

Article

The Nonlinear Relation between Institutional Ownership and Environmental, Social and Governance Performance in Emerging Countries

Jennifer Martínez-Ferrero *  and María-Belén Lozano 

Departamento Administración y Economía de la Empresa, Facultad de Economía y Empresa, Instituto Multidisciplinar de Empresa, Universidad de Salamanca, 37007 Salamanca, Spain; beloga@usal.es

* Correspondence: jenny_marfe@usal.es; Tel.: +34-677585179

Abstract: This paper examines how the level of institutional ownership affects environmental, social, and governance (ESG) performance in emerging countries by jointly investigating a nonlinear relationship. By examining an international sample composed of 17,318 firm–year observations from the period 2012–18 for 16 emerging countries, our findings reveal that the ESG performance of firms located in emerging countries depends on the level of influential institutional ownership, and displays a U-shaped relation, particularly for environmental disclosure. Institutional investors with low ownership are less likely to promote higher ESG performance in emerging countries, although this effect is attenuated when institutional ownership reaches a significant percentage, constituting a critical mass.

Keywords: ESG performance; institutional ownership; emerging countries



Citation: Martínez-Ferrero, J.; Lozano, M.-B. The Nonlinear Relation between Institutional Ownership and Environmental, Social and Governance Performance in Emerging Countries. *Sustainability* **2021**, *13*, 1586. <https://doi.org/10.3390/su13031586>

Received: 5 January 2021

Accepted: 29 January 2021

Published: 2 February 2021

Publisher's Note: MDPI stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.



Copyright: © 2021 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

1. Introduction

The current global pandemic is closely related to corporate social responsibility (CSR), which has become a key strategic issue to consider when managing firms. When analyzing CSR, environmental, social, and governance (ESG) performance are key issues to consider [1,2]. Analyzing CSR is a topic of major relevance, particularly for developing economies, not only because of the recent social conscience that has emerged, but also because commitment to its future development in our society is vital. This is the main reason why it is crucial to further our current understanding of CSR issues by focusing on firms located in developing countries.

Corporate governance is conceived as the set of coexistence rules that regulate relationships between owners, administrators, and stakeholders and is seen as an ideal tool to deal with conflicts of interest. In particular, among the main problems associated with firms' social responsibility and their corporate governance is the agency problem, which emerges amongst different agents in the firm. One key mechanism for controlling agency problems is to analyze firms' ownership structure, given that investors are a diverse set of stakeholders who pursue varying objectives and time horizons. The investment term is relevant, because an investor who is not clearly focused on the long term can make inefficient decisions regarding the creation of the company's value [3]. Institutional investors normally control the actions derived from their active monitoring role, although they may sometimes be seeking other interests and goals.

Although previous research on ESG has paid little attention to the role of institutional investors, empirical research exploring the link between institutional ownership and ESG has provided mixed results, with no consensus having been reached concerning what effect ownership structure has. Institutional ownership can adopt attitudes to ESG reporting in different ways depending on institutional owners' sensitivity or resistance to the pressure of their position in an institution [3–5]. Moreover, previous evidence has particularly focused

on developed countries (see also, for example, [6,7] or [8], among others). In this sense, few studies (e.g., [9] have explored the relationship between institutional ownership and ESG performance for developing economies. In addition, we are interested in firms located in emerging countries for the following reasons: first, because institutional investors play a key role in the corporate governance of such firms, and second, because ESG practices are particularly relevant to the long-term development of these regions. As a result, it is necessary to gain an understanding of whether institutional ownership has a major effect on ESG and what impact it has on each of its pillars.

In this respect, the mixed evidence to emerge concerning institutional investors ensures an active role and a greater commitment to stakeholders' demands when ownership concentration is high [3]. However, this clearly depends on institutional investor commitment, their investment term, and the motivations which drive them: in other words, it depends on heterogeneity in CSR orientation among the different types of investor [7,10]. For their part, [11] find a link between institutional ownership and monitoring that demands conservatism. This leads us to consider the existence of a curvilinear relationship and a cut-off point, after which the effects of institutional investors may fluctuate. Thus, when institutional investor ownership is low, the interests of such investors may not be aligned with the rest of the shareholders as a whole, since they display different risk aversion, time horizons, and propensities to monitor managerial decisions regarding ESG issues. In this situation, the costs associated with CSR are not attractive to them, because, from a short-term perspective, they prefer to relegate CSR engagement to the background if it will save on costs. In this case, as [5] point out, the entrenchment/collusion hypothesis prevails and institutional investors are negatively associated with ESG performance, as defended by [6,12–14], or [15].

Nevertheless, when institutional investor ownership is higher and, what is more, when their level of ownership goes beyond a certain threshold, institutional investors play the role of key controlling shareholders. In this situation, they become a mechanism to mitigate the shareholder-management agency problem by aligning both interests, and the decisions they take are in accordance with the ESG value generated in the long term [16–18]. In this sense, at a moderate to high level of ownership after a breakpoint, we expect ESG performance to grow.

Given the above research gaps, this paper aims to provide insights into two closely related issues. Firstly, focusing on emerging countries, how does institutional ownership impact a firm's ESG performance? Secondly, can this effect show a nonlinear relationship? This paper therefore explores whether the relationship between institutional ownership and ESG performance in emerging countries exhibits a nonlinear relationship. Using an international sample from 2012–2018 made up of 17,138 firm-year observations of firms located in emerging countries, previous evidence confirms the existence of a U-shaped relationship between institutional ownership and ESG performance. These results suggest that firms' ESG performance in emerging countries decreases as institutional ownership increases from 0 to 43 percent, and that beyond this, breakpoint ESG performance increases, because it is affected by the ownership concentration of institutional investors. Institutional investors with low ownership are less likely to promote higher ESG performance in emerging countries, although this effect is attenuated as institutional ownership reaches a significant percentage, constituting a critical mass.

This paper, together with the results reported, makes a number of contributions to prior literature. First, even though certain previous studies have examined the relationship between institutional ownership and ESG—performance and disclosure—(e.g., [4,5,8]), the above evidence is restricted to developed countries. As far as we know, no previous studies have examined the relationship analyzed herein for the context of emerging countries. Second, contributing to current understanding regarding how institutional ownership affects ESG performance, this paper explores and evidences how institutional ownership concentration plays a key role in increasing the socially responsible behavior of firms located in emerging countries. It is not only board or firm-level factors that are seen to

determine firms' ESG performance in these regions; the evidence shown in this paper confirms that, provided they constitute a critical mass, alternative corporate governance mechanisms are essential vis-à-vis ensuring greater commitment to stakeholders' demands. Third, this paper contributes by analyzing not only the impact of institutional ownership on ESG performance but also the cut-off point after which the effects on this performance change, depending on institutional investor motivation. In this respect, this paper also contributes to the literature in terms of what role institutional ownership plays in corporate governance, environment, and social performance, by evidencing a clear and significant link between corporate governance mechanisms and strategic ESG decisions. The results clearly provide evidence in favor of both arguments concerning the role played by institutional investors in CSR [7,19], prominent amongst which is the quadratic relationship recently discussed by [1,5,8] or [10]. Third, this paper contributes by not only examining the firm's ESG performance from a global but also from an individual perspective (environmental, social, and governance).

