1998), "Initial conditions and moment restrictions in dynamic panel data models", *Journal of Econometrics*, Vol. 87 No. 1, pp. 115–143.
- Cancela, B.L., Neves, M.E.D., Rodrigues, L.L. and Gomes Dias, A.C. (2020), "The influence of corporate governance on corporate sustainability: new evidence using panel data in the Iberian macroeconomic environment", *International Journal of Accounting & Information Management*, Vol. 28 No. 4, pp. 785–806.
- Cao, Z. and Rees, W. (2020), "Do employee-friendly firms invest more efficiently? Evidence from labor investment efficiency", *Journal of Corporate Finance*, Vol. 65, pp. 1–53.
- Carter, M.E., Li, L., Marcus, A.J. and Tehranian, H. (2016), "Excess pay and deficient performance", *Review of Financial Economics*, Vol. 30, pp. 1–10.
- Cavaco, S., Challe, E., Crifo, P., Rebérioux, A. and Roudaut, G. (2016), "Board independence and operating performance: analysis on (French) company and individual data", *Applied Economics*, Vol. 48 No. 52, pp. 5093–5105.
- Cremers, M. (2017), "What Corporate Governance Can Learn from Catholic Social Teaching", *Journal of Business Ethics*, Vol. 145 No. 4, pp. 711–724.
- Dakhlallh, M.M., Rashid, N., Adbullah, W. and Shehab, H. (2020), "Audit Committee and Tobin's Q As A Measure of Firm Performance among Jordanian Companies", *Journal of Advanced Research in Dynamical and Control Systems*, Vol. 12 No. 1, pp. 28–41.
- Dias, A., Rodrigues, L.L. and Craig, R. (2017), "Corporate governance effects on social responsibility disclosures", *Australasian Accounting, Business and Finance Journal*, Vol. 11 No. 2, pp. 3–22.
- Edmans, A., Gabaix, X. and Jenter, D. (2017), "Executive compensation: A survey of theory and evidence", *The Handbook of the Economics of Corporate Governance*,

1st ed., Vol. 1, Elsevier B.V., pp. 383-539.

- Elbadry, A., Gounopoulos, D. and Skinner, F. (2015), "Governance Quality and Information Asymmetry", *Financial Markets, Institutions & Instruments*, Vol. 24 No. 2–3, pp. 127–157.
- Elsayed, N. and Elbardan, H. (2018), "Investigating the associations between executive compensation and firm performance", *Journal of Applied Accounting Research*, Vol. 19 No. 2, pp. 245–270.
- Fama, E.F. (1980), "Agency Problems and the Theory of the Firm", *The Journal of Political Economy*, Vol. 88 No. 2, pp. 288–307.
- Al Farooque, O., Buachoom, W. and Sun, L. (2020), "Board, audit committee, ownership and financial performance – emerging trends from Thailand", *Pacific Accounting Review*, Vol. 32 No. 1, pp. 54–81.
- Fauzi, F., Basyith, A. and Foo, D. (2017), "Committee on board: Does it matter? A study of Indonesian Sharia-listed firms", *Cogent Economics & Finance*, Vol. 5 No. 1, pp. 1–12.
- Fernández-Temprano, M.A. and Tejerina-Gaite, F. (2020), "Types of director, board diversity and firm performance", *Corporate Governance: The International Journal* of Business in Society, Vol. 20 No. 2, pp. 324–342.
- García-Sánchez, I.M., Gómez-Miranda, M.E., David, F. and Rodríguez-Ariza, L. (2019),
 "Board independence and GRI-IFC performance standards: The mediating effect of the CSR committee", *Journal of Cleaner Production*, Vol. 225, pp. 554–562.
- García Martín, C.J. and Herrero, B. (2020), "Do board characteristics affect environmental performance? A study of EU firms", *Corporate Social Responsibility and Environmental Management*, Vol. 27 No. 1, pp. 74–94.
- Gaur, S.S., Bathula, H. and Singh, D. (2015), "Ownership concentration, board characteristics and firm performance", *Management Decision*, Vol. 53 No. 5, pp. 911–931.
- Gennari, F. and Salvioni, D.M. (2019), "CSR committees on boards: the impact of the external country level factors", *Journal of Management and Governance*, Vol. 23 No. 3, pp. 759–785.

