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CSR Performance, Financial Reporting, and Investors' Perception on Financial Reporting

Lukas Timbate and Cheong Kyu Park *

Department of Business Administration at Ajou University, Suwon 16499, Korea; lukasbeyashe@ajou.ac.kr

* Correspondence: parkacc@ajou.ac.kr; Tel.: +82-31-219-2711

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Abstract: This study examines whether socially responsible firms behave differently from other firms in their financial reporting. Specifically, we question whether firms that are better in their corporate social responsibility (CSR) performance also behave in a responsible manner to maintain their financial reporting quality and whether the market rewards such responsible behaviors. Using data from S&P 500 US companies, we find that socially responsible firms are less likely to manage their earnings. However, we fail to find significant relationships between CSR and investors' perceptions on earnings, measured by stock returns and earnings response coefficient. We interpret the results as investors not fully reflecting the benefits from CSR performance. Our findings are consistent with the notion that CSR activities are motivated by managers' ethical incentives to serve the interests of stakeholders.

Keywords: corporate social responsibility; financial reporting quality; investors' perception on financial reporting

1. Introduction

Corporate Social Responsibility (CSR) has been the subject of substantial academic debate and more issues surrounding CSR have emerged recently. Much of the debate on CSR has focused on whether socially responsible activities maximize shareholder value, or whether such activities consume resources without adequate returns. Generally, there are two perspectives scholars have considered on CSR. The first perspective argues that companies should engage in CSR only when doing so maximizes shareholder value (or when the benefit outweighs its related cost) and the other perspective states that companies might also make investments that benefit society even when doing so decreases shareholder value [1]. However, existing theory and empirical studies find inconsistent evidence on the relation between CSR and the value of firms. This inconsistency motivates our research questions: Does CSR performance drive the quality of financial reporting? Do investors benefit from these performances?

Accounting researchers have documented important findings about the determinants and consequences of CSR, the relation between CSR and financial performance, and the roles of CSR disclosure and assurance [2]. However, there are still contradicting ideas on the signs of the relationship between CSR and financial performance. The documented sign of the relationship may indicate negative [3], neutral [4], or positive [5–8] linkages. Accounting and finance researchers have also documented important findings on the benefits of CSR, such as reduced business risk, information asymmetry, cost of capital, insider trading profit and analyst forecast errors and increased customer trust and loyalty, employee retention, productivity, and company reputation. Yet, prior studies do not show a consistent relationship between CSR and firm value, that is, positive [9,10], neutral [11] and negative [12] relationships were all documented.

Prior studies examining the consequences of CSR have found that the best corporate citizen firms report higher quality of earnings than others. The study [13] found no significant relation between

CSR and discretionary accrual (the most widely used metric for financial reporting quality). Using three metrics for financial reporting quality, [14] also found a mixed result of the relation between CSR and financial reporting quality. The study [13] also found that the relationship between CSR and income-decreasing earnings management activities are stronger for family firms than non-family firms, suggesting that family firms use CSR disclosures to divert public attention from their poor financial reporting quality. These results may indicate the notion that CSR activities manifest the existence of an agency problem between managers and shareholders of a firm. For example, the study [15] found a moderating role of CSR in the relationship between earnings management and firm value (measured by cost of capital) and argue that firms may use CSR as a tool to cover up their poor financial reporting quality. Nevertheless, there are still studies and theories consistent with evidence supporting the idea that CSR activities are positively related to ethical behavior of managers. The work [16] documented that moral development of managers is related to their CSR engagement, supporting the claim that CSR activities are based on managers' ethical incentives to serve the society. If CSR activities are related to managers' ethical incentives to serve the society, we expect such managers to engage in CSR activities even if they may not have an intention to hide earnings management. To fill this gap in the literature, we empirically examine our first research question of the relation between CSR and financial reporting quality.

There are also mixed results in the relationship between CSR and a firm's value. The supporters of the relation find a positive relationship between CSR disclosure and stock return. There are positive relationships found between CSR performance and firms' bond price or yield spread [17] and stock return [18]. CSR performances are also negatively related to business risk [19], information asymmetry [20], cost of debt [21], cost of equity capital [22] and analyst forecast error [23]. These findings suggest that CSR activities may strengthen firms' reputation, which may improve shareholders' values in the long run.

On the other hand, other studies find a negative relationship between CSR performances and stock returns, supporting the claim that management may engage in CSR activities to serve the interests of stakeholders at the expense of the shareholders. For example, [24] found a consistent positive relationship holds only in the long run and, therefore, short-term stock returns are not related to CSR. The study [25] also found that the firms forced to spend money on CSR activities experience a 4.1% drop in their stock prices. The work [12] found no relationship between CSR and risk-adjusted stock return. Finally, [26] argued that only the deviant components of CSR expenditures are related to size adjusted future stock returns. Thus, it is *ex ante* unclear whether CSR performance increases the quality of financial reporting and whether investors view the CSR performance as benefits. Accordingly, we examine this issue empirically.

Employing two approaches for deriving measures of financial reporting quality and value relevance of financial reporting, we intend to show whether CSR performance increases financial reporting quality and the value-relevance of financial reporting. Our financial reporting quality metric, which is first proposed by [27], captures both discretionary accruals and unintentional accruals related to poor estimation [28]. By contrast, value relevance of financial reporting—estimated by regressing firms' one year ahead buy-and-hold returns on accounting earnings—measures the extent to which earnings are reflected in stock prices [29]. We use a binary variable for measuring firms' CSR performance based on whether they are ranked in the 100 best corporate citizens by Corporate Responsibility Magazine. Contrary to the prior studies using CSR index or KLD scores by Morgan Stanley, we are able to employ the performance of CSR with the CSR ranking.

Using data from a sample of non-financial S&P 500 US companies, we found the following mixed results. Consistent with [14], CSR performance is significantly associated with the proxy for financial reporting quality. We find that firms which are better in CSR performance have higher financial reporting quality than other firms. However, we find no relationship between CSR performance and future stock returns or earnings response coefficient. This indicates that investors do not fully reflect the quality of financial reporting with socially responsible firms.

