

## VALUE RELEVANCE OF CORPORATE DONATIONS

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# Value Relevance of Corporate Donations

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## **Abstract:**

This paper examines whether corporate donations have an impact on a firm's market value. We analyse 52,199 firm year observations on companies from 42 countries between 1998 and 2014. The regression model used to investigate the value relevance of corporate donations is the Collins, Pincus, & Xie (1999) adaptation of the Ohlson (1995) model. Our analysis finds evidence that supports our hypothesis that corporate donations are value relevant, while controlling for firm specific variables. The evidence is robust to a range of robustness tests that include recognition of the effects of the GFC and differences in country size, stage of economic development, and the economic, institutional, and legal aspects of each country.

## **Keywords:**

Value relevance, corporate donations, philanthropy

## **1. Introduction:**

The value of corporate philanthropy and its consequences has been an evolving topic over recent decades as shareholders and society have developed stronger expectations of firms acting in a socially and environmentally responsible way. Society's perception plays an important role in a firm's success in the current business environment, and this is telling in the rapidly expanding literature on corporate social responsibility and how firms can create a competitive advantage from it. One key element in this is whether a firm can generate value from engaging in philanthropic activity.

As evident from the literature review below, previous studies have only focused on a single-country setting. However, shareholders in different countries are likely to react differently to firms engaging in philanthropic activity, because of the different institutional, economic, and regulatory arrangements that firms operate under. These differing macro-economic factors may influence the behaviour of shareholders and society in valuing the philanthropic activity that a firm engages in. Therefore, by considering a global sample based on 42 countries, the current study addresses a significant gap in the literature.

The findings of this study may be useful to both management and shareholder groups. Management of firms may find it easier to justify engaging in philanthropic activity if there is evidence supporting the value relevance of corporate donations. This may shift the strategy of some firms to being more image-focussed. Shareholders, intent on maximisation of their wealth, may be more accepting of management 'giving' away their funds, if such activity generates value for them.

The remainder of the paper is structured as follows. Section 2 provides a general background on corporate donations and sets out the pros and cons of such donations. Section 3 gives an overview of the relevant literature and develops the hypothesis. Section 4 sets out the methodology and describes the sample data used to test the hypotheses. Section 5 reports descriptive analysis of the data and the results

of the multivariate tests of the hypotheses. Finally, Section 6 provides the conclusions from the study notes the limitations of the research, and identifies areas for future research.

## **2. General Background on Corporate Donations:**

Pearce II (2015) reports that an estimated \$20.1 billion was donated to charities by U.S firms alone in 2013 and observes that these charitable activities seem to ‘dispute the notion that a corporation exists “primarily for the profit of stakeholders”’. Why is there such a significant level of donations made by corporations? The possible rationales for corporate donations can be categorised as altruism, efficiency and opportunism. The first of these rationales reflects a concern by firms that ‘good causes’ do not receive sufficient financial support and therefore firms need to step in to assist in meeting the gap. However, this rationale begs the question: why not leave this role to the shareholders? The firm could pay shareholders a dividend equal in amount to the donation and let shareholders decide for themselves whether they actually want to make a donation. In the special case where indeed all shareholders would make the donation then it would of course be simpler for the company to make the single donation.

The efficiency rationale is that by engaging in charitable activities the firms will lift and improve the image of the firm with society thus increasing sales and potentially profit and firm value. Furthermore, it is sometimes argued that in many countries, such as the US, donations are a tax deductible expense and therefore in those countries the after tax cost of a donation is less than the amount of the donation. However, if donations are tax deductible to a firm it is likely that they would also be tax deductible to individual shareholders making a donation. Therefore, tax deductibility does not provide justification for firms to make donations rather than leaving the decision to individual shareholders. Finally, the opportunism rationale is that corporate donations are made to benefit management through, for example, lifting their status in the community or strengthening their relationships with certain key groups to improve their career prospects. The opportunism rationale thus views corporate donations as a special form of agency costs.