- Gupta, N. and Shaw, J.D. (2014), "Employee compensation: The neglected area of HRM research", *Human Resource Management Review*, Vol. 24 No. 1, pp. 1–4.
- Handriani, E. and Robiyanto, R. (2018), "Institutional ownership, independent board, board size, and firm performance: Evidence from Indonesia", *Contaduría y Administración*, Vol. 64 No. 3, pp. 1–16.
- Hassan, Y.M., Naser, K. and Hijazi, R.H. (2016), "The influence of corporate governance on corporate performance: evidence from Palestine", *Afro-Asian J. of Finance and Accounting*, Vol. 6 No. 3, pp. 269–287.
- Hoi, C.K., Wu, Q. and Zhang, H. (2019), "Does social capital mitigate agency problems? Evidence from Chief Executive Officer (CEO) compensation", *Journal of Financial Economics*, Vol. 133 No. 2, pp. 498–519.
- Hussain, N., Rigoni, U. and Orij, R.P. (2018), "Corporate Governance and Sustainability Performance: Analysis of Triple Bottom Line Performance", *Journal of Business Ethics*, Vol. 149 No. 2, pp. 411–432.
- Hussein Mohammed, B., Hammood Flayyih, H., Nori Mohammed, Y. and Qusay Abbood, H. (2019), "The Effect of Audit Committee Characteristics and Firm Financial Performance: An Empirical Study on Listed Companies in Iraq Stock Exchange", *Journal of Engineering and Applied Sciences*, Vol. 14 No. 14, pp. 4919– 4926.
- Iverson, R.D. and Zatzick, C.D. (2011), "The effects of downsizing on labor productivity: The value of showing consideration for employees' morale and welfare in highperformance work systems", *Human Resource Management*, Vol. 50 No. 1, pp. 29– 44.
- Iwasaki, I. and Mizobata, S. (2020), "Ownership Concentration and Firm Performance in European Emerging Economies: A Meta-Analysis", *Emerging Markets Finance and Trade*, Routledge, Vol. 56 No. 1, pp. 32–67.
- Jensen, M.C. and Meckling, W.H. (1976), "Theory of the firm: Managerial behavior, agency costs and ownership structure", *Journal of Financial Economics*, Vol. 3 No. 4, pp. 305–360.
- Kalsie, A. and Shrivastav, S.M. (2016), "Analysis of Board Size and Firm Performance: Evidence from NSE Companies Using Panel Data Approach", *Indian Journal of*

Corporate Governance, Vol. 9 No. 2, pp. 148–172.

- Kim, H.S. and Jang, S.C. (2020), "The effect of increasing employee compensation on firm performance: Evidence from the restaurant industry", *International Journal of Hospitality Management*, Vol. 88, pp. 1–9.
- Makridou, G., Doumpos, M. and Galariotis, E. (2019), "The financial performance of firms participating in the EU emissions trading scheme", *Energy Policy*, Vol. 129 No. August 2018, pp. 250–259.
- Mandacı, P. and Gumus, G. (2010), "Ownership Concentration, Managerial Ownership and Firm Performance: Evidence from Turkey", South East European Journal of Economics and Business, Vol. 5 No. 1, pp. 57–66.
- Manna, A., Sahu, T.N. and Gupta, A. (2016), "Impact of Ownership Structure and Board Composition on Corporate Performance in Indian Companies", *Indian Journal of Corporate Governance*, Vol. 9 No. 1, pp. 44–66.
- Martínez-Ferrero, J., Lozano, M.B. and Vivas, M. (2021), "The impact of board cultural diversity on a firm's commitment toward the sustainability issues of emerging countries: The mediating effect of a CSR committee", *Corporate Social Responsibility and Environmental Management*, Vol. 28 No. 2, pp. 675–685.
- Merendino, A. and Melville, R. (2019), "The board of directors and firm performance: empirical evidence from listed companies", *Corporate Governance: The International Journal of Business in Society*, Vol. 19 No. 3, pp. 508–551.
- Miralles-Marcelo, J.L., Miralles-Quirós, M. del M. and Lisboa, I. (2014), "The impact of family control on firm performance: Evidence from Portugal and Spain", *Journal of Family Business Strategy*, Vol. 5 No. 2, pp. 156–168.
- Neves, E.D. (2014), "Ownership Structure and Investor's Sentiments for Dividends", International Journal of Financial Research, Vol. 5 No. 2, pp. 35–58.
- Neves, M. and Branco, J. (2020), "Determinants of R&D on European high technology industry: panel data evidence", *Management Research: Journal of the Iberoamerican Academy of Management*, Vol. 18 No. 3, pp. 285–305.
- Neves, M.E., Henriques, C. and Vilas, J. (2021), "Financial performance assessment of electricity companies: evidence from Portugal", *Operational Research*, Vol. 21 No. 4, pp. 2809–2857.