This paper is structured as follows. Section 2 develops the theoretical background for proposing the research hypotheses. Section 3 explains the data and sample, variables, and regression models. Section 4 presents the main results, while in Section 5 we provide the main conclusions, implications, and limitations.

2. Theoretical Framework and Hypothesis Development: Institutional Ownership and a Firm's ESG Performance in Emerging Countries

2.1. ESG Performance in Emerging Countries

As defended by institutional and neo-institutional theories, different levels of development as well as institutional and cultural factors are, among others, issues that can define both the corporate commitment to CSR that companies acquire and the policies and strategies pursued in a given area of CSR (e.g., [20,21]). It is also worth considering the idiosyncrasy of the different countries related to their particular culture and the undeniable link that exists between the responsible actions of these firms and their subsequent and necessary development.

Certain previous studies have stated that emerging countries are some considerable distance away from displaying the right attitude towards ESG issues, which is why their sustainability policies need to be adapted to the specific situations found in each country [22,23]. Hence, there is a need to delve more deeply into and to focus particular attention on emerging firms in terms of how ESG is addressed—both formally and informally—and how firms thus contribute to the development of emerging countries [24].

The main concern is that most previous studies on CSR have addressed developed countries [23]. Authors such as [25,26] have explored the impact of different corporate governance mechanisms on CSR. Specifically, and although the trend towards social commitment is changing drastically [27,28], sustainability performance in emerging countries remains lower in comparison to other developed countries. As [29] point out, firms in developing countries might well not rely on the viability of such investments and may not occasionally even perceive pressure from stakeholders, possibly because they are not attentive to the community's social interests [22].

Under the umbrella of the institutional theory that understands CSR as a mode of governance, recent studies exploring socially responsible commitment in emerging countries have examined some of the drivers underlying this behavior. For example, for the emerging Latin-American context, it seems that there are certain issues, such as board composition or the role of the CSR committee, that acquire particular relevance. In this respect, it is clear that board cultural diversity is associated with ESG strategies [30–34]. This has recently been supported by [32], who report a high level of company commitment to social and environmental issues when board cultural diversity is also high. Moreover, it seems that for emerging Latin-American countries, the mediating effect of the CSR committee positively affects this relationship, thereby ensuring compliance with stakeholders' demands [34–37].

Nevertheless, the literature on emerging countries has omitted other ESG drivers. Research needs to explore in greater depth the behavior, interests, and monitoring devices

of developing economies and, in particular, to focus on firms' value creation from a long-term perspective and the relationship they have with their stakeholders so as to foster the appropriate and sustainable development that the stakeholders theory claims. In fact, these initiatives are imperative given the current and ever-growing pressure on corporations to improve their CSR agendas [24], and they are also needed in order to reinforce and ensure the legitimacy of their actions and of the decisions taken. Given that governments on many occasions have difficulties in this context when dealing with and mitigating social problems related to inequalities or corruption, companies must take an active leading role in this regard [38].

For all of the above, both at a firm level and for emerging countries, we must analyze how control mechanisms—such as effective monitoring—exercise their function in firms through corporate governance mechanisms as a whole and, in particular, through the monitoring role of ownership. In this sense, one of the main points of interest, which is the object of our study, is to examine the figure of institutional investors, who can establish monitoring systems from within the company itself, as well as through their ownership, in order to enhance the trust that society as a whole places in ESG performance. As will be seen below, several studies dealing with the role of the institutional investor in CSR have been carried out, although few exist for emerging economies.

2.2. *The Relationship between Institutional Ownership and the Firm's ESG Performance*

Over the last few years, a growing number of firms have been held by institutional investors [2]. This increase has led certain previous studies to focus on the role of institutional owners and to analyze what impact they have, for example, on board compensation or on leverage [39]. The above studies, together with the increasing presence of institutional ownership—in line with [2]—have led these investors to abandon their traditional passive role as shareholders and to become more active in the firm's managerial decisions, seeking to minimize the classical agency conflict between owners and managers. Previous literature examining the effects of ownership structures on corporate social responsibility has often overlooked some specific issues involving the main shareholder groups.

As [7,10] have done, diversity in CSR orientation and commitment among the different types of investors must be taken into account. Previous evidence suggests that the kind of business relations between institutional investors and companies [40] might explain why their abilities, incentives, and aims when engaging in corporate governance may differ [4]. Ref. [5] distinguish between pressure-sensitive directors, representing institutional investors who maintain business relations with the firm on whose board they sit, and pressure-resistant directors, who represent institutional investors who do not maintain such relations. The repercussions of these two categories of directors are also therefore examined.

As they are an important part of the shareholder group, prior literature agrees on the key role that institutional investors play in CSR issues and firms' ESG performance (e.g., [5–8]). However, those prior studies focused on developed countries and provided fragmented evidence. In this respect, and although previous ESG research has paid little attention to the role of institutional investors, empirical research exploring institutional ownership and ESG has yielded mixed results and has focused mainly on developed countries. Results from [8] show a non-linear association between institutional ownership and CSR whilst also revealing the complementary effect between insiders and institutional ownership.

Institutional investors can exercise significant voting power and have information advantages over other minority shareholders [14]. In this respect, [6] found that a high level of block institutional ownership leads to lower ESG ratings. This happens for example in Europe, where the agency conflict between minority and majority shareholders arises [41]. Refs. [13,15], among others, report that a high level of institutional ownership is negatively associated to ESG performance; institutional investors have different risk aversions, time horizons, and propensities to monitor managerial decisions concerning

ESG issues. This result is supported by [12], who found a negative relationship between institutional ownership and environmental concerns.

The voices of institutional investors cannot always be aligned with the firm's objectives, which might lead to ESG strategy development being limited. Under this perspective, we can expect institutional investors to adopt an active role in maximizing shareholder wealth rather than meeting stakeholders' demands regarding CSR issues. As [1] point out, the classical agency approach argues that greater CSR performance is achieved at the expense of greater economic and financial performance. If the company takes a short-term perspective, it is likely to prefer pushing CSR engagement to the background if this will save costs and increase customer profits. Hence, institutional investors can exert pressure to minimize ESG performance by associating this commitment and performance with the direct cost for the firm [42].

However, the short-term perspective and the initial rejection of the firm's ESG performance by institutional investors might be contingent on the ownership concentration in the hands of such investors [7]). As [8] proposed, the mixed results provided by prior research respond to the fact that these studies have overlooked the possible non-linear relationship between institutional ownership and ESG issues. In accordance with [8] or de [43], it should be acknowledged that ownership relationships are "multifaceted" and may move in opposite directions depending on ownership concentration.

What can make institutional investors change their vision and commitment to the firm's ESG performance in emerging countries? First, as the share of institutional investors increases, their decisions tend to be consistent with the long-term vision of shareholders, with the ESG creating value in the long term. If ESG generates value for the company in the long term and for the shareholder, institutional investors will be willing to promote enhanced ESG performance [16,17]. From the agency theory approach, when institutional investors become a powerful shareholder block as a result of a greater ownership share, they align their incentives with the firm's objectives in order to find the ESG strategy that can best enhance the firm's long-term value [18]. Since institutional owners with significant shares cannot easily sell their equity without lowering stock prices, they are more attentive than other shareholders to the firm's strategic decisions [8]. As [8] noted in their research, greater institutional ownership is reflected in greater monitoring over managerial decisions and may lead managers to take decisions that are aligned with investors' long-term objectives, thereby increasing ESG engagement.