The three rationales are not necessarily mutually exclusive. It may well be that efficiency drives a firm to make donations and that altruism and or opportunism drives the choice between alternative donees. However, if donations do not enhance firm value then either the donations were driven by altruism and/or opportunism or the donations were driven by efficiency but did not have the desired value effect. Porter & Kramer (2002) argue that executives face a “no-win situation” in respect of donations because they face pressure from “critics demanding higher levels of socially responsible activity and investors wanting short-term profits”. The critics will never be satisfied with the level of donations, and it is not easy to justify philanthropic activity to investors. This places the executive in a precarious position the answer to which should be to search for causes for which donations would indeed result in increased firm value.

Chesters & Lawrence (2008) argue that a firm could be perceived as acting both altruistically and efficiently if the donations are aligned with the firm’s mission and values. In order for shareholders to know what or who a firm has donated to, the firm must disclose qualitative information about its donations. Currently, across many countries the disclosure requirements for corporate donations are voluntary, in respect of qualitative information surrounding them. This presents an issue for shareholders and other users of the firm’s financial statements, because if this qualitative information is not disclosed it cannot be determined whether the purpose of the philanthropic activity was for altruism or efficiency reasons. This can be seen as an advantage and disadvantage for firms. If the donations were obviously for efficiency reasons, there may be some negative reaction from society, because the firm is acting only in its own interest. However, shareholders’ would be satisfied with this, because it is advancing the interests of the firm. The opposite can be said if the donations made were obviously altruistic. Thus, the voluntary nature of disclosure of qualitative information regarding corporate donations presents issues, because stakeholders cannot reliably determine whether to agree or not with the donations made.

If firms are motivated by efficiency in making donations the decision to be made is essentially that of paying a lower dividend. That is, once the firm has determined its investment decision a donation

should be contemplated against the alternative of paying the amount of the donation to shareholders as a dividend. If donations are expected to add value, that is, provide a return greater than the cost of capital, then make donations. If the answer is in favour of making donations, then the firm needs to decide the amount, identify the optimal donees, and determine the timing.

### **3. Literature Review and Hypothesis Development**

Research on corporate philanthropy and its relationship to firm value has been expanding, especially with the growing interest in corporate social responsibility (CSR). The research has been both conceptual and empirical. The leading conceptual article on corporate philanthropy is Godfrey (2005) who proposes that corporate donations should reflect the following premises:

1. Corporate philanthropy can generate positive moral capital among communities and shareholders.
2. Moral capital can provide shareholders with insurance-like protection for a firm's relationship-based intangible assets
3. This protection contributes to shareholder wealth

Godfrey (2005) identifies key elements that firms should consider when engaging in philanthropic activity, in particular, the necessity for genuineness when making donations. The author asserts that a philanthropic activity must be stable and consistent, the firm must be responsive to changing needs of donees, and the firm's activity must be transparent in order to be perceived as genuine in the eyes of the shareholders. However, (Bright, 2006) argues that these factors are inadequate, and that instead firms must strive for organisational virtuousness and act virtuously. Bright (2006) notes that philanthropic activity should be rooted in moral goodness, and should be unconditional in order for it to be genuine. Raiborn, Green, Todorova, Trapani, & Watson (2003) assert that business leaders have found that organizational giving programs have the potential to support mission achievement, instil loyalty in employees and customers, and create a competitive advantage. This paper also states that philanthropic

activity decisions of corporations should be considered and analysed in the same manner as any other business decision, because of the potential competitive advantage generated from these decisions.

The empirical research on corporate donations has focused on links to firm attributes, external events, and firm value in general. The studies focussing on links to firm attributes include Amran, Ling, & Sofri (2007), Adams & Hardwick (1998), Hogan, Olson, & Sharma (2014), and Hanousek, Kočenda, & Svítková (2006). Amran, Ling, & Sofri (2007) use a sample of 100 publically-listed companies on the Bursa Malaysia Main Board from 2004 to investigate the characteristics of firms that make significant contributions to society. The study found that there is a strong positive relationship between donation level and firm size, but there is no significant relationship between donation level and the profitability of the firm. In contrast, Adams & Hardwick (1998) found that for a sample of 100 UK listed companies more profitable companies donate proportionately more. However, the study found that there was no significant relationship with ownership structure, a negative relationship with leverage, and donations increase with firm size. Hogan, Olson, & Sharma (2014) examine the relationship between a firm's community spending and the scores it receives from organizations that rate firms' CSR and whether community spending and these scores are related to shareholder return. The study found that a firm's scores on various measures of CSR varied with corporate philanthropy and that firms with a lower probability of bankruptcy (as measured by Altman's Z score), more women on the board, and larger boards tend to donate more to the community. Donations, as a percentage of EBITDA, did not appear to have any effect on the value to the firm. Hanousek, Kočenda, & Svítková (2006), using survey data on donations by 891 companies in the Czech and Slovak republics over the period 2001-2005, found that Czech firms give more frequently and that in Slovakia donations are more common for firms operating at an international level. No support was found for the hypotheses that foreign-owned firms or firms that provide retail services donate more.