- Neves, M.E., Proença, C. and Dias, A. (2020), "Bank Profitability and Efficiency in Portugal and Spain: A Non-Linearity Approach", *Journal of Risk and Financial Management*, Vol. 13 No. 11, p. 284.
- Neves, M.E., Serrasqueiro, Z., Dias, A. and Hermano, C. (2020), "Capital structure decisions in a period of economic intervention", *International Journal of Accounting & Information Management*, Vol. 28 No. 3, pp. 465–495.
- Neves, M.E.D. (2018), "Payout and firm's catering", *International Journal of Managerial Finance*, Vol. 14 No. 1, pp. 2–22.
- Neves, M.E.D., Baptista, L., Dias, A.G. and Lisboa, I. (2021), "What factors can explain the performance of energy companies in Portugal? Panel data evidence", *International Journal of Productivity and Performance Management*, Vol. aheadof-p No. ahead-of-print, available at:https://doi.org/10.1108/IJPPM-01-2021-0057.
- Neves, M.E.D., Gouveia, M.D.C. and Proença, C.A.N. (2020), "European Bank's Performance and Efficiency", *Journal of Risk and Financial Management*, Vol. 13 No. 4, pp. 1–17.
- Orozco, L.A., Vargas, J. and Galindo-Dorado, R. (2018), "Trends on the relationship between board size and financial and reputational corporate performance", *European Journal of Management and Business Economics*, Vol. 27 No. 2, pp. 183– 197.
- Pais, M.A. and Gama, P.M. (2015), "Working capital management and SMEs profitability: Portuguese evidence", *International Journal of Managerial Finance*, Vol. 11 No. 3, pp. 341–358.
- Palaniappan, G. (2017), "Determinants of corporate financial performance relating to board characteristics of corporate governance in Indian manufacturing industry", *European Journal of Management and Business Economics*, Vol. 26 No. 1, pp. 67– 85.
- Pekovic, S. and Vogt, S. (2021), "The fit between corporate social responsibility and corporate governance: the impact on a firm's financial performance", *Review of Managerial Science*, Vol. 15 No. 4, pp. 1095–1125.
- Proença, C., Augusto, M. and Murteira, J. (2020), "Political connections and banking performance: the moderating effect of gender diversity", *Corporate Governance:*

The International Journal of Business in Society, Vol. 20 No. 6, pp. 1001–1028.

- Pucheta-Martínez, M.C. and Gallego-Álvarez, I. (2020), "Do board characteristics drive firm performance? An international perspective", *Review of Managerial Science*, Vol. 14 No. 6, pp. 1251–1297.
- Puni, A. and Anlesinya, A. (2020), "Corporate governance mechanisms and firm performance in a developing country", *International Journal of Law and Management*, Vol. 62 No. 2, pp. 147–169.
- Rashid, A. (2018), "Board independence and firm performance: Evidence from Bangladesh", *Future Business Journal*, Vol. 4 No. 1, pp. 34–49.
- Rehman, A. ur, Ali, T., Hussain, S. and Waheed, A. (2021), "Executive remuneration, corporate governance and corporate performance: Evidence from China", *Economic Research-Ekonomska Istraživanja*, Vol. 0 No. 0, pp. 1–26.
- Rodriguez-Fernandez, M. (2016), "Social responsibility and financial performance: The role of good corporate governance", *BRQ Business Research Quarterly*, Vol. 19 No. 2, pp. 137–151.
- Sá, T.M., Neves, E.D. and Góis, C.G. (2017), "The influence of corporate governance on changes in risk following the global financial crisis: evidence from the Portuguese stock market", *Journal of Management and Governance*, Vol. 21 No. 4, pp. 841– 878.
- Sekhon, A.K. and Kathuria, L.M. (2019), "Analyzing the impact of corporate social responsibility on corporate financial performance: evidence from top Indian firms", *Corporate Governance: The International Journal of Business in Society*, Vol. 20 No. 1, pp. 143–157.
- Serrasqueiro, Z.S. and Maçãs Nunes, P. (2008), "Performance and size: empirical evidence from Portuguese SMEs", *Small Business Economics*, Vol. 31 No. 2, pp. 195–217.
- Singh, S., Tabassum, N., Darwish, T.K. and Batsakis, G. (2018), "Corporate Governance and Tobin's Q as a Measure of Organizational Performance", *British Journal of Management*, Vol. 29 No. 1, pp. 171–190.
- Smirnova, A.S. and Zavertiaeva, M.A. (2017), "Which came first, CEO compensation or firm performance? The causality dilemma in European companies", *Research in*