Our findings contribute to the literature in two ways. First, our results are consistent with the scholarly recommendations for viewing CSR as being motivated by managers' ethical incentives to serve the interests of stakeholders as opposed to the perspective that firms only engage in CSR activities that maximize shareholder value [1,14]. Second, our results indicate that CSR is not related to shareholders' (firm) value, but that the manager's ethical behavior may be positively related to both CSR and financial reporting quality. Our additional tests present consistent results when we include discretionary accrual and real earnings management metrics in our regression model.

The remainder of the paper is structured as follows: Section 2 presents the literature review and our hypotheses. Section 3 describes our empirical procedures. Section 4 presents descriptive statistics and correlations. Section 5 reports the multivariate regression results of the main tests and the additional tests. Section 6 summarizes the paper and presents our conclusions.

2. Literature Review and Hypothesis Development

2.1. CSR and Financial Reporting Quality

There is an increased need for corporate social responsibility research and especially its relationship with financial performance. Accounting and finance researchers have documented important findings on the consequences of CSR. CSR performances and disclosures are related to reductions in business risk [20,21], information asymmetry [20], cost of debt [21], cost of equity capital [22] insider trading profit [30] and analyst forecast error [23]. Studies have also found that CSR performance is positively related to customer trust and loyalty [31], employee retention, commitment, efficiency and productivity [16], and company image and reputation [16]. However, even if there are a number of studies examining the relationship between CSR and financial reporting quality, the findings in prior studies are either mixed or have limitations due to their data sources [13].

Using only two years of data, [13] found that the best corporate citizen firms have more predictable, persistent, and smoother earnings than others. Besides the data limitation, [13] found no significant relation between CSR and discretionary accrual (the most widely used metric for financial reporting quality). Using a long panel data of ten years and three metrics for financial reporting quality, [14] also found a mixed result. Albeit their findings that accrual-based financial reporting quality (discretionary accrual) was significantly related to CSR, the relationship appears stronger for CSR weaknesses rather than strengths. Using hand-collected CSR disclosure data from 226 Italian listed firms for the period from 2006 to 2015, [13] also found that the relationship between CSR and income-decreasing earnings management activities are stronger for family firms than non-family firms, suggesting family firms use CSR disclosure to divert public attention from their poor financial reporting quality. Two other studies also support the notion that CSR activities may manifest the existence of an agency problem between managers and shareholders of a firm. According to [23], the number of earnings forecasts from analysts is lower for firms engaging in CSR because the analysts think that CSR activities do not benefit the shareholders and, therefore, curb firms from engaging in such activities. The study [15] also found a moderating role of CSR in the relationship between earnings management and firm value (measured by cost of capital) and argue that firms may use CSR as a tool to cover up their poor financial reporting quality.

The above studies [13,15] suggest that CSR activities are managers' incentive to hide earnings management and avoid the cost of being punished for their poor financial reporting. However, there are studies with evidence supporting the notion that CSR activities are positively related to the ethical behavior of managers. The work [16] documented that moral development of managers is related to their CSR engagement, supporting the notion that CSR activities are managers' ethical incentives to serve the society. The findings in [14] also reveal that better CSR-performing firms are less likely to be subject to the Securities and Exchange Commission (SEC) investigations of Generally Accepted Accounting Principles (GAAP) violations and have lower tendency to conceal bad information. If CSR activities are only related to managers' intentions to hide earnings management, we expect that

the costs of doing so should not exceed the cost of the punishment from poor financial reporting. Additionally, such managers may not be committed to show a consistency in CSR performance unless they have an earnings management problem regularly. However, if CSR activities are related to managers' ethical incentives to serve the society, we expect such managers to engage in CSR activities even if they may not have an intention to hide earnings management. To solve this puzzle, we choose firms with superior CSR performance which are ranked as the best corporate citizens by CR magazine each year in the study period and compare their financial reporting quality with other S&P 500 listed firms. Therefore, we argue that firms with superior CSR performance have less incentives to engage in earnings management activities (lower quality of financial reporting) and hence will have higher quality of financial reporting. Our first hypothesis (in alternative form) is:

Hypothesis 1. *Superior CSR performance is associated with a higher quality of financial reporting.*

2.2. CSR and Value Relevance of Financial Reporting

Prior studies have used various measures of earnings quality. One stream of the measures is the earnings metrics used in the first section of this study. The other stream of measures uses the market metrics reflected for earnings. In particular, Dhaliwal et al. [32] found that the earnings response coefficients are higher for firms with CSR activities. However, the market metric of earnings used in this study is different from what the authors of [33] used in their study. We follow the way the authors of [34] developed in their studies, which captures the perception of investors on earnings.

Prior empirical evidence on the relationship between CSR and a firm's value are mixed. The supporters of positive relationship are the authors of [9,10], who find a positive relationship between CSR disclosure, measured by voluntary carbon emission disclosure, and stock return. There were positive relationships found between CSR performance and firms' bond price or yield spread [17] and stock return [18]. When high-profile misconduct occurs, firms that issue CSR reports are documented to experience less negative loss from their stock prices compared those who do not issue CSR reports [35]. CSR performances are also negatively related to business risk [20,21], information asymmetry [20], cost of debt [21], cost of equity capital [22] and analyst forecast error [23]. These findings suggest that CSR activities may strengthen firms' reputations, which may help them reduce information asymmetry related to their stakeholders and thereby reduce their costs and risks and improve shareholders' values.

On the other hand, [11] have found negative relationship between CSR performances and stock returns, supporting the claim that management may engage in CSR activities to serve the interests of stakeholders at the expense of the shareholders. There are also studies that present no or mixed relationships. For example, based on international evidence, [24] found a consistent positive relationship holds only in the long run and, therefore, short-term stock returns are not related to CSR except for European firms. The authors of [25] found that the firms forced to spend money on CSR activities experience a 4.1% drop in their stock prices. The work [12] found no relationship between CSR and risk-adjusted stock return. Finally, [26] argued that only the deviant components of CSR expenditures are related to size-adjusted future stock returns.