There are numerous articles that examine corporate philanthropy surrounding external events such as natural disasters. These include Gao, Faff, & Navissi (2011), Patten (2008), and Muller & Whiteman (2009). Gao, Faff, & Navissi (2011) use event study methodology to examine the response to donations surrounding the 2008 Wenchuan earthquake in China. They examine 221 announcements of corporate donations made by Chinese A-share listed companies. The study found that firms that are more consumer-orientated experience a proportionally larger market reaction to donations and that there is a stronger positive impact for firms in a relatively concentrated industry. The results are argued to be due to the potential for the donations to be used as a marketing tool. Patten (2008) found a significant positive market reaction to donations by 79 U.S listed firms regarding donations to the relief effort following the 2004 South Asian tsunami. Patten (2008) also found that larger donations generate a greater market reaction, except donations of exactly \$1million. It is argued that donations of exactly \$1million are seen as ingratiating, therefore evoking a less-positive reaction. Muller & Whiteman (2009) found that firms donate proportionately more to a disaster relief effort in their home country or when the firm has a local presence in that region. Muller & Whiteman (2009) conduct a global study of donations by Global Fortune 500 firms from 2004 in relation to three disasters: the 2004 South Asian tsunami, Hurricane Katrina, and the Kashmiri Earthquake. The study found that the tsunami received the greatest amount of donations but that there was a regional variable in-play, where firms closer to the disaster donated more. The 'home region effect' is particularly apparent in Hurricane Katrina and less of a factor for Asian firms. If a firm has a local presence, then it is likely to donate more.

Finally, there have been a number of survey papers on the current literature on corporate philanthropy. These include Cornwell & Maignan (1998), Gauthier & Pache (2015), and Vaidyanathan (2008). These papers conclude that the majority of research finds a positive relationship between corporate philanthropy and financial performance. In a review of 109 studies from 1972-2002 that consider the impact of CSR (including donations) on financial performance, Vaidyanathan (2008) found that 49.5% percent reported a positive relationship between CSR and financial performance. Only 6.4% of the papers found a negative relationship, and the remaining 44.1% of papers either found no significant

relationship or mixed results. Vaidyanathan (2008) also states that there is a great amount of variation between different measures of CSR and the relationship to financial performance. This is understandable, considering the difficulties in definition of CSR.

A broad view of the literature suggests the following hypothesis for the relationship between corporate donations and firm value (stated in the alternative form):

H<sub>A</sub>: Corporate donations are value relevant

Baughn, Bodie, & McIntosh (2007) analyse the differences in levels of CSR activities between a range of countries. The study finds that there are significant institutional and legal factors that affect the way in which firms engage in CSR-related activities as well as the overall level of CSR activities engaged in. The existence of these differences, leads us to believe that a study on value relevance of donations should use a global sample, rather than just focusing on one country or group of countries. By using a global sample, the study will more accurately analyse the value effect of donations as the sample will be much larger than it would be for a single country study and the results will be affected only minimally by factors specific to a particular country. Furthermore, temporal differences and country differences can be specifically allowed for, as we do in the robustness analysis.