It should also be pointed out that uncertainty regarding CSR practices may play a key role with regard to the motivations of institutional investors. On the one hand, investors holding from low to medium ownership may prefer not to face the uncertainty, and consequently to invest less effort in ESG practices. On the other hand, the institutional investor who has a larger stake in ownership is more likely to face and engage with complex and uncertain issues, such as defining corporate strategies [5,39].

In this respect, when institutional investors exercise greater ownership control, their objectives are more aligned with those shown by other shareholders. The alignment perspective can therefore drive institutional investors to favor greater ESG performance. Nevertheless, if institutional investors' short or long-term perspective is to change, they must reach a certain ownership threshold. Achieving such a breakpoint means that institutional investors feel themselves to be powerful and closely related to the firm's long-term objectives. In this respect, a firm's decisions might be consistent with the long-term approach of the various shareholders, and with the firm's value creation of ESG performance.

Given the above arguments, we expect institutional ownership to have a negative effect on ESG at the low to moderate level. From a nonlinear relationship approach, we expect a marginal increase in institutional ownership at the moderate to high level above a certain threshold to increase the firm's ESG performance in emerging countries. Thus, the following hypotheses are proposed under the argument that there is a U-shaped relationship between institutional ownership and ESG performance in emerging countries:

Hypothesis 1 (H1). *Low institutional ownership exerts a negative effect on the firm's ESG performance in emerging countries.*

Hypothesis 2 (H2). *There is a U-shaped relationship between institutional ownership and the firm's ESG performance in emerging countries.*

3. Method

3.1. Sample

This paper seeks to provide an understanding of the nonlinear relationship between institutional ownership and ESG performance, focusing on emerging countries during the period 2012–2018, with these regions constituting our analysis sample. For this aim, the sampling procedure is as follows. We start by selecting the list of publicly held companies operating in Africa, Pacific Asia, Europe, Latin America, North America, and Oceania for the fiscal period from 2012 to 2018, removing duplicated firms. This constitutes a total of 9964 firms, collected from Thomson Reuters Eikon (69,888 firm–year observations from 68 countries). We then remove from the list any companies located in countries that have less than 50 firm–year observations during the period analyzed, thus leaving a final sample of 69,461 firm–year observations from 46 countries. Given that this paper focuses on emerging countries, we then remove firm–year observations from non-emerging countries, which means that the sample includes a list of publicly held firms from 16 emerging countries (Argentina, Brazil, China, Egypt, India, Indonesia, Republic of South Korea, Malaysia, Mexico, Morocco, Pakistan, Philippines, Poland, South Africa, Turkey, and Vietnam). The final sample is thus composed of 17,318 firm–year observations from 2474 unique-firms and for the period 2012–2018, constituting a balanced panel data (2472 firms from eight years).

Table 1 presents the sample distribution by country and industry. The sample includes 16 emerging countries, although, as they are not weighted, it is necessary to highlight the greater representation of companies from the Republic of South Korea (23.61%) and India (20.25%). By activity sector, the sample includes firms from 12 industries. Although there is greater homogeneity at the industry level in the distribution of firm–year observations, there is a noticeably higher representation of companies in the industrial (15.09%), consumer discretionary (13.75%), and financial (13.67%) sectors.

Table 1. Sample description by country and by industry.

Panel A. Country		
	Freq.	%
Argentina	168	0.97
Brazil	1071	6.18
China	2660	15.36
Egypt	224	1.29
India	3507	20.25
Indonesia	980	5.66
Republic of South Korea	4088	23.61
Malaysia	1197	6.91
Mexico	483	2.79
Morocco	147	0.85
Pakistan	280	1.62
Philippines	546	3.15
Poland	392	2.26
South Africa	749	4.32
Turkey	406	2.34
Vietnam	420	2.43

Table 1. Cont.

Panel B. Industry		
	Freq.	%
Communication Services	826	4.77
Consumer Discretionary	2380	13.75
Consumer Staples	1533	8.86
Energy	609	3.52
Financials	2366	13.67
Health Care	1575	9.1
Industrials	2611	15.09
Information Technology	1316	7.61
Materials	2177	12.58
Real Estate	1246	7.2
Utilities	665	3.84
Others	14	0.00

Sample: 17,318 firm–year observations in 2012–2018.

3.2. Measures of ESG Performance and Institutional Ownership

Following previous ESG research, as a dependent variable, we measure ESG performance using the ESG score (ESG) obtained from Thomson Reuters Eikon [44–46]. This score measures firms' ESG performance based on data in publicly reported information and considerations regarding comparability, data availability, and industry relevance. The ESG score is grouped into 10 categories (resource use, emissions, innovation, management, shareholders, CSR strategy, workforce, human rights, community, and product responsibility) weighted proportionately according to the three pillar scores (environmental, social, and governance). ESG ranges from 0.1 to 100 based on the above 10 categories' data points that Thomson Reuters Eikon assigns. Institutional ownership (IO) is measured as the percentage of shares held by strategic institutional holdings using the ratio of the sum of shares held by all institutions for each firm to the total shares outstanding [7]. In order to examine the nonlinear effect of institutional ownership, IO² is measured as the IO square.

3.3. Research Design

Our following regression Model 1 is aimed at examining (i) the influence of institutional ownership on ESG performance in emerging countries and (ii) how this effect can show a nonlinear relation. The regression model specifically tests the above two research aims by regressing on ESG performance the institutional ownership indicator, its square, and some control variables, so as to avoid biased results. Based on prior literature, we include some control variables that are closely related to ESG performance and those associated to board of directors' compositions as well as certain firm and country-level factors:

$$\begin{aligned}
 \text{ESG}_{it} = & \beta_1 \text{IO}_{it} + \beta_2 \text{IO}^2_{it} + \beta_3 \text{Size}_{it} + \beta_4 \text{MTB}_{it} + \beta_5 \text{RiskLeverage}_{it} \\
 & + \beta_6 \text{BoardSize}_{it} + \beta_7 \text{CSRCom}_{it} + \beta_8 \text{BoardGenderDiv}_{it} \\
 & + \beta_9 \text{BoardIndep}_{it} + \beta_{10} \text{CommonLaw}_t + \beta_{11} \text{GDPGrowth}_t \\
 & + \beta_{12} \text{Industry}_t + \beta_{13} \text{Year}_t + \beta_{14} \text{Country}_t + \eta_i + \mu_{it}
 \end{aligned} \quad (1)$$

where ESG and IO are dependent and independent variables, respectively, as described in Section 3.2; size is the natural logarithm of total assets; MTB is the market-to-book ratio; RiskLeverage is the ratio of total debt to total equity plus total debt based on book values; BoardSize is the total number of board members; CSRCom is the dummy variable coded as 1 if the firm has a CSR committee, and 0 otherwise; BoardGenderDiv is the percentage of female directors out of the total number of directors on the board; BoardIndep is the percentage of independent directors out of the total number of directors on the board; CommonLaw is the dummy variable coded as 1 if the firm is located in common law countries, and 0 otherwise (civil law countries); GDPGrowth is the change in gross domestic product (DGP). We also control for industry, year, and country effects.