We test the relationship between earnings response coefficient (ERC) and CSR performance to see whether CSR rankings enhance the value relevance of earnings in the future stock price or return. The assumption is that if investors consider CSR performance as a value relevant activity (for example, increasing earnings quality), they will give more weight for earnings reported by the best CSR ranking firms than others. However, because of inconsistency in prior studies on the relationship between CSR and firm value, we cannot set a directional hypothesis. We, therefore, empirically test the following null hypothesis:

Hypothesis 2. *CSR performance is not associated with value relevance of financial reporting.*

3. Research Design

3.1. Empirical Model

Our first proxy of financial reporting quality is the accrual quality (AQ) measure initially proposed by [27] and modified by [36], which they define as “the quality of accruals as the extent to which they map into past, current, and future cash flow”. The model by [27] views the matching function of accruals to cash flows as being of primary importance because accruals anticipate future collections and payments of cash and the transactions are reversed when the cash is received or paid. In this way, the quality of earnings is poor when there is a mismatch between accruals and cash due to managers’ discretions. AQ is the firm-level standard deviation of five-year residuals (from $t-4$ to t) from the following regression (higher AQ denotes lower accrual (financial reporting) quality):

$$\Delta WC_t = \alpha + \alpha_1 CFO_{t-1} + \alpha_2 CFO_t + \alpha_3 CFO_{t+1} + \alpha_4 \Delta REV_t + \alpha_5 PPE_t + \varepsilon_{it} \quad (1)$$

where ΔWC_{it} is change in working capital measured by the difference between the current and prior year working capital divided by beginning total assets. CFO_{t-1} , CFO_t and CFO_{t+1} are prior, current and one-year ahead operating cash flows, respectively. ΔREV is the change in revenues, PPE is property, plant and equipment, and all variables are scaled by beginning total assets. Consistent with prior studies, the regression controls for firm and year effects are used.

We estimated the following regression model to measure the relationship between CSR and absolute discretionary accruals:

$$\begin{aligned} AQ_{it} = & \alpha + \beta_1 CSR_{it} / CSR_best_{it} + \beta_2 LNTA_{it} + \beta_3 LNMVE_{it} + \\ & \beta_4 EMPLOY_{it} + \beta_5 INVREC_{it} + \beta_6 MTB_{it} + \beta_7 LEV_{it} + \beta_8 \Delta Q_{it} + \\ & \beta_9 TURN_{it} + \beta_{10} ROA_{it} + \beta_{11} LOSS_{it} + \beta_{12} LAGLOSS_{it} + \beta_{13} BIG4_{it} + \\ & \beta_{14} STDCFO + \beta_{15} STDSALES + \text{Year and Industry Dummies} + \varepsilon_{it} \end{aligned} \quad (2)$$

where AQ_{it} is accrual quality as measured by the standard deviation of the residual from Equation (1). The subscripts i and t refer to a specific firm and year which the observation belongs to, respectively. We use CSR to test H1. CSR is a dummy coded one if the firm is listed in the 100 best citizens of year t by Corporate Responsibility (CR) Magazine, otherwise it is zero. CSR_best is a dummy coded one if the firm has appeared in the CR 100 best citizens ranking list for more than 50% of the cases in the study period (eight or more times in fifteen years period), otherwise it is zero. CSR_best is added for the sensitivity analysis. We believe this variable to show the extent to which the firm is engaged in consistent CSR activities. With these two categories, we believe that we are able to test our first hypothesis, which captures the effects of CSR performance in a certain period on the quality of financial reporting. LNTA is measured as the log of total assets. LNMVE is a natural logarithm of market value of equity where market value of equity is estimated by multiplying the number of shares outstanding by stock price at fiscal year-end. EMPLOY is squared root of total employees of a firm. INVREC is the product of total inventories and receivables of a firm divided by beginning total assets. MTB is market-to-book ratio, measured as the market value of common equity divided by the book value of common equity. LEV is leverage, measured as total liabilities divided by common equity. ΔQ is change in equity issuance, measured as the annual percentage change in common equity from previous year to current year. TURN is turnover, measured as sales divided by total assets. ROA is return on assets, measured as income before extraordinary items divided by beginning total assets. LOSS and LAGLOSS are dummies coded one if the firm reported loss in the current and prior year, respectively, otherwise they are zero. BIG4_{it} is a dummy coded one if the firm is audited by one of the big four audit firms during the year, otherwise it is zero. STDCFO and STDSALES are the standard deviation of cash flow from operations and sales (divided by beginning total assets), respectively, over years $t-4$ to t . We control for year and industry effects. All variables are defined in the Appendix A.

In Equation (2), β_1 captures the impact of CSR on AQ. Higher/lower AQ denotes lower/higher financial reporting quality. If the CSR leads to less AQ or better financial reporting quality, we expect a negative and significant coefficient of β_1 for both CSR and CSR_best and positive or insignificant coefficient of β_1 for CSR_poor. If the CSR results in more AQ or worse financial reporting quality, we expect a positive and significant coefficient of β_1 for both CSR and CSR_best and negative or insignificant coefficient of β_1 for CSR_poor. We include several control variables in Equation (2) to control for other factors that may affect earnings quality and/or CSR. LNTA, LNMVE and EMPLOY are metrics for size. The authors of [27] indicate that large firms may have higher earnings quality and [37] found a positive relationship between firm size and CSR. INVREC is included to control for complexity of a business. We expect complex businesses to have low financial reporting quality because of the time limitation they create to accountants and auditors to identify and correct possible misstatements. The MBR (market-to-book ratio) reflects firm's growth [38]. High-growth firms may have more accruals or lower financial reporting quality [39]. Highly leveraged (LEV) firms may have high financial reporting quality [40]. Firms issuing new securities (ΔQ) have incentives to engage in income-increasing earnings management [41]. High asset turnover (TURN) may predict the existence of accounting fraud and hence lower financial reporting quality [42]. Higher return on assets (ROA) are negatively related to earnings quality [38]. Frequently reported negative earnings are related to lower earnings quality [27] and, therefore, we predict a negative relationship for LOSS and LAGLOSS. Firms audited by BIG4 auditors have higher earnings quality [43]. STDCFO and STDSALES measure volatility of operating cash flows and sales revenues which prior studies show to be negatively related to earnings quality [27]. We also include year and industry (we use an industry classification equivalent to Compustat's one-digit SIC) dummies in the regression to control for time and cross-sectional correlations.