 International Business and Finance, Vol. 42, pp. 658-673.

- Spitzeck, H. (2009), "The development of governance structures for corporate responsibility", *Corporate Governance: The International Journal of Business in Society*, Vol. 9 No. 4, pp. 495–505.
- Srivastava, V., Das, N. and Pattanayak, J.K. (2018), "Corporate governance: mapping the change", *International Journal of Law and Management*, Vol. 60 No. 1, pp. 19–33.
- Terjesen, S., Couto, E.B. and Francisco, P.M. (2016), "Does the presence of independent and female directors impact firm performance? A multi-country study of board diversity", *Journal of Management & Governance*, Vol. 20 No. 3, pp. 447–483.
- Ting, I.W.K., Azizan, N.A., Bhaskaran, R.K. and Sukumaran, S.K. (2019), "Corporate Social Performance and Firm Performance: Comparative Study among Developed and Emerging Market Firms", *Sustainability*, Vol. 12 No. 1, p. 26.
- Tulung, J.E. and Ramdani, D. (2018), "Independence, size and performance of the board: An emerging market research", *Corporate Ownership and Control*, Vol. 15 No. 2– 1, pp. 201–208.
- Vieira, E.S., Neves, M.E. and Dias, A.G. (2019), "Determinants of Portuguese firms" financial performance: panel data evidence", *International Journal of Productivity* and Performance Management, Vol. 68 No. 7, pp. 1323–1342.
- Waheed, A. and Malik, Q.A. (2019), "Board characteristics, ownership concentration and firms' performance", *South Asian Journal of Business Studies*, Vol. 8 No. 2, pp. 146–165.
- Wei, Y., Nan, H. and Wei, G. (2020), "The impact of employee welfare on innovation performance: Evidence from China's manufacturing corporations", *International Journal of Production Economics*, Vol. 228 No. November 2019, pp. 1–20.
- Zeitun, R. and Saleh, A.S. (2015), "Dynamic performance, financial leverage and financial crisis: evidence from GCC countries", *EuroMed Journal of Business*, Vol. 10 No. 2, pp. 147–162.
- Zhao, C., Guo, Y., Yuan, J., Wu, M., Li, D., Zhou, Y. and Kang, J. (2018), "ESG and Corporate Financial Performance: Empirical Evidence from China's Listed Power Generation Companies", *Sustainability*, Vol. 10 No. 8, pp. 1–18.

Zhou, H., Owusu-Ansah, S. and Maggina, A. (2018), "Board of directors, audit committee, and firm performance: Evidence from Greece", Journal of International ting Tornert Lisbon a Accounting, Auditing and Taxation, Vol. 31, pp. 20-36.