As proposed in the research hypotheses, this paper aims to provide insights into the nonlinear relationship between institutional ownership and the firm's ESG performance in emerging countries. With this aim in mind, the nonlinear (quadratic) relationship proposed in Model 1 presents one breakpoint or threshold that can be optimally derived by differentiating ESG performance with respect to institutional ownership [40]. Equating this partial derivative to zero, the breakpoint is calculated as: $(-\beta_1)/(2 * \beta_2)$.

Our prediction is that β_1 is negative and β_2 positive, presenting opposite signs and, therefore, supporting the existence of a nonlinear (U-shaped) relationship between institutional ownership and ESG performance in emerging countries.

As set out in the data description, the analysis sample constitutes a balanced panel data given that the paper examines 2472 firms over an eight-year period. Regression analysis for panel data, in contrast to cross-section and longitudinal data, obtains greater consistency, explanatory power, and variability in time that benefits from less collinearity among variables. Thus, we estimate our regression models to panel data, which also benefits from controlling unobservable heterogeneity. As an analysis technique, the decision depends on the nature of the dependent variable. In this paper, the ESG score ranges from 0.1 to 100, and is therefore left and right side censored. Considering this nature, Tobit models provide efficient and consistent estimates of coefficients for censored variables [47]. In line with [48], despite the dependent variable being an index, the results of this paper are robust by employing dynamic panel GMM [49], specifically the two-step estimator proposed by [50]. GMM as a robust estimator not only solves the possible endogeneity problem, but also controls heteroscedasticity and serial autocorrelation, employing lagged values as suitable instruments. In this respect, it should be noted that our research models could suffer from reverse causality that may occur: (i) when changes in the dependent variable—ESG performance—change the value of at least one of the covariates (“reverse” causation)—institutional ownership. As regards the endogeneity problem, it is necessary to test whether a set of estimates obtained by ordinary least squares (OLS) is consistent or not. In this respect, an augmented regression test (Durbin–Wu–Hausman test) can easily be formed by including the residuals of each endogenous variable, as a function of all exogenous variables, in a regression of the original model. In our case, we first perform a regression where institutional ownership is explained by a number of variables based on previous literature (e.g., firm size, leverage, ownership concentration, industry, etc.). We obtain the residuals of this estimate and subsequently perform an augmented regression where the residuals of the previous model are incorporated as an explanatory variable in our basic Model 1. Since the coefficient obtained in the regression is different from 0, the OLS estimate is not consistent, and instrumental variables must be used (IV). IV methods allow for consistent estimation when the explanatory variables (covariates) are correlated with the error terms in a regression model, solving self-selection bias. Having tested the existence of endogeneity and the possible use of IV that may solve endogeneity, it should be pointed out that the conventional IV estimator (although consistent) is inefficient in the presence of heteroskedasticity and autocorrelation. With regard to heteroskedasticity, we resort to the modified Wald test under the null hypothesis of homoscedasticity. The test result shows that the null hypothesis at 99% confidence is rejected; there is a problem of heteroskedasticity. As regards serial autocorrelation, the Wooldridge test is proposed under the null hypothesis of no-first autocorrelation problems. Its p-value allows the null hypothesis to be rejected for a 99% confidence level, supporting the existence of autocorrelation problems. Due to the existence of heteroskedasticity, serial autocorrelation, and endogeneity, it is necessary to use an IV estimator that guarantees that these problems are controlled; specifically, the GMM estimator of [48]. The basic Tobit model assumes there is a latent variable (called y_{it}^*) that can be explained by observable variable(s) (called x_{it}). Specifically,

$$y_{it}^* = \beta x_{it} + \varepsilon_{it}$$

$$\varepsilon_{it} \approx N(0, \sigma^2)$$

The observable variable y_{it} is then defined as

$$y_{it} = y_{it}^* \quad \text{if } y_L < y_{it}^* < y_U$$

$$y_{it} = y_L \quad \text{if } y_{it}^* \leq y_L$$

$$y_{it} = y_U \quad \text{if } y_{it}^* \geq y_U$$

where y_L is the lower limit of the dependent variable (0 in our case for both variables), and y_U is the upper limit.

4. Results

Descriptive statistics of the variables examined are presented in Table 2 prior to performing multivariate analysis. As the main variable of this paper, the ESG score shows a mean value of 52.061 with a standard deviation of 17.969, which suggests a significant deviation in the practice of ESG score in emerging countries. It should be noted that ESG performance in the sample analyzed ranges from 7.73 (minimum performance) to 95.531 (maximum performance). The percentage of institutional ownership is, on average, around 52 percent, showing a minimum value of 0 and a maximum of 1.464. As [7] reported, this mean value indicates that the majority of firms' shareholders are represented by institutional holders. As for the control variables, for example, we note that the average board size is around 10 directors, and that around 11 and 44 percent of board members are, respectively, female and independent directors. Furthermore, average GDP growth by emerging countries is around 3.8%, and 31.15% of the countries analyzed belong to a common law regime.

Table 2. Descriptive statistics.

	Mean	Std. Dev.
Dependent and independent variables		
ESG	52.061	17.969
IO	0.496	0.226
<i>Control variables</i>		
Size	21.078	2.035
MTB	18.162	1779.895
RiskLeverage	0.346	1.114
BoardSize	10.548	3.629
CSRCom	0.586	0.493
BoardGenderDiv	11.002	10.938
BoardIndep	44.704	17.740
CommonLaw	0.315	0.464
GDPGrowth	3.757	2.419

Sample: 17,318 firm–year observations in 2012–2018. ESG is an index variable that ranges from 0.1 to 100 based on the above 10 categories' data points that Thomson Reuters Eikon assigns for measuring ESG performance. IO is measured as the percentage of shares held by strategic institutional holdings using the ratio of the sum of shares held by all institutions for each firm to the total shares outstanding. Size is the natural logarithm of total assets expressed in thousands of Euros; MTB is the market-to-book ratio; RiskLeverage is the ratio of total debt to total equity plus total debt based on book values; BoardSize is the total number of board members as a numerical variable; CSRCom is the dummy variable coded as 1 if the firm has a CSR committee, and 0 otherwise; BoardGenderDiv is the percentage of female directors out of the total number of directors on the board, ranging from 0 to 100; BoardIndep is the percentage of independent directors out of the total number of directors on the board, ranging from 0 to 100; CommonLaw is the dummy variable coded as 1 if the firm is located in common law countries, and 0 otherwise (civil law countries); GDPGrowth is the change in gross domestic product (GDP) as a numerical variable.