Our second model includes a market-based measure, that is, a long-window earnings response coefficient which captures the decision usefulness (value relevance) of financial reporting [18]. The study [18] developed the following model with EPS and change in EPS to fully capture information contents of earnings throughout any given year. By including CSR, we estimate a regression model as follows:

$$\begin{aligned} \text{RET}_{it+1} = & \alpha + \beta_1 \text{EPS}_{it} + \beta_2 \Delta \text{EPS}_{it} + \beta_3 \text{CSR}_{it} + \beta_4 \text{EPS}_{it} \times \text{CSR}_{it} + \beta_5 \Delta \text{EPS}_{it} \times \text{CSR}_{it} \\ & + \text{Year and Industry Dummies} + \varepsilon_{it} \end{aligned} \quad (3)$$

where RET_{it+1} is one-year buy-and-hold stock return over the next $t+1$ fiscal accounting year. EPS_{it} and ΔEPS_{it} are annual earnings per share and the change in earnings per share (both divided by beginning market value of equity). Earnings per share is measured as net income before extraordinary items and discontinued operations divided by the number of common stock shares outstanding. As the coefficients of the interaction, β_4 and β_5 represent the effect of the CSR on earnings response coefficient, positive (negative) and significant coefficients are expected if the CSR leads to higher (lower) earnings quality. All variables are defined in Appendix A.

3.2. Sample and Data

Our initial sample consists of the Standard & Poor's 500 (S&P 500) firms for which all the necessary accounting, price and audit related data are available on Thomson Reuters Eikon for the years 2001 through 2014. S&P 500 consists of the 500 largest American firms based on market capitalizations. We use publicly available CSR data from Corporate Responsibility Magazine (CR) which publishes 100 best corporate citizens ranking list since 2000 based on data collected from company websites, sustainability reports and annual reports. Since we limit our sample into S&P 500 companies with other data restrictions, we were able to collect only 281 firm-year observations between 2005 and 2014 (AQ sample) and 307 firm-year observations between 2001 and 2014 (full sample).

CR uses seven broad categories: environment, climate change, employee relations, human rights, corporate governance, financial performance and, philanthropy and community support. These seven

categories have been used by CR magazine since 2001 and encompass 260 data elements. Our initial sample starts from 2001 because CR used only three of the seven broad categories in 2000. Since our empirical tests require five years of data to calculate AQ, our final sample ranges from 2005 to 2014. However, results for our third hypothesis and additional tests are presented using the full sample which starts from 2001. We exclude financial institutions and observations with missing data for any of the variables. Our total firm-year observations are 2329 for AQ sample and 3173 for the full sample. Because the estimation model of AQ requires the standard deviation of a 5-year period, the AQ sample has only 2329 firm-year observations with 281 CSR observations. The sample sizes vary with the individual test model because of data restrictions and further procedures for the estimations. We winsorize continuous variables at one percent and ninety-nine percent levels to eliminate the influence of outliers.

4. Results

4.1. Descriptive Statistics

Table 1 compares descriptive statistics of variables between non-CSR and CSR firms. The CSR observations contain 281 of a total 2329 sample observations (12.06 percent). The magnitude of AQ is larger for non-CSR firms relative to CSR firms (mean AQ of 0.037 for the non-CSR firms and 0.029 for CSR firms). The last column of the table shows that the mean difference in AQ between non-CSR and CSR firms is statistically significant at less than 0.01 significance level with the CSR firms having lesser AQ or a better accrual quality on average. There is no statistically significant difference between non-CSR and CSR firms in sales turnover, the extent of using Big4 auditors, cash flow and sales volatility and current or future stock return. Mean values of control variables also indicate that CSR firms are larger but less complex, show higher growth, have better operating cash flows and accounting earnings performance, have lower leverage, and are less likely to issue new equities than non-CSR firms.

Table 1. Descriptive statistics.

Variable	Non-CSR Observations				CSR Observations				Difference
	Min.	Max.	Mean (A)	Std. Dev.	Min.	Max.	Mean (B)	Std. Dev.	A-B
AQ	0.0042	0.2155	0.0372	0.0345	0.0042	0.1437	0.0293	0.0202	0.0090 ***
LNTA	4.7687	12.509	8.6858	1.2592	6.3272	12.334	9.5705	1.1296	−0.8848 ***
LNME	5.8799	12.365	8.9919	1.1850	7.5894	12.263	10.1051	1.1456	−1.1132 ***
EMPLOY	0.6356	18.974	5.1981	3.5636	1.2649	18.862	7.2205	3.8333	−2.0224 ***
INVREC	0.0111	0.706	0.2263	0.1310	0.0228	0.4722	0.1994	0.0972	0.0268 ***
MTB	0.5174	76.49	3.8001	3.3432	1.0103	17.824	4.3211	2.6122	−0.521 **
CFO	−0.064	0.4086	0.1413	0.0704	0.0184	0.3553	0.1687	0.0670	−0.0274 ***
LEVE	0.0744	0.9562	0.5210	0.1683	0.1401	0.9143	0.4976	0.1707	0.0234 *
ΔQ	−0.4955	0.9491	0.0620	0.1118	−0.301	0.8539	0.0465	0.1117	0.0155 *
TURN	0.1381	3.7685	0.9817	0.6396	0.2345	3.1371	0.9544	0.4420	0.0273
ROA	−0.2254	0.2285	0.0693	0.0556	−0.08	0.2179	0.0941	0.0509	−0.0248 ***
LOSS	0	1	0.0814	0.2735	0	1	0.0357	0.1859	0.0457 **
LAGLOSS	0	1	0.0915	0.2884	0	1	0.0401	0.1968	0.0513 ***
BIG4	0	1	0.2217	0.4155	0	1	0.1875	0.3911	0.0343
STDCFO	0.0012	0.1829	0.0336	0.0253	0.0021	0.1766	0.0363	0.0269	−0.0026
STDSALES	0.0049	1.1336	0.1218	0.1182	0.0153	0.6478	0.1157	0.0923	0.0061
EPS	−0.321	0.1653	0.0432	0.0466	−0.124	0.1506	0.0517	0.031	−0.0085 ***
RET	−0.0394	0.0529	0.0001	0.0045	−0.019	0.0105	−0.0000	0.0021	0.0001
RET _{t+1}			−0.0000	0.0042	−0.019	0.0095	0.0000	0.0019	−0.0085
Number of Observations	2048				281				

***, **, * indicate two-tailed *t*-test statistical significance if there is a mean difference between non-CSR and CSR observations at 0.01, 0.05, and 0.10 significant levels, respectively. Out of total 2329 observations, 281 observations represent the CSR sample. All the variables are defined in the Appendix A. CSR: corporate social responsibility.