Appendix A- Listed Companies on Euronext Lisbon and Madrid Stock Exchange

Name	Name
Altri, SPGS, S.A.	Mota Engil, SPGS, S.A.
Cofina, SPGS, S.A.	NOS, SPGS, S.A.
Corticeira Amorim, SPGS, S.A.	Novabase - Soc. Gest. de Particip. Sociais, S.A.
EDP – Energias de Portugal, S.A.	Ramada – Investimentos e Indústria, S.A.
Estoril Sol, SPGS, S.A.	Reditus - Soc. Gest. de Part. Socias, S.A.
Galp Energia, SPGS, S.A.	REN – Redes Energéticas Nacionais, SPGS, S.A.
Glintt - Global Intelligent Technologies, S.A.	Semapa – Soc. De Inv. e Gestão, SPGS, S.A.
Grupo Media Capital, SPGS, S.A.	Sonae, SPGS, S.A.
Ibersol, SPGS, S.A.	Sonae Capital, SPGS, S.A.

Table A1 - Companies listed on Euronext Lisbon

Imobiliária Contrutora Grão Pará, S.A.	Sonae Indústria, SPGS, S.A.
Impresa – Soc. Gestora de Particip. Sociais, S.A.	Sonaecom, SPGS, S.A.
Inapa – Invest., Participações e Gestão, S.A.	Sumol+Compal, S.A.
Jerónimo Martins, SPGS, S.A.	Teixeira Duarte, S.A.
Lisgráfica – Impressão e Artes Gráficas, S.A.	The Navigator Company, S.A.
Litho Formas, S.A.	Toyota Caetano Portugal, S.A.
Luz Saúde, S.A.	VAA – Vista Alegre Atlantis, S.A.
Martifer, SPGS, S.A.	