#### **4. Methodology and sample data**

Studies on the relationship between CSR performance/disclosure and firm value have typically used value relevance methodology based on some version of the Ohlson (1995) model. We also use this methodology to test our null hypothesis on the impact of donations on firm value. Value relevance studies use either a price model or return model (Barth, Beaver, & Landsman, 2001; Ota, 2003). Some studies have used both the return model and price model, generating similar results (Sami & Zhou, 2004; Bao & Chow, 1999). However, other studies have generated contradictory results when using both models (Ely & Waymire, 1999; Francis & Schipper, 1999). In this study we decided to use the price model because the cumulative effect of the independent variables reflects share price and the estimated

slope coefficient of the test variable is unbiased (Chen , Chen, & Su, 2001; Kothari & Zimmerman, 1995). Specifically, we use the Collins, Pincus, & Xie (1999) adaptation of the Ohlson (1995) model. The Collins, Pincus, & Xie (1999) model estimates the market value of equity as the sum of book value, accounting earnings, and ‘other information’, which in our case is donations. In addition, we include as controls, return on assets (ROA) (Beiner, Drobetz, Schmid, & Zimmerman, 2006; Jo & Harjoto , 2011) leverage, and an environmental, social and governance (ESG) score. We include leverage as a proxy for both risk and growth (Huynh & Petrunia, 2010) (McGuire, Sundgren , & Schneeweis, 1988). The ESG score controls for different levels of ESG performance/disclosure.

In symbols, the model for the main test is stated as:

$$P_{it} = \beta_0 + \beta_1 DON_{it} + \beta_2 BVPS_{it} + \beta_3 EPS_{it} + \beta_4 ROA_{it} + \beta_5 LEV_{it} + \beta_6 ESG_{it} + fixed\ effects + \varepsilon$$

where,

<i>P</i>	= Price per share at the balance sheet date
<i>DON</i>	= Donations per share paid during a year for a firm
<i>BVPS</i>	= Book Value per share of common equity
<i>EPS</i>	= Earnings per share from continuing operations
<i>ROA</i>	= Earnings before interest, tax, and depreciation over total assets at balance sheet date
<i>LEV</i>	= year-end total liabilities over total assets at balance sheet date
<i>ESG</i>	= Environmental, Social, and Governance Score from Bloomberg

Thus a significant coefficient on the donations variable would indicate that donations have a positive impact on value and thus provide supportive evidence for our hypothesis.

In our robustness tests we include a dummy variable for system of law (=1 for Common Law and =0 for Civil Law) as a proxy for the different economic, institutional, and regulatory factors that can impact on value (Devalle, Onali, & Magarini, 2010; Hung, 2000; Veith & Werner, 2010). We also include gross domestic product per capita as a proxy for stage of economic development. The robustness tests involve

splitting the sample into multiple sub-samples: samples of observations on high ESG firms and low ESG firms; samples excluding observations on firms from small countries and firms from large countries; a sample excluding observations from the global financial crisis years; samples of observations on firms from high-income countries (developed countries) and firms from low-income countries (developing countries); samples of observations on firms that operate in countries that use a Common Law legal system and firms that operate in countries that use a Civil Law legal system.

The sample used in the study came from multiple sources. Data on donations per share and the ESG scores were obtained from the Bloomberg database. The data on price per share, book value per share, earnings per share, ROA and leverage were obtained from the Compustat Global database. The World Fact Book was used as the source for the system of law dummy and GDP per capita was sourced from the World Bank database. Table 1, Panel A, provide a description of each variable and the data source.

Table 1, Panel B, shows the construction of the final sample of 52,119 firm year observations on companies operating in 42 countries during the period 1998-2014. The sample started with 310,078 firm year observations which included 195,271 observations with missing values on the dependent variable or independent variables. Furthermore, there were 18,119 observations with missing SIC code, 39,142 observations with missing values in Compustat, 4,289 observations on finance related firms (SIC codes 6000-6999). These firm year observations were all deleted from the sample. In addition, of the remaining observations we also deleted observations registering in the top or bottom 1%. There were 13 countries in the sample operating under Common Law as opposed to 29 countries that operate under Civil Law. However, within the sample there is a relatively even split of firms that operate under each system of law, as is evident from Table 6. We excluded finance firms because of the less onerous disclosure requirements on these firms and we excluded the top and bottom 1% to limit the impacts of outliers and skewness.