Table 3 shows the estimation results of the nonlinear relationship between institutional ownership and ESG performance in emerging countries on the basis of Model 1. Examining the results reported, the percentage of institutional ownership in emerging countries negatively impacts the level of ESG performance (coef. -17.835 , $p < 0.10$), thereby lending support to our hypothesis 1—low institutional ownership exerts a negative impact on firms'

ESG performance in emerging countries. However, examining the square of this indicator, we observe how the ESG performance of the firm improves as this percentage increases; greater institutional ownership positively impacts ESG performance (coef. 14.756, $p < 0.10$). Specifically, by obtaining the derivative and equaling it to zero, it is possible to infer the breakpoint of the percentage of institutional ownership after which the level of ESG increases. From the coefficients obtained in Model 1, the breakpoint at which institutional investors modify their orientation and commit to ESG is seen to stand at 43.30% ownership. Specifically, of the sample analyzed, 1499 are over the 43.30% threshold. This result supports hypothesis 2, which predicted a U-shaped relation between institutional ownership and ESG in emerging countries. In other words, institutional ownership has a negative effect on ESG at the low to moderate level. From a nonlinear relationship approach, a marginal increase in institutional ownership at the moderate to high level above a certain threshold increases the firm's ESG performance in emerging countries.

Table 3. The nonlinear relation between institutional ownership and ESG performance.

	Coef.	Std. Dev.
Main variable		
IO	−12.835 *	7.044
IO ²	14.756 *	8.407
Control variables		
Size	1.900	0.139
MTB	0.158	0.061
RiskLeverage	−0.262 ***	1.703
BoardSize	0.016 ***	0.176
CSRCom	14.509 ***	1.238
BoardGenderDiv	0.135 ***	0.047
BoardIndep	0.117	0.034
CommonLaw	−5.350	1.466
GDPGrowth	−0.023	0.207
Controlled by year and industry		
Log likelihood	Prob > chi2 = 0.000	

Sample: 17,318 firm–year observations in 2012–2018. *, and *** represent statistical significance at 10%, 5%, and 1%, respectively. ESG is an index variable that ranges from 0.1 to 100 based on the above 10 categories' data points that Thomson Reuters Eikon assigns for measuring ESG performance. IO is measured as the percentage of shares held by strategic institutional holdings using the ratio of the sum of shares held by all institutions for each firm to the total shares outstanding. Size is the natural logarithm of total assets expressed in thousands of Euros; MTB is the market-to-book ratio; RiskLeverage is the ratio of total debt to total equity plus total debt based on book values; BoardSize is the total number of board members as a numerical variable; CSRCom is the dummy variable coded as 1 if the firm has a CSR committee, and 0 otherwise; BoardGenderDiv is the percentage of female directors out of the total number of directors on the board in the 0 to 100 range; BoardIndep is the percentage of independent directors out of the total number of directors on the board in the 0 to 100 range; CommonLaw is the dummy variable coded as 1 if the firm is located in common law countries, and 0 otherwise (civil law countries); GDPGrowth is the change in gross domestic product (GDP) as a numerical variable.

From the above evidence, and focusing on emerging countries, the evidence supports the prior literature defending the role played by institutional investors in a firm's socially responsible commitment (e.g., [5–8]). Specifically, the results reported find support for the existence of a nonlinear relationship linking the presence of institutional investors on the board and ESG (e.g., [5]). Therefore, when institutional investors have a low ownership percentage in firms located in emerging countries, their primary objective is to maintain and satisfy their own business relations with the firm by focusing on a short-term perspective. Rather than playing an active role as investor, and probably exacerbated by a relatively limited participation, institutional investors adopt a cost perspective in ESG strategies in the short-term, and ignore the numerous long-term benefits associated with ESG performance (greater economic and financial performance, market value, firm reputation, lower cost of capital, and so on). The above finding partially concurs with previous evidence reported by [6,12], and recently [2], among others, who reflected the negative relationship between institutional ownership and certain socially responsible concerns.

However, and similar to [7,42], findings support the notion that institutional ownership relationships can change in contradictory directions, contingent on their concentration. The attitude and commitment from institutional investors to promote a more socially responsible strategy is not always hidden under a short-term perspective. As their stake in the company increases, specifically after about 43 percent, their shareholding control over the firm increases, and they align their objectives with those of the company. In accordance with [7], this alignment thus implies playing an active role in implementing and developing ESG practices that result in numerous long-term benefits. That is, it substitutes a cost perspective for a profit perspective; a short-term vision of ESG for a long-term vision that accentuates its benefits in emerging countries.

As described in the ESG measure, this score comprises three individual scores: environmental, social, and corporate governance terms. Following [1], we further examine the nonlinear relation between institutional ownership and ESG by examining each of the three categorized pillars: social, environmental, and governance. Models 2 to 4 set out below explore the nonlinear relationship between institutional ownership and each pillar (environmental, social, and governance, respectively):

$$\begin{aligned} \text{Environmental}_{it} = & \beta_1 \text{IO}_{it} + \beta_2 \text{IO}^2_{it} + \beta_3 \text{Size}_{it} + \beta_4 \text{MTB}_{it} + \beta_5 \text{RiskLeverage}_{it} \\ & + \beta_6 \text{BoardSize}_{it} + \beta_7 \text{CSRCom}_{it} + \beta_8 \text{BoardGenderDiv}_{it} \\ & + \beta_9 \text{BoardIndep}_{it} + \beta_{10} \text{CommonLaw}_t + \beta_{11} \text{GDPGrowth}_t \\ & + \beta_{12} \text{Industry}_t + \beta_{13} \text{Year}_t + \beta_{14} \text{Country}_t + \eta_i + \mu_{it} \end{aligned} \quad (2)$$

$$\begin{aligned} \text{Social}_{it} = & \beta_1 \text{IO}_{it} + \beta_2 \text{IO}^2_{it} + \beta_3 \text{Size}_{it} + \beta_4 \text{MTB}_{it} + \beta_5 \text{RiskLeverage}_{it} \\ & + \beta_6 \text{BoardSize}_{it} + \beta_7 \text{CSRCom}_{it} + \beta_8 \text{BoardGenderDiv}_{it} \\ & + \beta_9 \text{BoardIndep}_{it} + \beta_{10} \text{CommonLaw}_t + \beta_{11} \text{GDPGrowth}_t \\ & + \beta_{12} \text{Industry}_t + \beta_{13} \text{Year}_t + \beta_{14} \text{Country}_t + \eta_i + \mu_{it} \end{aligned} \quad (3)$$

$$\begin{aligned} \text{Governance}_{it} = & \beta_1 \text{IO}_{it} + \beta_2 \text{IO}^2_{it} + \beta_3 \text{Size}_{it} + \beta_4 \text{MTB}_{it} + \beta_5 \text{RiskLeverage}_{it} \\ & + \beta_6 \text{BoardSize}_{it} + \beta_7 \text{CSRCom}_{it} + \beta_8 \text{BoardGenderDiv}_{it} \\ & + \beta_9 \text{BoardIndep}_{it} + \beta_{10} \text{CommonLaw}_t + \beta_{11} \text{GDPGrowth}_t \\ & + \beta_{12} \text{Industry}_t + \beta_{13} \text{Year}_t + \beta_{14} \text{Country}_t + \eta_i + \mu_{it} \end{aligned} \quad (4)$$

As regards the analysis of the individual scores, Table 4 shows the results of separately testing the nonlinear relation between institutional ownership and the respective pillar scores (environmental, social, and governance), providing significant differences between each pillar. The results reported clearly show differences in the institutional ownership manifestations in ESG, depending on the pillar examined.