Table A2 - Companies listed on Madrid Stock Exchange

Lisgráfica – Impressão e Artes Gráficas, S.A. Litho Formas, S.A.	The Navigator Company, S.A. Toyota Caetano Portugal, S.A.		
Luz Saúde, S.A.	VAA – Vista Alegre Atlantis, S.A.		
Martifer, SPGS, S.A.			
Table A2 - Companies list	ed on Madrid Stock Exchange		
Table A2 - Companies list	ed on Madrid Stock Exchange Name		
Table A2 - Companies list Name Acciona, S.A.	ed on Madrid Stock Exchange Name Industria de Diseño Textil, S.A.		
Table A2 - Companies list Name Acciona, S.A. Acerinox, S.A.	ed on Madrid Stock Exchange Name Industria de Diseño Textil, S.A. Inmobiliaria Colonial Socimi, S.A.		
Table A2 - Companies list Name Acciona, S.A. Acerinox, S.A. ACS, Act. de Construccion y Servicios, S.A.	ed on Madrid Stock Exchange Name Industria de Diseño Textil, S.A. Inmobiliaria Colonial Socimi, S.A. Inmobiliaria del Sur, S.A.		
Table A2 - Companies list Name Acciona, S.A. Acerinox, S.A. ACS, Act. de Construccion y Servicios, S.A. Adolfo Dominguez, S.A.	ed on Madrid Stock Exchange Name Industria de Diseño Textil, S.A. Inmobiliaria Colonial Socimi, S.A. Inmobiliaria del Sur, S.A. Laboratorios Reig Jofre, S.A.		
Table A2 - Companies list Name Acciona, S.A. Acerinox, S.A. ACS, Act. de Construccion y Servicios, S.A. Adolfo Dominguez, S.A. Amadeus It Group, S.A.	ed on Madrid Stock Exchange Name Industria de Diseño Textil, S.A. Inmobiliaria Colonial Socimi, S.A. Inmobiliaria del Sur, S.A. Laboratorios Reig Jofre, S.A. Laboratorios Farmaceuticos Rovi, S.A.		
Table A2 - Companies liste Name Acciona, S.A. Acerinox, S.A. ACS, Act. de Construccion y Servicios, S.A. Adolfo Dominguez, S.A. Amadeus It Group, S.A. Applus Services, S.A.	ed on Madrid Stock Exchange Name Industria de Diseño Textil, S.A. Inmobiliaria Colonial Socimi, S.A. Inmobiliaria del Sur, S.A. Laboratorios Reig Jofre, S.A. Laboratorios Farmaceuticos Rovi, S.A. Lingotes Especiales, S.A.		
Table A2 - Companies list Name Acciona, S.A. Acerinox, S.A. ACS, Act. de Construccion y Servicios, S.A. Adolfo Dominguez, S.A. Amadeus It Group, S.A. Applus Services, S.A. Atresmedia Corp. de Medios de Comunicacion, S	ed on Madrid Stock Exchange Name Industria de Diseño Textil, S.A. Inmobiliaria Colonial Socimi, S.A. Inmobiliaria del Sur, S.A. Laboratorios Reig Jofre, S.A. Laboratorios Farmaceuticos Rovi, S.A. Lingotes Especiales, S.A. A. Liwe Española, S.A.		
Table A2 - Companies list Name Acciona, S.A. Acerinox, S.A. ACS, Act. de Construccion y Servicios, S.A. Adolfo Dominguez, S.A. Amadeus It Group, S.A. Applus Services, S.A. Atresmedia Corp. de Medios de Comunicacion, S Ayco Grupo Inmobiliario, S.A.	ed on Madrid Stock Exchange Name Industria de Diseño Textil, S.A. Inmobiliaria Colonial Socimi, S.A. Inmobiliaria del Sur, S.A. Laboratorios Reig Jofre, S.A. Laboratorios Farmaceuticos Rovi, S.A. Lingotes Especiales, S.A. Liwe Española, S.A. Minerales y Productos Derivados, S.A.		
Table A2 - Companies liste Name Acciona, S.A. Acerinox, S.A. ACS, Act. de Construccion y Servicios, S.A. Adolfo Dominguez, S.A. Amadeus It Group, S.A. Applus Services, S.A. Atresmedia Corp. de Medios de Comunicacion, S Ayco Grupo Inmobiliario, S.A. Azkoyen, S.A.	ed on Madrid Stock Exchange Name Industria de Diseño Textil, S.A. Inmobiliaria Colonial Socimi, S.A. Inmobiliaria del Sur, S.A. Laboratorios Reig Jofre, S.A. Laboratorios Farmaceuticos Rovi, S.A. Lingotes Especiales, S.A. Liwe Española, S.A. Minerales y Productos Derivados, S.A. Miquel y Costas & Miquel, S.A.		
Table A2 - Companies list Name Acciona, S.A. Acerinox, S.A. ACS, Act. de Construccion y Servicios, S.A. Adolfo Dominguez, S.A. Adolfo Dominguez, S.A. Amadeus It Group, S.A. Applus Services, S.A. Atresmedia Corp. de Medios de Comunicacion, S Ayco Grupo Inmobiliario, S.A. Baron de Ley, S.A.	ed on Madrid Stock Exchange Name Industria de Diseño Textil, S.A. Inmobiliaria Colonial Socimi, S.A. Inmobiliaria del Sur, S.A. Laboratorios Reig Jofre, S.A. Laboratorios Farmaceuticos Rovi, S.A. Lingotes Especiales, S.A. Liwe Española, S.A. Minerales y Productos Derivados, S.A. Miquel y Costas & Miquel, S.A. Montebalito, S.A.		
Table A2 - Companies list Name Acciona, S.A. Acerinox, S.A. ACS, Act. de Construccion y Servicios, S.A. Adolfo Dominguez, S.A. Amadeus It Group, S.A. Applus Services, S.A. Atresmedia Corp. de Medios de Comunicacion, S Ayco Grupo Inmobiliario, S.A. Azkoyen, S.A. Baron de Ley, S.A. Bodegas Riojanas, S.A.	ed on Madrid Stock Exchange Name Industria de Diseño Textil, S.A. Inmobiliaria Colonial Socimi, S.A. Inmobiliaria del Sur, S.A. Laboratorios Reig Jofre, S.A. Laboratorios Farmaceuticos Rovi, S.A. Lingotes Especiales, S.A. Liwe Española, S.A. Minerales y Productos Derivados, S.A. Miquel y Costas & Miquel, S.A. Montebalito, S.A. Naturgy Energy Group, S.A.		