4.2. Correlation Analysis

Table 2 presents Pearson correlation coefficients. CSR ranking is negatively correlated with AQ and is not associated with current or future stock return. CSR is also correlated positively with firm size (LNTA, LNMVE and EMPLOY), growth (MTB) and accounting earning (ROA and EPS) and negatively with firm complexity (INVREC), leverage (LEVE) and prior loss (LAGLOSS). CSR ranking is not correlated with turnover (TURN), current loss (LOSS) and Big four auditors (BIG4), cash flow volatility (STDCFO) and sales volatility (STDSALES). These two tables preliminarily (at univariate level) suggest that CSR firms have better accrual quality compared to their less responsible counterparts, but CSR rankings might not have value relevance to the shareholders.

Table 2. Pearson correlations among selective variables.

Variables	CSR	AQ
CSR		−0.09 ***
AQ	−0.09 ***	
LNTA	0.22 ***	−0.27 ***
LNMVE	0.29 ***	−0.21 ***
EMPLOY	0.18 ***	−0.14 ***
INVREC	−0.07 ***	0.3 ***
MTB	0.03 *	0.03
LEVE	−0.05 *	−0.11 ***
ΔQ	−0.04 **	0.15 ***
TURN	−0.01	0.12 ***
ROA	0.14 ***	0.02
LOSS	−0.05	0.03
LOSSLAG	−0.06 **	−0.02
BIG4	−0.03	0.05 **
STDCFO	0.03	0.42 ***
STDSALES	−0.02	0.34 ***
EPS	0.06 *	−0.04 *
RET	−0.01	−0.01
RET _{t+1}	0.01	−0.04 *

***, **, * indicate the statistical significance of the Pearson's correlation coefficient at 0.01, 0.05, and 0.10 significant levels, respectively. All the variables are defined in the Appendix A.

4.3. Main Results of Regression

4.3.1. CSR and Financial Reporting Quality

Panels A, B and C of Table 3 report the results of multiple regression analyses of AQ and CSR, CSR_best respectively. As noted earlier, the dependent variable of CSR_best is a supplement test for robustness. The t-statistics and significance levels presented are based on the standard errors adjusted by a two-dimensional cluster at the industry and year levels. As can be seen in Panel A and B, the coefficient estimates of CSR and CSR_best are negative and significant at the 0.05 level (two-tailed) in the regressions where AQ is a dependent variable. Since negative coefficients suggest firms manage earnings less through accruals, the results indicate that CSR firms have a better financial reporting quality proxied by Dechow and Dichev's accrual quality measure. This result supports our H1 that good corporate citizens have more desirable financial reporting quality than those less socially responsible. The extent to which CSR ranking is related to AQ is stronger for CSR_best. Consistent with prior studies, we find that firm size (measured by log of total assets) and big four auditors are positively related to earning quality and firm complexity, growth, new equity issuance, cash flow volatility and sales volatility are negatively related. However, we found a positive association between earnings quality and sales turnover and return on asset in contradiction to our predictions.

Table 3. Regression results: CSR and accrual quality (AQ).

Variable	Predicted Sign	Panel A (DV = AQ)		Panel B (DV = AQ)	
		Estimate	t-Value	Estimate	t-Value
CSR	—	−0.0038	−2.13 **		
CSR_best	—			−0.0057	−2.49 **
LNTA	—	−0.0031	−2.48 **	−0.0032	−2.52 **
LNMBVE	—	0.0009	0.72	0.0010	0.8
EMPLOY	—	−0.0000	−0.15	−0.0000	−0.09
INVREC	+	0.0613	11.05 ***	0.0620	11.17 ***
MTB	+	0.0008	5.72 ***	0.0008	5.71 ***
LEVE	+	0.0006	0.14	0.0006	0.15
ΔQ	+	0.0129	2.73 **	0.0129	2.74 **
TURN	+	−0.0112	−8.24 ***	−0.0114	−8.31 ***
ROA	+	−0.0573	−4.38 ***	−0.0577	−4.42 ***
LOSS	+	−0.0034	−1.32	−0.0035	−1.32
LOSSLAG	+	−0.0026	−1.3	−0.0027	−1.31
BIG4	—	−0.0026	−1.92 **	−0.0026	−1.9 *
STDCFO	+	0.2797	13.06 ***	0.2794	13.06 ***
STDSALES	+	0.0847	14.5 ***	0.0846	14.5 ***
Constant		0.0338	5.37 ***	0.0332	5.26 ***
Industry and year fixed effects			YES	YES	
Number of Observations			2329	2329	
Adj-R ²			0.36	0.36	

***, **, * indicate the regression coefficient's statistical significance at 0.01, 0.05, and 0.10 significant levels, respectively. This table presents the regression results of the relationship between CSR and earnings quality measured by AQ. The t-value provided is a two-tailed t-statistics. Since higher AQ values show lower earning qualities (and vice versa), negative coefficients indicate a positive relationship and positive coefficients indicate a negative relationship with earnings quality. All the variables are defined in the Appendix A.