## 5. **Results**

### 5.1 **Descriptive analysis**

Table 1, Panel C, shows the results of descriptive analysis including the mean, median, standard deviation, minimum, and maximum values for each variable. The donations per share made by firms ranges from \$0.0001 to \$0.0986m, with a mean of \$0.0510. The ESG variable ranges from 3.3542 to 80.2456 (on an index ranging from 0 to 100), with a mean value of 32.4524. Leverage, varies substantially from 0.0018% to 82.45% but has a mean value of 23.41

Table 1, Panel D, shows the degree of pairwise correlation among the variables. The table shows that donations per share has a correlation of 0.3616 with share price, which is significant at the 1% level. This suggests that donations and firm value are indeed positively related. However, share price is obviously not determined solely by donations and therefore the impact of donations can only be assessed from multivariate analysis. We checked for multicollinearity but the results were negative.

### 5.2 **Main Results:**

Table 2 reports the results of regression analysis of the test model. The coefficients on all variable have the expected sign and are significant at the 1% level. Furthermore the adjusted  $R^2$  is 84.57%, indicating a good fit. The key result is that the coefficient on donations is positive and significant at 1% level, which is supportive of our hypothesis that donations have a positive impact on value.

In terms of relating this result to findings in the literature, there are numerous comparisons. However, our study is the only one to date to have used a global sample.

In terms of a proposal to donate \$1 per share in perpetuity, the size of the coefficient on donations shows that investors regard donations as a highly risky use of company funds. This is consistent with there being uncertainty as to the payoff and the underlying motive for the donation.

### **5.3 Robustness Tests**

Tables 3 to 6 report the results of our robustness tests. Table 3 shows the results of splitting the sample into observations on companies with a high ESG score and those with a low ESG score. The impact of donations on value is positive and significant for both samples but the impact is stronger for the high ESG sample. This result is expected, because it is likely that the high-ESG firms use their socially responsible image as their competitive advantage. Therefore, more investment into ESG/image is recognised positively by investors and a greater reaction to donations as they are a key part of the ESG ranking.

We tested for the impact of the global financial crisis on our results by removing observations from the years 2007-2009 inclusive. Table 4, Column 1, shows that the coefficient on donations remains positive and significant and with little change in value from the main result. To test for the effect of country size we firstly excluded observations from smaller countries and secondly observations from larger countries. The results are reported in Table 4, Columns 2 and 3. In both cases the coefficient on donations remains positive and significant but the value resulting from excluding the observations from larger countries is significantly smaller than in the main result. To test for the effect of stage of economic development we split the sample into observations on companies operating in developed countries and observations from developing countries. The results are reported in Table 5. The coefficient on donations remains positive and significant for both sub-samples. As expected the coefficient for developing countries is significantly smaller than in the main result. Finally we tested for the impact of differences in economic, institutional, and regulatory factors by splitting the sample into observations from Common Law countries and Code law countries. The results are reported in Table 6. Again the coefficient on donations remains positive and significant in both samples but the difference is not significant. Thus, the main test result hold across all the robustness tests.

The robustness tests serve two purposes. Firstly, the test indicate the strength of the main result. Secondly, the tests enhances the understanding of the relationship between corporate donations and share

price. The main test indicates that there is a statistically significant impact of donations on share price. but the robustness tests show that corporate donations are more value relevant in larger countries and developed countries.

## **6. Conclusion**

The objective of this study was to empirically examine the relationship between corporate donations and firm value using a global data set. We analysed the relationship using data on companies operating in 42 countries over the period 1998-2014. The Collins, Pincus, & Xie (1999) adaptation of the Ohlson (1995) model was used to assess the value relevance of donations. Our results show that corporate donations have a positive impact on firm value and our results are robust to demanding sensitivity tests. These results should be of interest to management and investors.

This study's main contribution to the literature in this field is that it empirically shows that corporate donations positively impact share price and this is consistent with the efficiency rationale for corporate donations. The finding is significant because our study is the first to have used a global sample to test for the relationship. The results of this study could be used to argue that firms should engage in more corporate philanthropic activity in the future. The results are certainly consistent with the idea that in today's society, corporate philanthropy is increasingly valued.