The previously reported U-shaped relationship between institutional ownership and ESG performance only remains in the environmental pillar score. In Model 2, the percentage of shares held by institutional investors negatively influences a firm's environmental performance (coef. -19.068 , $p < 0.05$), while its square shows a positive impact on this performance (coef. 21.754 , $p < 0.10$). Operating with coefficients, we again find that above the 43.83 percent ownership threshold, institutional investors positively influence the firm's environmental performance. As regards the social and governance pillars, in addition to the lack of influence of the ownership held by institutional investors on social performance in Model 3, the results of Model 4 confirm the negative influence of this type of investor on the level of governance performance without evidencing a U-shaped relation (coef. -19.564 , $p < 0.05$).

From the above evidence, a clear distinction between environmental, social, and governance dimensions emerges. These results confirm that the environmental performance of firms located in emerging countries decreases as institutional ownership increases from 0 percent to almost 44 percent, and that beyond this breakpoint, environmental performance is seen to rise, affected by the ownership concentration of institutional investors. Institutional investors with low ownership are less likely to promote higher performance related to environmental issues in emerging countries, although this effect is attenuated as institutional ownership reaches a significant percentage and constitutes a critical mass.

Again, institutional investors show a short-term perspective concerning environmental performance until they constitute a critical mass, after which they adopt an active role in promoting environmental performance (e.g., projects related to controlling greenhouse gas emissions). Institutional investor interest in emerging countries with regard to environmental issues takes precedence over other factors, and is the most widespread dimension worldwide and the one that currently exerts the greatest media pressure (such as the media pressure received by the UN climate change conference held in 2019 in Madrid). It should also be noted that the environmental dimension is even more important for companies in emerging countries, where their protocols must be more specific and demanding given the substantial growth that companies in these countries are experiencing. Once a certain ownership limit has been exceeded, and their participation in the companies increased, institutional investors take on an active role, showing greater interest in satisfying stakeholders' demands concerning environmental issues.

Table 4. The nonlinear relation between institutional ownership and ESG performance: individual analysis of environmental, social, and governance pillar.

	Environmental		Social		Governance	
	Coef.	Std. Dev.	Coef.	Std. Dev.	Coef.	Std. Dev.
Main variable						
IO	−19.068 **	9.694	−19.564 *	9.874	8.406	9.604
IO ²	21.754 *	11.570	15.838	11.784	−0.321	11.281
Control variables						
Size	2.127 ***	0.191	1.797 ***	0.194	3.592 ***	0.485
MTB	0.053	0.083	0.213 **	0.085	0.300 ***	0.083
RiskLeverage	−3.343	2.343	0.887	2.387	0.458	2.272
BoardSize	0.354	0.242	−0.403	0.246	−0.004	0.233
CSRCom	16.482 ***	1.704	8.974 ***	1.736	17.040 ***	1.640
BoardGenderDiv	0.081	0.064	0.216 ***	0.065	0.132 **	0.062
BoardIndep	−0.045	0.047	0.363 ***	0.048	0.103 **	0.046
CommonLaw	−2.476	2.017	−12.100 ***	2.054	−1.826	1.942
GDPGrowth	0.539 *	0.285	−0.050	0.291	−0.785 ***	0.281
Controlled by year and industry						
Log likelihood	Prob > chi2 = 0.000		Prob > chi2 = 0.000		Prob > chi2 = 0.000	

Sample: 17,318 firm–year observations in 2012–2018. *, **, and *** represent statistical significance at 10%, 5%, and 1%, respectively. Environmental, social, and governance are index variables that range from 0.1 to 100 based on the above categories' data points that Thomson Reuters Eikon assigns for measuring ESG performance according to environmental, social, and governance categories, respectively. IO is measured as the percentage of shares held by strategic institutional holdings using the ratio of the sum of shares held by all institutions for each firm to the total shares outstanding. Size is the natural logarithm of total assets expressed in thousands of Euros; MTB is the market-to-book ratio; RiskLeverage is the ratio of total debt to total equity plus total debt based on book values; BoardSize is the total number of board members as a numerical variable; CSRCom is the dummy variable coded as 1 if the firm has a CSR committee, and 0 otherwise; BoardGenderDiv is the percentage of female directors out of the total number of directors on the board in the 0 to 100 range; BoardIndep is the percentage of independent directors out of the total number of directors on the board in the 0 to 100 range; CommonLaw is the dummy variable coded as 1 if the firm is located in common law countries, and 0 otherwise (civil law countries); GDPGrowth is the change in gross domestic product (GDP) as a numerical variable.

However, discussing the results with regard to social and governance dimensions involves looking at alternative explanations. Specifically, as regards the governance pillar, the results support the idea that institutional investors do not think it essential to increase governance performance (e.g., ensuring greater board gender diversity), regardless of ownership share. Institutional investors see governance issues as non-priority objectives for the firm, and believe that there are other demands that must be satisfied in emerging countries, such as prioritizing the environmental policies needed to improve an economic and social model that has become unsustainable. Finally, and despite the initial proposition, the results show that the firm's social performance in emerging countries is a secondary

consideration, since institutional investors mainly focus attention on environmental aspects. Firms' social performance in emerging countries is not seen to depend on the influence of institutional investors.

5. Conclusions

This paper seeks to find evidence concerning how the level of institutional ownership affects ESG performance in emerging countries by jointly examining a nonlinear relationship. In other words: (i) how institutional investors behave towards the firm's ESG performance and (ii) whether this relationship can show a nonlinear relationship. By examining an international sample of 17,318 firm-year observations from the period 2012-18 for 16 emerging countries, results confirmed that the ESG performance of firms located in emerging countries depends on the level of influential institutional ownership, showing a U-shaped relation, particularly for environmental disclosure. Institutional investors with low ownership are less likely to promote higher ESG performance in emerging countries, although this effect is attenuated as institutional ownership reaches a significant percentage of about 43 percent, constituting a critical mass. Further analysis also explores and confirms that this U-shaped relationship remains particularly significant in terms of environmental performance.

This paper contributes to previous studies in developed countries—mostly from the USA and UK—and has the added value that thus far no reports have specifically dealt with emerging economies. In addition, it fills a gap in studies addressing institutional interest in the development of the economy worldwide and with regard to issues concerning the major challenges currently facing mankind. In this emerging background, to the best of our knowledge, no previous work has explored the motivations and effects of different levels of ownership on the curvilinear relationship between institutional investors and ESG performance.

