

Corporate Reputation, Financial Performance and Earnings Quality

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An important issue frequently assessed by investors is the quality of reported financial information. Recent research suggests a relationship between corporate reputation (CR) and the quality of reported information. This paper examines the association between CR and earnings quality of the firms operating in a European market. We use a two-stage method, applying a cross-sectional accruals-based measure as a proxy for earnings quality, and a regression analysis to detect relationship between earnings quality and CR. Our results suggest that most reputable companies also have superior earnings quality. These findings may increase the confidence of investors in assessing the earnings quality of firms with a higher CR. It may also be of interest to business managers who are establishing a corporate strategy based on CR.

Keywords: Corporate Reputation, Earnings Quality, Financial Performance, Financial Analysis, Stakeholders

Introduction

The relationship between Corporate Reputation (CR) and firms' earnings quality is an issue of increasing importance to investors and other stakeholders. To determine the nature of any associations between earnings quality and CR, metrics published by the *Reputation Institute* for Spain¹ are used as a proxy for CR. The measure of CR of the *Reputation Institute* has become an international standard for strategically evaluating and managing CR². According to this methodology, the dimensions that allow to understand CR and through which stakeholders build their perception of the reputation of a company are as follows: Products/Services, Innovation, Workplace, Citizenship, Governance, Leadership, and Performance. Reputation is achieved through a mix of these inter-related dimensions. For instance, some authors refer that an innovative leadership has strong impacts on performance³. Integrity in financial practices implies the absence of intentional earnings manipulation; such manipulation would reduce the firm's earnings quality. To measure earnings quality, we follow the Modified Model proposed by Jones⁴, in which the absolute value of discretionary accruals growth is inversely related to earnings quality. Thus, a higher absolute value of

discretionary accruals suggests lower earnings quality. In addition, we use regression models^{5,6} for detecting the inverse relationship between the absolute value of discretionary accruals and CR. CR is also a global perception on how the organization responds to and satisfies stakeholders' demands and expectations^{7,8}, and can be considered as an important intangible asset that produces benefits for an indefinite period of time⁹. Several empirical studies have examined these benefits and support a positive relationship between CR and financial performance¹⁰. In the view of some authors^{11,12}, the most reputable companies have the highest market value. We will test if firms with stronger CRs are characterized by more straightforward reporting practices and are less subject to earnings manipulation.

Data and methodology

This study analyses annual financial information from the Spanish ranking of most reputable companies according to the *Reputation Institute* (2016), which initially included 101 companies. From these, 20 financial companies (SIC 60-63) have been removed because it was difficult to define their accruals. Thus, our final sample consists of 81 companies that have been paired with 81 other companies not included in the ranking of the Reputation Institute. Table 1 presents the industrial distribution of the sample, which includes 29

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Table 1 — Industry distribution of the sample

Industry	SIC	Number of Firms
Oil and Energy	13	7
Construction	16	6
Manufacturing	20-39	29
Transportation	42	5
Telecommunications	48	8
Mass media	48	4
Distribution	51	17
Tourism	70	5
		Total 81

manufacturing companies and 17 from the distribution sector, among others. In this paper, the level of total accruals (TA) of a firm is measured as shown in (1).

$$TA_{i,t} = \Delta CA_{i,t} - \Delta Cash_{i,t} - \Delta CL_{i,t} + \Delta DCL_{i,t} - DEP_{i,t} \quad \dots (1)$$

where $\Delta CA_{i,t}$ represents the change in the current assets of firm i in year t , $\Delta Cash_{i,t}$ is the change in cash and cash equivalents of firm i in year t , $\Delta CL_{i,t}$ is the change in the current liabilities of firm i in year t , $\Delta DCL_{i,t}$ is the change in debt included in current liabilities of firm i in year t , and $DEP_{i,t}$ is amortization and depreciation expense of firm i in year t .

All companies in the same industry are used to estimate discretionary accruals. Thus, the calculation is performed as shown in (2).

$$TA_{j,t}/A_{j,t-1} = \alpha_{j,t} (1/A_{j,t-1}) + \beta_{1j,t} [(\Delta REV_{j,t} - \Delta RECE_{j,t})/A_{j,t-1}] + \beta_{2j,t} [PPE_{j,t}/A_{j,t-1}] + \varepsilon_{j,t} \quad \dots (2)$$

where $TA_{j,t}$ is the j sector's total accruals in year t , $\Delta REV_{j,t}$ is the change in income for sector j between the year $t-1$ and the year t , $\Delta RECE_{j,t}$ is the change in accounts receivable for sector j between years $t-1$ and t , $PPE_{j,t}$ represents investment in non-current assets for sector j in year t , and $A_{j,t-1}$ is the total assets for sector j in year $t-1$.

The specific estimation of parameters for each sector according to equation (2) implies an expected relationship between nondiscretionary accruals and accounting variables. Therefore, non-discretionary accruals for firm i in year t can be calculated as shown in (3).

$$NDA_{i,t} = \alpha_{j,t} (1/A_{i,t-1}) + \beta_{1j,t} [(\Delta REV_{i,t} - \Delta RECE_{i,t})/A_{i,t-1}] + \beta_{2j,t} [PPE_{i,t}/A_{i,t-1}] \quad \dots (3)$$

In turn, the absolute value of discretionary accruals for firm i in year t is identified as (4).

$$|DA_{i,t}| = |TA_{i,t} - NDA_{i,t}| \quad \dots (4)$$

Once discretionary accruals for each firm and year have been estimated, a regression is performed in order to test the association between earnings quality and CR. To this end, we have adapted a regression model proposed by some authors^{5,6} and use the format specified in (5).