4.3.2. CSR and Investors' Perception of Financial Reporting

Panels A and B of Table 4 report the results of multiple regression analyses of RET_{t+1} and CSR and CSR_best. The results show no statistically significant coefficient of either CSR or CSR_best (i.e., β_3), indicating no relationship between CSR performance and investors' perception on earnings. In addition, in both regressions, the estimated coefficients of the interaction terms between CSR and earnings per share and changes in earnings per share (i.e., β_4 and β_5) are not significant. These non-significant coefficients indicate that CSR performance do not have statistically significant value relevance. (The non-significant coefficient of the interaction terms (β_4 and β_5) can be statistically interpreted as CSR rankings do not moderate (strengthen or weaken) the relationship between current accounting income and future stock return.) These also do not increase the value relevance of earnings in the stock market. In summary, regression results from Tables 3 and 4 support the notion that CSR firms are less likely to manage their earnings using accruals and, therefore, have higher financial reporting quality, but there is no statistically significant evidence to claim that investors give more weight for the earnings of these firms or pay more for the stocks of these firms. Thus, we interpret the evidence as investors not fully reflecting the characteristics of financial reporting from socially responsible firms.

Table 4. Regression results: CSR and earnings response coefficient.

	Panel A (DV = RET _{t+1})		Panel B (DV = RET _{t+1})	
Variable	Estimate	t-Value	Estimate	t-Value
EPS	−0.0047	−1.74 *	−0.0044	−1.66 *
ΔEPS	0.0099	4.16 ***	0.0094	4.05 ***
CSR	−0.0000	0.08		
CSR_best			0.0001	0.15
CSR×EPS	0.0033	0.56		
CSR×ΔEPS	−0.0049	−1.1		
CSR best×EPS			0.0025	0.22
CSR best×ΔEPS			−0.0051	−0.55
Intercept	−0.0000	−0.14	−0.0000	−0.2
Industry and year fixed effects		YES		YES
Number of Observations		3173		3173
Adj-R ²		0.0056		0.0052

***, **, * indicate the regression coefficient's statistical significance at 0.01, 0.05, and 0.10 significant levels, respectively. This table presents the regression results of the relationship between CSR and earnings value relevance measured by ERC. The *t*-value provided is a two-tailed *t*-statistics. All the variables are defined in the Appendix A.

5. Additional Tests

5.1. CSR and Discretionary Accrual

In this study, we examined the association between corporate social responsibility ranking of firms and financial reporting quality measured by accrual quality using the approach of [27]. However, despite the claim that AQ captures both discretionary accruals and unintentional accruals [28], the modified Jone's model for discretionary accruals is the most widely used measure of financial reporting quality. Therefore, we replicated our analysis in Equation (2) using the performance-adjusted cross-sectional variation of the modified Jones model, proposed by [44], as presented below:

$$\begin{aligned} TAC_{it}/TA_{it-1} = & \alpha + \alpha_1 1/TA_{it-1} + \alpha_2 \Delta REV_{it} - \Delta REC_{it} / TA_{it-1} + \alpha_3 PPE_{it} / TA_{it-1} \\ & + IBEL_{it} / TA_{it-1} + \varepsilon_{it} \end{aligned} \quad (4)$$

where TAC_{it} is total accrual measured as the difference between earnings before extraordinary items and discontinued operations and cash flow from operations. TA_{it-1} is total assets at the beginning of the year. ΔREV_{it} and ΔREC_{it} are changes in revenues and receivables between year $t-1$ and year t , respectively. PPE_{it} is gross property, plant, and equipment. $IBEL_{it}$ is income before extraordinary items. All variables are defined in Appendix A.

After estimating parameters in Equation (4), we use the value of the residuals (i.e., discretionary accruals or DA) as a measure of financial reporting quality. We re-estimate the regression model in Equation (2) to measure the relationship between CSR and earnings quality by replacing the independent variable with DA. As can be seen in Panel A and B of Table 5 (we find a similar result when we estimate the regression for AQ sample only with less observations), the coefficient estimates of CSR and CSR_best were negative and significant at the 0.05 level (two-tailed), which supports our earlier finding that CSR firms have a better financial reporting quality proxied by modified Jone's discretionary accrual measure. Consistent with AQ, the extent to which CSR ranking is related to DA is also stronger for CSR_best.

Table 5. Regression results: CSR and discretionary accrual (DA).

	Panel A (DV = DA)		Panel B (DV = DA)	
Variable	Estimate	t-Value	Estimate	t-Value
CSR	−0.0090	−2.31 **		
CSR best			−0.0151	−3.03 **
LNTA	0.0171	6.95 ***	0.0170	6.91 ***
LN MVE	−0.0182	−7.4 ***	−0.0180	−7.31 ***
EMPLOY	0.0009	2.33 **	0.0010	2.41 **
INVREC	0.1268	12.7 ***	0.1280	12.83 ***
MTB	−0.0012	−3.96 ***	−0.0012	−3.99 ***
LEVE	0.0264	2.93 **	0.0264	2.93 **
ΔQ	−0.0162	−1.82 *	−0.0164	−1.84 *
TURN	−0.0197	−7.95 ***	−0.0199	−8.04 ***
ROA	0.1167	4.61 ***	0.1164	4.61 ***
LOSS	−0.0125	−2.52 **	−0.0124	−2.51 **
LOSSLAG	0.0230	5.8 ***	0.0229	5.78 ***
BIG4	−0.0098	−3.49 ***	−0.0098	−3.48 ***
STDCFO	−0.1985	−5.04 ***	−0.1985	−5.04 ***
STDSALES	0.0114	1.25	0.0151	1.25
Constant	−0.012	−1.04	−0.0133	−1.15
Industry and Year fixed effects		YES		YES
Number of Observations		3173		3173
Adj-R ²		0.16		0.16

***, **, * indicate the regression coefficient's statistical significance at 0.01, 0.05, and 0.10 significant levels, respectively. This table presents the regression results of the relationship between CSR and earnings quality measured by DA. The *t*-value provided is a two-tailed *t*-statistics. Since higher DA values show lower earning qualities (and vice versa), negative coefficients indicate a positive relationship and positive coefficients indicate a negative relationship with earnings quality. All the variables are defined in the Appendix A.