From the above evidence, this paper provides a number of practical implications. From a managerial point of view, this paper provides interesting results about what type of internal factors support managers in their decision making related to ESG performance; specifically, managers identify in institutional ownership an internal mechanism that can limit or encourage the social and environmental commitment of an organization according to their representation. In emerging countries, firms and managers obtain evidence of how once institutional investors achieve a critical mass, they must try to design and promote greater ESG performance. This evidence is also of particular interest for investors, whose social and environmental demands are satisfied when institutional owners acquire a significant representation in firm ownership—above 43 percent. Thus, stakeholders (society, customers, employees, and so on) might see greater institutional ownership as a mechanism for ensuring that their social and environmental demands are met in emerging countries. Finally, this paper offers key practical implications that provide guidance to regulators and policymakers alike regarding which policies to follow in relation to firms' ownership concentration, especially for developing economies, given the dual role played by institutional investors in this context. Likewise, it will be of great interest to know both the cut-off point in each of the economies as well as their commitment to ESG performance. As regards policy implications, the results of this study are of particular interest for those regulatory bodies in emerging countries involved in the 2030 Agenda in the sense that the findings can help them to better understand those drivers of greater ESG performance by focusing on ownership-level factors. In this respect, it should be noted that regulators' agendas in emerging countries should not forget the necessary and continuous progress that many aspects require, such as reducing inequality and poverty, action against climate change, the need to promote gender participation in micro and macro organizations, among others, aspects that have clearly been aggravated with the Covid-19 crisis.

Unfortunately, this paper also suffers from certain limitations. Despite the use of an international sample of 16 emerging countries, future studies could examine the specific peculiarities of each country which might affect the relationship examined herein. For

example, the need to address social issues might be in great demand in some emerging countries, and might thus affect the evidence examined here. In this respect, future studies could also explore the relationship between institutional ownership and other socially responsible policies focused on disclosure and assurance beyond ESG performance. In the same vein, regional, industry or institutional differences might also be analyzed. Furthermore, future studies could also explore alternative explanations for the U-shaped relation between institutional ownership and ESG performance by examining complementary or substitutive associations with other corporate governance mechanisms (for example, those related to board factors) or those related to country-level factors, such as the level of legal enforcement. Finally, this paper focuses on the effect of institutional ownership in emerging countries without examining the type and nature of the institutional investors under analysis. In this regard, future studies must explore whether the different nature of institutional investors (international investment funds, or government-owned organizations, among others) could affect the relationship between institutional ownership and ESG performance in emerging and non-emerging countries.

Author Contributions: Conceptualization: M.-B.L. and J.M.-F.; methodology: J.M.-F.; software: J.M.-F.; formal analysis: M.-B.L. and J.M.-F.; writing—original draft preparation: M.-B.L. and J.M.-F.; writing—review and editing: M.-B.L. and J.M.-F. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Institutional Review Board Statement: Not applicable.

Informed Consent Statement: Not applicable.

Data Availability Statement: The data presented in this study are available on request from the corresponding author.

Acknowledgments: We are thankful to the Multidisciplinary Institute of Enterprise (MIE); University of Salamanca and to the Regional Agency of the Spanish Government JCYL Grant/Award Number: SA069G18 for financial support. The authors are grateful to the Junta de Castilla y León and the European Regional Development Fund (Grant CLU-2019-03) for the financial support given to the “Economic Management for Sustainability” Excellence Research Unit (GECOS).

Conflicts of Interest: The authors declare no conflict of interest.

References

1. Yoon, B.; Lee, J.H.; Byun, R. Does ESG performance enhance firm value? Evidence from Korea. *Sustainability* **2018**, *10*, 3635. [CrossRef]
2. Gunningham, N. Shaping corporate environmental performance: A review. *Environ. Policy Gov.* **2009**, *19*, 215–231. [CrossRef]
3. Erhemjampets, O.; Huang, K. Institutional ownership horizon, corporate social responsibility and shareholder value. *J. Bus. Res.* **2019**, *105*, 61–79. [CrossRef]
4. Almazan, A.; Hartzell, J.C.; Starks, L.T. Active institutional shareholders and costs of monitoring: Evidence from executive compensation. *Financ. Manag.* **2005**, *34*, 5–34. [CrossRef]
5. Pucheta-Martínez, M.C.; Chiva-Ortells, C. The role of directors representing institutional ownership in sustainable development through corporate social responsibility reporting. *Sustain. Dev.* **2018**, *26*, 835–846. [CrossRef]
6. Arora, P.; Dharwadkar, R. Corporate governance and corporate social responsibility (CSR): The moderating roles of attainment discrepancy and organization slack. *Corp. Gov. Int. Rev.* **2011**, *19*, 136–152. [CrossRef]
7. Harjoto, M.; Jo, H.; Kim, Y. Is institutional ownership related to corporate social responsibility? The nonlinear relation and its implication for stock return volatility. *J. Bus. Ethics* **2017**, *146*, 77–109.
8. Oh, W.Y.; Cha, J.; Chang, Y.K. Does ownership structure matter? The effects of insider and institutional ownership on corporate social responsibility. *J. Bus. Ethics* **2017**, *146*, 111–124. [CrossRef]
9. Matos, P. *ESG and Responsible Institutional Investing Around the World: A Critical Review*; CFA Institute Research Foundation: Charlottesville, VA, USA, 2020; Available online: <https://www.cfainstitute.org/-/media/documents/book/rf-lit-review/2020/rflr-esg-and-responsible-institutional-investing.ashx> (accessed on 1 February 2021).
10. Dam, L.; Scholtens, B. Ownership Concentration and CSR Policy of European Multinational Enterprises. *J. Bus. Ethics* **2013**, *118*, 117–126. [CrossRef]
11. Ramalingegowda, S.; Yu, Y. Institutional ownership and conservatism. *J. Account. Econ.* **2012**, *53*, 98–114. [CrossRef]