As with most empirical studies there are limitations. There are many firms in the sample that are multi-nationals. This causes an effect that blurs the lines for the classification of firms in each of the 42 countries represented. Therefore, the use of common law and civil law classification may not be the most suitable regulatory institutional control variable for these firms. No account has been taken of any qualitative disclosure on donations. This may be a serious limitation as the study has proceeded as if all reported donations would have been equally favoured by investors, which is an assumption that is unlikely to be met. Another limitation is that the sample was collected from four different sources. For example, the donations and ESG data was collected from the Bloomberg database, but the other data was collected from Compustat Global and the World Fact Book and the World Bank. This is possibly

not a major issue but homogeneity of the data would be greater if it all came from a single source. A minor, and possibly insignificant, limitation of this study is that not all countries and firms are represented in the sample. The finance sector was excluded because of the different disclosure requirements to firms in other sectors. The inclusion of these firms in the sample may have generated different results but the sample size is so large that it is unlikely that their inclusion would have changed the results.

The study may have suffered from failure to consider relevant variables. In that regard, future studies could benefit from examining other macro-economic and institutional factors across different countries. There needs to be a deeper understanding of how donations are valued between different countries. For instance, examining the value relevance of donations between different continents may be useful, because it will assist multi-national firms in their philanthropic decision making. Furthermore, firms that only operate in a single country would also want to know how the country that they operate in compares to other countries, in terms of the possible value gained in corporate donations. This may be important knowledge for a firm considering international expansion. CSR activities, including corporate donations, may not be as valued in another country, so it would be a waste of resources investing in such activities in those countries.

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## Appendix:

**Table 1**

**Panel A: Description of variables and data sources**

<i>Variable</i>	<i>Measure</i>	<i>Description of variable</i>	<i>Data source</i>
<b><i>Dependent variable</i></b>			
<i>P</i>	Price per share	Price per share at the Balance sheet date for firm <i>i</i> in year <i>t</i> .	Compustat Global
<b><i>Test variable</i></b>			
<i>DON</i>	Donations per share	Total donations paid during a year scaled by outstanding common shares for firm <i>i</i> in year <i>t</i> .	Bloomberg
<b><i>Other independent variables</i></b>			
<i>BVPS</i>	Book value per share	Book value of common equity per share for firm <i>i</i> in year <i>t</i> .	Compustat Global
<i>EPS</i>	Earnings per share	Earnings per share from continuing operations for firm <i>i</i> in year <i>t</i> .	Compustat Global
<i>ROA</i>	Return on assets	Earnings before interest tax and depreciation over total assets at Balance sheet date for firm <i>i</i> in year <i>t</i> .	Compustat Global
<i>LEV</i>	Leverage	LEV is the year-end total liabilities over total assets of a firm at Balance Sheet date for firm <i>i</i> in year <i>t</i> .	Compustat Global
<i>ESG</i>	ESG scores	Environmental, Social and Governance score for firm <i>i</i> in year <i>t</i> .	Bloomberg
<i>LAW</i>	Legal system	A dummy to represent country clusters using Common Law (= 1) and Code Law (= 0)	World Fact Book (2014)
<i>GDP</i>	Economic Development	Gross domestic product divided by midyear population.	The World Bank (2014)

## Panel B: Sample selection

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Number of firm year observations on dependent and independent variables for 1998-2014, companies operating across 42 countries	310,078
Less: Missing values on dependent and independent control variables	(195,271)
Less: Missing values on SIC code missing	(18,119)
Less: Missing values from Compustat	(39,142)
Less: excluding SIC 6000-6999	(4,289)
Less: variables registering in the top or bottom 1%	<u>(1,058)</u>
Final Sample	<u>52,199</u>

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## Panel C: Descriptive statistics for firm-level variables

Variable	Mean	Median	S.D	Minimum	Maximum
<i>P</i>	14.2547	7.6841	16.9814	0.0254	118.5874
<i>DON</i>	0.0510	0.0200	0.3217	0.0001	0.0986
<i>BVPS</i>	9.2546	5.7542	9.7812	0.0121	66.8540
<i>EPS</i>	0.8542	0.4500	1.4520	-4.5813	8.6900
<i>ROA</i>	7.5482	7.1000	7.2854	-27.000	49.100
<i>LEV</i>	23.4121	22.6154	16.5143	0.0018	82.4500
<i>ESG</i>	32.4524	28.6541	12.5540	3.3542	80.2456

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All variable definitions appear in Table 1, Panel A.