5.2. CSR and Real Earnings Management

We used financial reporting quality metrics related to accounting based manipulation of earnings. However, managers may engage in real activities manipulation (price discount) to meet or beat an income target [45]. Following [45], we first estimated three individual real activities manipulation proxies and then used the combined measures of real activities manipulation for our main analysis. The three individual proxies were abnormal cash flow from operations (Abn_CFO), abnormal production costs (Abn_PROD) and abnormal discretionary expenses which are the values of the residuals from the following three equations, respectively:

$$\text{CFO}_{it}/\text{TA}_{it-1} = \alpha + \alpha_1 1/\text{TA}_{it-1} + \alpha_2 \Delta \text{REV}_{it} + \alpha_3 \Delta \text{REC}_{it}/\text{TA}_{it-1} + \varepsilon_{it} \quad (5)$$

$$\text{PROD}_{it}/\text{TA}_{it-1} = \alpha + \alpha_1 1/\text{TA}_{it-1} + \alpha_2 \Delta \text{REV}_{it} + \alpha_3 \Delta \text{REC}_{it}/\text{TA}_{it-1} + \alpha_4 \Delta \text{REC}_{it-1}/\text{TA}_{it-1} + \varepsilon_{it} \quad (6)$$

$$\text{DISX}_{it}/\text{TA}_{it-1} = \alpha + \alpha_1 1/\text{TA}_{it-1} + \alpha_2 \Delta \text{REC}_{it-1}/\text{TA}_{it-1} + \varepsilon_{it} \quad (7)$$

where CFO_{it} is firm's operating cash flows, TA_{it-1} is total assets at the beginning of the year, ΔREV_{it} and ΔREC_{it} are changes in revenues and receivables between year $t-1$ and year t , respectively, ΔREC_{it-1} is prior year change in receivables, PROD_{it} is total production cost (cost of goods sold + change in inventories), and DISX_{it} is total discretionary expenses (advertising expenses + research and development expenses + selling and general administrative expenses).

After estimating parameters in Equations (5)–(7), we used the value of the residuals as a measure of individual-level real earnings management. Following [14], we calculated combined real earnings management (REM) as is calculated as $\text{Abn_CFO} - \text{Abn_PROD} + \text{Abn_DISX}$. Replacing the independent variable with REM, we re-estimated the regression model in Equation 2 to measure the relationship between CSR and financial reporting quality. As can be seen in Panels A and B of

Table 6 (regression results in Panel A and B of the table are for the full sample, i.e., from 2001 through 2014, and for the AQ sample, i.e., from 2005 through 2014, respectively), the coefficient estimates of CSR_best is positive and significant at the 0.05 level (two-tailed), which supports our earlier finding that CSR firms have a better earning quality. We also found consistent results when we used CSR (not tabulated) in our regression model. Due to the discrepancy in sample sizes, we report our results based on two groups of the sample, including the full sample and only AQ sample previously used. To sum up, CSR firms are less engaged in accruals and real activities manipulations and have a better earnings quality than others.

Table 6. Regression results: CSR and real earnings management (REM).

Variable	Panel A: Full Sample (DV = REM)		Panel B: AQ Sample (DV = REM)	
	Estimate	t-Value	Estimate	t-Value
CSR_best	0.0892	2.83 **	0.0945	3.12 **
LNTA	−0.2188	−13.96 ***	−0.2780	−16.59 ***
LNME	0.1848	11.83 ***	0.2152	12.53 ***
EMPLOY	0.0157	5.86 ***	0.0214	7.31 ***
INVREC	0.3079	4.84 ***	0.2512	3.42 ***
MTB	0.0110	5.71 ***	0.0065	3.36 ***
LEVE	−0.2349	−4.08 ***	−0.1696	−2.82 **
ΔQ	0.1264	2.22 **	0.0887	1.41
TURN	−0.1845	−11.68 ***	−0.1903	−10.48 ***
ROA	0.9462	12.08 ***	0.9661	10.21 ***
LOSS	0.1405	4.4 ***	0.1183	3.39 ***
LOSSLAG	−0.0292	−1.15	−0.0197	−0.74
BIG4	0.0489	2.74 **	0.0421	2.33 **
STDCFO	0.8642	3.43 ***	0.4805	1.7 *
STDSALES	−0.10186	−1.72 *	−0.0340	−0.44
Constant	0.18580	2.5 **	0.4321	5.16 ***
Industry and year fixed effects		YES		YES
Number of Observations		3171		2327
Adj-R ²		0.38		0.39

***, **, * indicate the regression coefficient's statistical significance at 0.01, 0.05, and 0.10 significant levels, respectively. This table presents the regression results of the relationship between CSR and earnings quality measured by REM. The t-value provided is a two-tailed t-statistics. Higher REM values show higher earning qualities. All the variables are defined in the Appendix A.

6. Conclusions

In this study, we examine the association between corporate social responsibility performance of S&P 500 firms and financial reporting quality and value relevance of financial reporting. After controlling for various potentially confounding factors, we found that CSR performance is significantly negatively associated with the accrual quality metric of [27], and hence positively related to financial reporting quality. Our additional tests also supported our main findings and we documented significantly negative (positive) association between CSR performance and discretionary accruals (real earnings management). On the other hand, we found no significant association between CSR performance and earnings response coefficient and one-year ahead stock return. This indicates that firms' CSR performance is not related to firm value. Even if the firms performing better in CSR may have a better financial reporting quality, the shareholders do not price CSR and do not consider it a value relevant activity. This may be because firms' CSR engagement is related to ethical management rather than shareholders' value maximization.

Our results are consistent with the scholarly recommendations for viewing CSR as being motivated by needs or demands of a broader set of stakeholders and managers' ethical incentives to serve the interests of stakeholders as opposed to the perspective that firms only engage in CSR activities that maximize shareholder values [1,14]. The management's ethical incentive perspective [14] makes sense

since CSR firms are less likely subject to SEC investigations of GAAP violations. Firms' engagement in CSR activities may emanate from ethical managers' desire to serve the larger stakeholders and such managers may also be less likely to manipulate earnings using accruals or real activities. Therefore, CSR firms are more likely to have better financial reporting quality and transparent financial reporting. Finally, our results indicate that CSR performance is not related to shareholders' (firm) value, but the manager's ethical behavior may be positively related to both CSR performance and financial reporting quality.