$$|DA_{i,t}| = \beta_0 + \beta_1 * CR_{i,t} + \beta_2 * A_{i,t} + \beta_3 * LEV_{i,t} + \beta_4 * LIQ_{i,t} + \beta_5 * IND_{i,t} + \varepsilon_{i,t} \quad \dots (5)$$

where $|DA_{i,t}|$ is the absolute value of discretionary accruals for firm i in year t . The following control variables are also included: $CR_{i,t}$ is a dummy variable that takes the value 1 if the company appears in the ranking of the *Reputation Institute* and takes the value 0 otherwise; $A_{i,t}$ represents the total assets for firm i in year t ; $LEV_{i,t}$ is the leverage ratio measured by total debt/total assets for firm i in year t ; $LIQ_{i,t}$ is the liquidity ratio measured by cash and marketable securities/short-term debt; $IND_{i,t}$ is a dummy variable that takes the value “1” if the firm belongs to service sector (transportations, airlines, telecommunications, mass media, distribution and tourism) and takes the value “0” if it belongs to energy, construction or manufacturing sector; and $\varepsilon_{i,t}$ represents the error term of the regression.

Results

Table 2 shows statistics for firms in the sample and for those that were used as matched pairs. These variables include the absolute value of discretionary accruals (|DA|), the total assets (A), the level of financial leverage (LEV), the return on assets (ROA) and the liquidity (LIQ). For firms in the sample, the mean and median of the |DA| are 0.0770 and 0.0577, respectively. For the matched companies, the values for the mean and median of the |DA| are 0.1129 and 0.0912, respectively. The data suggest that firms in the sample have lower discretionary accruals than their matched counterparts. In addition, the sample of reputed companies has higher values than the control sample for all other variables except leverage (LEV). Thus, the average value of assets for the sample firms is € 5936600.2176, whereas the average value of assets in matched companies is € 216930.6043. Table 2 also shows the significance of the differences between the mean values of the variables of the sample firms and their corresponding matched pairs. Using the t-test and the Wilcoxon nonparametric test to measure the importance of these differences,

Table 2 — Descriptive statistics and paired difference in means

Variable definitions: $|DA|$ = absolute value of discretionary accruals; A = total assets (€M); LEV = total debt/total assets; ROA = return on assets (%); LIQ = cash and marketable securities/short-term debt

	Sample Firms (n=81)			Matched Firms (n=81)		
	Mean	Std. Dev.	Median	Mean	Std. Dev.	Median
$ DA_{i,t} $	0.0770	0.0637	0.0577	0.1129	0.1011	0.0912
A	5936600.2176	10168548.0379	1199989.3054	216930.6043	506960.4705	12230.1840
LEV	0.6314	0.1977	0.6182	0.7238	0.1776	0.7636
ROA	6.7072	7.0285	5.9346	5.8776	7.1988	4.0473
LIQ	0.0704	0.1097	0.0214	0.0669	0.1061	0.0277
			T-test (p-value)			Wilcoxon test (p-value)
	$ DA_{i,t} $		0.017			0.048
	A		0.000			0.000
	LEV		0.006			0.006
	ROA		0.506			0.252
	LIQ		0.902			0.271

Table 3 — Regression analysis

Variable definitions: $|DA|$ = absolute value of discretionary accruals; CR = Dummy variable with value "1" if the firm is on Reputation Institute ranking of 2016, and "0" otherwise; A = total assets; LEV = total debt/total assets; LIQ = cash and marketable securities/short-term debt; IND = Dummy variable with value "1" if the firm belongs to the industries: transportation, telecommunications, mass media, distribution and tourism (SIC 42, 48, 51, 70), and "0" if belongs to the industries: oil and energy, construction and manufacturing (SIC 13, 16, 20-39).

Regression model: $|DA_{i,t}| = \beta_0 + \beta_1 * CR_{i,t} + \beta_2 * A_{i,t} + \beta_3 * LEV_{i,t} + \beta_4 * LIQ_{i,t} + \beta_5 * IND_{i,t} + \varepsilon_{i,t}$

Results: (n = 162)

Variables	Parameter Estimates	Std. Error	t-stat	Pr> t
Constant	0.124	0.039	3.136	0.002**
CR	-0.034	0.017	-1.196	0.038*
A	0.021	0.008	0.061	0.024*
LEV	0.037	0.043	0.866	0.388
LIQ	0.106	0.172	0.912	0.477
IND	0.014	0.018	0.767	0.444

we can conclude that there are significant differences in the absolute value of the discretionary accruals ($|DA|$), the total assets (A), and the level of financial leverage (LEV). To test our hypothesis that firms with good reputations have a higher earnings quality, we developed the regression model proposed in (5). If the hypothesis is true, we expect a significant negative relationship between the absolute value of discretionary accruals and CR . Table 3 reports the results of our regression analysis. As shown, the coefficient β_1 is -0.034, which is significant (with $p=0.038$). Thus, our hypothesis is accepted. We also included three control variables in our regression analysis. The results suggest that the absolute value of discretionary accruals is positively associated with firm size. These results are similar to those of another study⁶ with regard to the relationship between CR and

earnings quality in the USA, but they differ in the significance of the variable size (A), which is not relevant in the US market.

Conclusions

The results of our study on the association between CR and earnings quality suggest that firms with a higher CR also have a superior earnings quality, and that earnings quality is inversely associated with firm size. Therefore, we have demonstrated empirically that CR is a strategic asset that contributes to earnings quality and that the features of firms are determinants of this relationship. This paper contributes to the CR literature by determining that earnings quality is related to both accounting-based and non-accounting-based information. Therefore, a global analysis of companies must also incorporate the perceptions of

the different stakeholders. Also, these findings may increase the confidence of investors in assessing the earnings quality of firms with higher CR. It may also be of interest to financial analysts looking for indicators of earnings quality and business managers who are establishing a corporate strategy based on CR.

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