**Panel D: Correlation Matrix**

	<i>P</i>	<i>DON</i>	<i>BVPS</i>	<i>EPS</i>	<i>ROA</i>	<i>LEV</i>	<i>ESG</i>
<i>P</i>	1						
<i>DON</i>	0.3616***	1					
<i>BVPS</i>	0.7241***	0.0154*	1				
<i>EPS</i>	0.7642***	0.2101**	0.6058*	1			
<i>ROA</i>	0.2854***	0.2214***	0.0450*	0.3965**	1		
<i>LEV</i>	0.1841***	0.1112*	0.2541**	-0.1254*	-0.1753*	1	
<i>ESG</i>	0.2578***	0.1214*	0.2075**	0.1754*	-0.0150	-0.0117	1

Note: All variable definitions appear in Table 1, Panel A. \*, \*\*, and \*\*\* denote statistical significance at the 10%, 5%, and 1% levels, respectively.

**Table 2: Ordinary Least squares regression results for full sample**

$$P_{it} = \beta_0 + \beta_1 DON_{it} + \beta_2 BVPS_{it} + \beta_3 EPS_{it} + \beta_4 ROA_{it} + \beta_5 LEV_{it} + \beta_6 ESG_{it} + \text{fixed effects} + \varepsilon$$

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	<i>Estimates</i>
	<i>(t-value)</i>
<i>Intercept</i>	-14.0123*** (16.78)
<i>DON</i>	4.1254*** (6.871)
<i>BVPS</i>	0.8285*** (32.58)
<i>EPS</i>	4.5871*** (24.32)
<i>ROA</i>	0.1879*** (9.85)
<i>LEV</i>	0.0354*** (7.62)
<i>ESG</i>	0.0541*** (12.14)
<i>Fixed Effects</i>	YES
<i>Number of observations</i>	52,199
<i>Adjusted R<sup>2</sup></i>	84.57
<i>p-value</i>	<0.0001

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Note: All variable definitions appear in Table 1, Panel A. \*, \*\*, and \*\*\* denote statistical significance at the 10%, 5%, and 1% levels, respectively.

## Robustness Tests

**Table 3: Ordinary Least squares regression results for ESG subsamples**

$$P_{it} = \beta_0 + \beta_1 DON_{it} + \beta_2 BVPS_{it} + \beta_3 EPS_{it} + \beta_4 ROA_{it} + \beta_5 LEV_{it} + \beta_6 ESG_{it} + \text{fixed effects} + \varepsilon$$

	High ESG sub-sample	Low ESG sub-sample
	<i>Estimates</i>	<i>Estimates</i>
	<i>(t-value)</i>	<i>(t-value)</i>
Intercept	-16.108*** (22.54)	10.361** (14.58)
DON	4.187*** (7.78)	1.889* (1.78)
BVPS	0.8059*** (36.78)	0.798*** (35.63)
EPS	4.908*** (31.98)	4.561*** (30.21)
ROA	0.224*** (15.39)	0.211*** (13.21)
LEV	0.041*** (7.80)	0.044*** (8.12)
ESG	0.056*** (13.58)	0.038** (8.79)
Fixed Effects	Included	Included
Number of observations	28,428	23,771
Adjusted R <sup>2</sup>	80.25	72.56
p-value	<0.0001	<0.0001

**Note:** All variable definitions appear in Table 1 Panel A. \*, \*\*, and \*\*\* denote statistical significance at the 10%, 5%, and 1% levels, respectively.