12. Chava, S. Environmental externalities and cost of capital. *Manag. Sci.* **2014**, *60*, 2223–2247. [[CrossRef](#)]
13. Dalton, D.R.; Daily, C.M.; Certo, S.T.; Roengpitya, R. Meta-analyses of financial performance and equity: Fusion or confusion? *Acad. Manag. J.* **2003**, *46*, 13–26. [[CrossRef](#)]
14. Schnatterly, K.; Shaw, K.W.; Jennings, W.W. Information advantages of large institutional owners. *Strateg. Manag. J.* **2008**, *29*, 219–227. [[CrossRef](#)]
15. Hoskisson, R.E.; Hitt, M.A.; Johnson, R.A.; Grossman, W. Conflicting voices: The effects of institutional ownership heterogeneity and internal governance on corporate innovation strategies. *Acad. Manag. J.* **2002**, *45*, 697–716.
16. Coffey, B.S.; Fryxell, G.E. Institutional ownership of stock and dimensions of corporate social performance: An empirical examination. *J. Bus. Ethics* **1991**, *10*, 437–444. [[CrossRef](#)]
17. Sethi, S.P. Investing in socially responsible companies is a must for public pension funds—Because there is no better alternative. *J. Bus. Ethics* **2005**, *56*, 99–129. [[CrossRef](#)]
18. Orlitzky, M.; Schmidt, F.L.; Rynes, S.L. Corporate social and financial performance: A meta-analysis. *Organ. Stud.* **2003**, *24*, 403–441. [[CrossRef](#)]
19. Chabachib, M.; Fitriana, T.U.; Hersugondo, H.; Pamungkas, I.D.; Udin, U. Firm Value Improvement Strategy, Corporate Social Responsibility, and Institutional Ownership. *Int. J. Econ. Manag. Syst.* **2020**, *5*, 146–157. [[CrossRef](#)]
20. Brammer, S.; Jackson, G.; Matten, D. Corporate social responsibility and institutional theory: New perspectives on private governance. *Socio-Econ. Rev.* **2012**, *10*, 3–28. [[CrossRef](#)]
21. Fernando, S.; Lawrence, S. A theoretical framework for CSR practices: Integrating legitimacy theory, stakeholder theory and institutional theory. *J. Theor. Account. Res.* **2014**, *10*, 149–178.
22. Jamali, D. A stakeholder approach to corporate social responsibility: A fresh perspective into theory and practice. *J. Bus. Ethics* **2008**, *82*, 213–231. [[CrossRef](#)]
23. Idemudia, U. Corporate social responsibility and developing countries: Moving the critical CSR research agenda in Africa forward. *Prog. Dev. Stud.* **2011**, *11*, 1–18. [[CrossRef](#)]
24. Visser, W. Corporate Social Responsibility in Developing Countries. In *The Oxford Handbook of Corporate Social Responsibility*; Oxford University Press: Oxford, UK, 2008; Volume 473, Available online: <https://www.oxfordhandbooks.com/view/10.1093/oxfordhb/9780199211593.001.0001/oxfordhb-9780199211593-e-021> (accessed on 1 February 2021).
25. Michelon, G.; Parbonetti, A. The effect of corporate governance on sustainability disclosure. *J. Manag. Gov.* **2012**, *16*, 477–509. [[CrossRef](#)]
26. Frijns, B.; Dodd, O.; Cimerova, H. The impact of cultural diversity in corporate boards on firm performance. *J. Corp. Financ.* **2016**, *41*, 521–541. [[CrossRef](#)]
27. Munro, V.; Arli, D.; Rundle-Thiele, S. CSR engagement and values in a pre-emerging and emerging country context. *Int. J. Emerg. Mark.* **2018**, *13*, 1251–1272. [[CrossRef](#)]
28. Sahasranamam, S.; Arya, B.; Sud, M. Ownership structure and corporate social responsibility in an emerging market. *Asia Pac. J. Manag.* **2020**, *37*, 1165–1192. [[CrossRef](#)]
29. Amini, C.; Dal Bianco, S. Corporate social responsibility and Latin American firm performance. *Corp. Gov.* **2017**, *17*, 403–445. [[CrossRef](#)]
30. Harjoto, M.; Laksmana, I.; Lee, R. Board diversity and corporate social responsibility. *J. Bus. Ethics* **2014**, *132*, 641–660. [[CrossRef](#)]
31. Rao, K.; Tilt, C. Board Composition and Corporate Social Responsibility: The Role of Diversity, Gender, Strategy and Decision Making. *J. Bus. Ethics* **2015**, *138*, 327–347. [[CrossRef](#)]
32. Lau, C.; Lu, Y.; Liang, Q. Corporate Social Responsibility in China: A Corporate Governance Approach. *J. Bus. Ethics* **2016**, *136*, 73–87. [[CrossRef](#)]
33. Martínez-Ferrero, J.; Lozano, M.B.; Vivas, M. 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. *Corp. Soc. Responsib. Environ. Manag.* **2020**. [[CrossRef](#)]
34. Katmon, N.; Mohamad, Z.Z.; Norwani, N.M.; Farooque, O. Comprehensive board diversity and quality of corporate social responsibility disclosure: Evidence from an emerging market. *J. Bus. Ethics* **2017**, *2017*, 1–35. [[CrossRef](#)]
35. Peters, F.; Romi, M. Does the voluntary adoption of corporate governance mechanisms improve environmental risk disclosures? Evidence from greenhouse gas emission accounting. *J. Bus. Ethics* **2014**, *125*, 637–666. [[CrossRef](#)]
36. Hussain, N.; Rigoni, U.; Orij, R.P. Corporate governance and sustainability performance: Analysis of triple bottom line performance. *J. Bus. Ethics* **2016**, *149*, 411–432. [[CrossRef](#)]
37. Cucari, N.; DeFalco, S.E.; Orlando, B. Diversity of Board of Directors and Environmental Social Governance: Evidence from Italian Listed Companies. *Corp. Soc. Responsib. Environ. Manag.* **2017**, *25*, 250–266. [[CrossRef](#)]
38. Damiano-Teixeira, K.M.; Pompermayer, M.M. Corporate social responsibility: Profile and diagnosis of 797 programs developed in Brazil. *Bus. Soc. Rev.* **2007**, *112*, 343–367. [[CrossRef](#)]
39. García-Meca, E.; López-Iturriaga, F.; Tejerina-Gaite, F. Institutional investors on boards: Does their behavior influence corporate finance? *J. Bus. Ethics* **2017**, *146*, 365–382. [[CrossRef](#)]
40. Brickley, J.A.; Lease, R.C.; Smith, C.W., Jr. Ownership structure and voting on antitakeover amendments. *J. Financ. Econ.* **1988**, *20*, 267–291. [[CrossRef](#)]

41. Brossard, O.; Lavigne, S.; Erdem Sakinc, M.E. Ownership structures and R & D in Europe: The good institutional investors, the bad and ugly impatient shareholders. *Ind. Corp. Chang.* **2013**, *22*, 1031–1068.
42. Barnett, M.L.; Salomon, R.M. Beyond dichotomy: The curvilinear relationship between social responsibility and financial performance. *Strateg. Manag. J.* **2006**, *27*, 1101–1122. [[CrossRef](#)]
43. De Miguel, A.; Pindado, J.; De La Torre, C. Ownership structure and firm value: New evidence from Spain. *Strateg. Manag. J.* **2004**, *25*, 1199–1207. [[CrossRef](#)]
44. Cheng, B.; Ioannou, I.; Serafeim, G. Corporate social responsibility and access to finance. *Strateg. Manag. J.* **2014**, *35*, 1–23. [[CrossRef](#)]
45. Sassen, R.; Hinze, A.K.; Hardeck, I. Impact of ESG factors on firm risk in Europe. *J. Bus. Econ.* **2016**, *86*, 867–904. [[CrossRef](#)]
46. Garcia, A.S.; Mendes-Da-Silva, W.; Orsato, R.J. Sensitive industries produce better ESG performance: Evidence from emerging markets. *J. Clean. Prod.* **2017**, *150*, 135–147. [[CrossRef](#)]
47. López-González, E.; Martínez-Ferrero, J.; García-Meca, E. Corporate social responsibility in family firms: A contingency approach. *J. Clean. Prod.* **2019**, *211*, 1044–1064. [[CrossRef](#)]
48. Hillier, D.; Pindado, J.; De Queiroz, V.; De La Torre, C. The impact of country-level corporate governance on research and development. *J. Int. Bus. Stud.* **2011**, *42*, 76–98. [[CrossRef](#)]
49. Arellano, M.; Bond, S. Some tests of specification for panel data: Monte Carlo evidence and an application to employment equations. *Rev. Econ. Stud.* **1991**, *58*, 277–297. [[CrossRef](#)]
50. Roodman, D. How to do xtabond2: An introduction to difference and system GMM in Stata. *Stata J.* **2009**, *9*, 86–136. [[CrossRef](#)]