Clinica Baviera, S.A. Compañia de Dist. Int. Logistica Holdings, S.A. Compañia Lev. de Edif. y Obras Publicas, S.A. Corporación Emp. de Materiales de Construccion, S.A.	Obrascon Huarte Lain, S.A. Prim, S.A. Prosegur Compañia de Seguridad, S.A.
Compañia de Dist. Int. Logistica Holdings, S.A. Compañia Lev. de Edif. y Obras Publicas, S.A. Corporación Emp. de Materiales de Construccion, S.A.	Prim, S.A. Prosegur Compañia de Seguridad, S.A.
Compañia Lev. de Edif. y Obras Publicas, S.A. Corporación Emp. de Materiales de Construccion, S.A.	Prosegur Compañia de Seguridad, S.A.
Corporación Emp. de Materiales de Construccion, S.A.	
	Realia Business, S.A.
Desarrollos Especiales de Sistemas de Anclaje, S.A.	Red Electrica Corporación, S.A.
Distribuidora Internacional de Alimentación, S.A.	Repsol, S.A.
Ebro Foods, S.A.	Sacyr, S.A.
Ecolumber, S.A.	Siemens Gamesa Renewable Energy, S.A.
Elecnor, S.A.	Sniace, S.A.
Enagas, S.A.	Telefonica, S.A.
Ence Energia y Celulosa, S.A.	TR Hotel Jardin del Mar, S.A.
Endesa, S.A.	Tubacex, S.A.
Ercros, S.A.	Tubos Reunidos, S.A.
Faes Farma, S.A.	Urbar Ingenieros, S.A.
Fluidra, S.A.	Vidrala, S.A
Fomento de Construcciones y Contratas, S.A.	Viscofan, S.A.
Iberdrola, S.A.	Zardoya Otis, S.A.

Appendix A- Descriptive Statistics

Table A3 - Descriptive Statistics for Iberian Peninsula

Variables	Mean	Minimum	Maximum	Standard Deviation	
ROA	5.017	-57.958	425.396	19.552	
QTobin	0.734	0	7.418	1.09	
BSize	9.721	2	21	3.753	
BInd	0.326	0	1.714	0.233	
AudCom	0.764	0	1	0.425	
OwnC	2.181	1	6	1.357	
CSRCom	0.12	0	1	0.325	
CEORem	13.051	8.294	16.503	1.292	
SE	11.297	2.04	16.221	2.126	
Size	13.769	7.869	18.681	2.141	
Lev	62.79	2.261	271.64	27.792	

	ROA				Tobins' Q				
	Coefficient	Standard error	Z	P-Value	Coefficient	Standard error	Z	P-Valu	e
Constante	170.688	23.837	7.16	0.000 ***	-5.716	2.071	-2.76	0.006	***
L1	-0.212	0.002	-107.52	0.000 ***	-0.012	0.006	-1.97	0.049	**
BSize	0.766	0.065	11.82	0.000 ***	0.048	0.008	5.87	0.000	***
BInd	16.985	2.046	8.3	0.000 ***	-0.686	0.163	-4.22	0.000	***
AudCom	-112.603	4.989	-22.57 💙	0.000 ***	5.488	1.414	3.88	0.000	***
CEORem	0.14	0.364	0.38	0.700	0.063	0.007	8.84	0.000	***
CSRCom	-164.958	45.808	-3.6	0.000 ***	-11.767	3.434	-3.43	0.001	***
SE	8.345	0.855	9.76	0.000 ***	-0.739	0.039	-19.09	0.000	***
Size	-5.019	1.137	-4.42	0.000 ***	1.014	0.077	13.16	0.000	***
Lev	-0.897	0.003	-316.33	0.000 ***	-0.006	0.001	-5.66	0.000	***
Sargan			27.591(23)	0.232		R	27.448(23)	0.237	
Wald			3.71E+06(10)	0.000			1347.76(10)	0.000	
m1			-1.184	0.237		37	-1.708	0.088	
m2			-0.854	0.393			0.597	0.550	

Regression is performed using an unbalanced data panel. It should also be noted that: i) *, **, and *** indicates significance levels at 10%, 5%, and 1% respectively; (ii) The Sargan test with a p-value greater than 5% shows that the instruments are valid, and the values in parentheses of the test represent degrees of freedom; (iii) The Wald test has a p-value of less than 5% which means that the joint significance and the coefficients are significant asymptotically distributed as χ^2 under a null hypothesis without significance, with degrees of freedom in parentheses; iv) The m1 test has a normal distribution N (0,1) and tests the null hypothesis of the existence of the first-order autocorrelation; v) The test m2 has normal distribution N (0,1) and with a p-value higher than 5% accepts the null hypothesis of the absence of second-order autocorrelation.