**Table 4: Ordinary Least squares regression results for the following sub-samples**

**Column 1: excluding the years 2007, 2008 & 2009**

**Column 2: excluding observations from smaller countries**

**Column 3: excluding observations from larger countries**

$$P_{it} = \beta_0 + \beta_1 DON_{it} + \beta_2 BVPS_{it} + \beta_3 EPS_{it} + \beta_4 ROA_{it} + \beta_5 LEV_{it} + \beta_6 ESG_{it} + \text{fixed effects} + \varepsilon$$

	<b>Column 1</b>	<b>Column 2</b>	<b>Column 3</b>
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	<i>Estimates</i>	<i>Estimates</i>	<i>Estimates</i>
	<i>(t-value)</i>	<i>(t-value)</i>	<i>(t-value)</i>
<i>Intercept</i>	16.541*** (22.16)	16.100*** (23.25)	10.122*** (15.12)
<i>DON</i>	4.010*** (5.98)	4.190*** (7.12)	1.689* (1.69)
<i>BVPS</i>	0.845*** (42.52)	0.852*** (42.56)	0.805*** (36.78)
<i>EPS</i>	4.681*** (31.20)	4.821*** (32.56)	4.401*** (30.12)
<i>ROA</i>	0.200*** (12.24)	0.214*** (12.96)	0.198*** (11.88)
<i>LEV</i>	0.054*** (13.11)	0.058*** (14.10)	0.057*** (15.10)
<i>ESG</i>	0.049*** (10.75)	0.050*** (12.56)	0.047*** (9.98)
<i>Fixed Effects</i>	Included	Included	Included
<i>Number of observations</i>	35,744	46,725	28,412
<i>Adjusted R<sup>2</sup></i>	82.54	84.21	79.35
<i>p-value</i>	<0.0001	<0.0001	<0.0001

**Note:** All variable definitions appear in Table 1 Panel A. \*, \*\*, and \*\*\* denote statistical significance at the 10%, 5%, and 1% levels, respectively.

**Table 5: Ordinary Least squares regression results for subsample (High GDP vs Low GDP)**

$$P_{it} = \beta_0 + \beta_1 DON_{it} + \beta_2 BVPS_{it} + \beta_3 EPS_{it} + \beta_4 ROA_{it} + \beta_5 LEV_{it} + \beta_6 ESG_{it} + \text{fixed effects} + \varepsilon$$

	High GDP sub-sample	Low GDP sub-sample
	<i>Estimates</i>	<i>Estimates</i>
	<i>(t-value)</i>	<i>(t-value)</i>
Intercept	-16.781*** (24.10)	9.98** (13.65)
DON	4.200** (7.98)	1.901* (1.79)
BVPS	0.854*** (43.56)	0.802*** (38.52)
EPS	4.721*** (32.55)	4.258*** (31.58)
ROA	0.210*** (14.21)	0.208*** (13.50)
LEV	0.049*** (12.54)	0.051*** (11.90)
ESG	0.051*** (11.68)	0.049** (7.89)
Fixed Effects	Included	Included
Number of observations	29,254	23,771
Adjusted R <sup>2</sup>	83.88	71.10
p-value	<0.0001	<0.0001

**Note:** All variable definitions appear in Table 1 Panel A. \*, \*\*, and \*\*\* denote statistical significance at the 10%, 5%, and 1% levels, respectively.

**Table 6: Ordinary Least squares regression results for subsample (Common law vs Code Law)**

$$P_{it} = \beta_0 + \beta_1 DON_{it} + \beta_2 BVPS_{it} + \beta_3 EPS_{it} + \beta_4 ROA_{it} + \beta_5 LEV_{it} + \beta_6 ESG_{it} + \text{fixed effects} + \varepsilon$$

	Common Law sub-sample	Code Law sub-sample
	<i>Estimates</i>	<i>Estimates</i>
	<i>(t-value)</i>	<i>(t-value)</i>
Intercept	-16.98*** (25.14)	15.54** (24.11)
DON	4.291*** (8.10)	3.984*** (5.98)
BVPS	0.858*** (44.58)	0.821*** (40.10)
EPS	4.801*** (34.68)	4.657*** (31.10)
ROA	0.231*** (18.21)	0.210*** (12.95)
LEV	0.050*** (12.90)	0.054*** (12.26)
ESG	0.068*** (12.54)	0.078*** (14.10)
Fixed Effects	Included	Included
Number of observations	27,244	24,955
Adjusted R <sup>2</sup>	85.54	81.25
p-value	<0.0001	<0.0001

**Note:** All variable definitions appear in Table 1 Panel A. \*, \*\*, and \*\*\* denote statistical significance at the 10%, 5%, and 1% levels, respectively.