Besides its valuable contributions, we realize that our study has limitations and there are related issues requiring further research. To start with, our sample of S&P 500 firms may limit the generalizability of our findings to only large firms. However, we believe our sample selection is reasonable because these firms comprise the majority of the US businesses in terms of market capitalization. Second, besides our use of unique CSR data from prior studies, the reliability of our CSR metrics depend on the extent to which CR magazine collects and uses CSR data for ranking firms. Since CR uses many (260) indicators for the seven CSR dimensions it measures, we hope the measurement errors to be minimum. Third, our results do not provide empirical evidence on the proposition that the relationship between CSR performance and financial reporting quality is affected by managers' ethical incentives. Thus, future studies may explore how managers' ethical behavior affects the relationship between CSR performance and financial reporting quality and if managers' CSR engagement may lead to agency conflicts with the shareholders.

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

Appendix A. Definition of Variables

Table A1. Definition of Variables.

Dependent Variables	
AQ	Accrual Quality, firm-level standard deviation of five-year residuals from regression model matching current accruals with past, present and future cash flows (where revenues and Property, Plant and Equipment included)
DA	Discretionary Accrual, measured using the performance-adjusted cross-sectional variation of the modified Jones model.
REM	Combined Real Earnings Management, equal to the sum of individual real activities manipulation proxies, measured as $Ann_CFO - Abn_PROD + AB_EXP$.
RET_{t+1}	Return at $t + 1$, one year ahead buy-and-hold returns measured by the firm's stock price at time $t + 1$ minus stock price at time t .
Independent Variables	
CSR	An indicator variable coded one if the firm is listed in the 100 best citizens at a given year by Corporate Responsibility (CR) Magazine, zero otherwise.
CSR_best	An indicator variable coded one if the firm is appeared in the CR 100 best citizens ranking list for more than 50% of the cases in the study period (eight or more times in fifteen years period), zero otherwise.
CSR_poor	An indicator variable coded one if the firm is never listed in the CR 100 best citizens ranking in the study period (zero appearance in fifteen years period), zero otherwise.
EPS/ Δ EPS	Earnings Per Share/Change in Earnings Per Share, both divided by beginning market value of equity.

Table A1. Definition of Variables.

Control Variables	
LNTA	Natural logarithm of the total assets.
LNMVE	Natural logarithm of the total market value of equity.
EMPLOY	The squared root of total number of employees.
MTB	Market to Book Ratio, measured by dividing market value of equity to its book value of equity.
LEVE	Leverage, equal to total liabilities scaled by total assets.
ΔQ_{it}	Change in Equity Issuance, measured as the annual percentage change in common equity from previous year to current year.
TURN	Turnover, measured as sales divided by total assets.
ROA	Return on Assets, measured as income before extraordinary items divided by beginning total assets.
LOSS	An indicator variable coded one if the firm reported loss in the current year, zero otherwise.
LAGLOSS	An indicator variable coded one if the firm reported loss in the prior year, zero otherwise.
BIG4	An indicator variable coded one if the firm is audited by one of the big four audit firms during the year, zero otherwise.
STDCFO	Cash Flow Volatility, measured as the standard deviation of cash flow from operations (divided beginning total assets), over five years from $t - 4$ to t .
STDSALES	Sales Flow Volatility, measured as the standard deviation of sales (divided by beginning total assets), over five years from $t - 4$ to t .

References

1. Moser, D.V.; Martin, P.R. A Broader Perspective on Corporate Social Responsibility Research in Accounting. *Account. Rev.* **2012**, *87*, 797–806. [\[CrossRef\]](#)
2. Huang, X.; Watson, L. Corporate social responsibility research in accounting. *J. Account. Lit.* **2015**, *34*, 1–16. [\[CrossRef\]](#)
3. Aupperle, K.E.; Carroll, A.B.; Hatfield, J.D. An Empirical Examination of the Relationship between Corporate Social Responsibility and Profitability. *AMJ* **1985**, *28*, 446–463. [\[CrossRef\]](#)
4. Ullmann, A.A. Data in Search of a Theory: A Critical Examination of the Relationships among Social Performance, Social Disclosure, and Economic Performance of U.S. Firms. *AMJ* **1985**, *10*, 540–557. [\[CrossRef\]](#)
5. Moskowitz, M. Choosing Socially Responsible Stocks. *Bus. Soc. Rev.* **1972**, *1*, 71–75.
6. Alexander, G.J.; Buchholz, R.A. Research Notes. Corporate Social Responsibility and Stock Market Performance. *AMJ* **1978**, *21*, 479–486. [\[CrossRef\]](#)
7. Manrique, S.; Carmen-Pilar, M. Analyzing the Effect of Corporate Environmental Performance on Corporate Financial Performance in Developed and Developing Countries. *Sustainability* **2017**, *9*, 1957. [\[CrossRef\]](#)
8. Carini, C.; Nicola, C.; Laura, P.; Sergio, V. Measure the Performance with the Market Value Added: Evidence from CSR Companies. *Sustainability* **2017**, *9*, 2171. [\[CrossRef\]](#)
9. Griffin, P.A.; Sun, Y. Going green: Market reaction to CSRwire news releases. *J. Account. Public Policy* **2013**, *32*, 93–113. [\[CrossRef\]](#)
10. Loh, L.; Thomas, T.; Yu, W. Sustainability Reporting and Firm Value: Evidence from Singapore-Listed Companies. *Sustainability* **2017**, *9*, 2112. [\[CrossRef\]](#)
11. Krüger, P. Corporate goodness and shareholder wealth. *Soc. Sci. Electron. Publ.* **2015**, *115*, 304–329. [\[CrossRef\]](#)
12. Humphrey, J.E.; Lee, D.; Shen, Y. Does it cost to be sustainable? *J. Corp. Financ.* **2012**, *18*, 626–639. [\[CrossRef\]](#)
13. Kim, Y.; Park, M.S.; Wier, B. Is Earnings Quality Associated with Corporate Social Responsibility? *Account. Rev.* **2012**, *87*, 761–796. [\[CrossRef\]](#)
14. Lakshmana, I.; Yang, Y. Corporate citizenship and earnings attributes. *Adv. Acc.* **2009**, *25*, 40–48. [\[CrossRef\]](#)
15. Martinez-Ferrero, J.; Banerjee, S.; Garcia-Sanchez, I.M. Corporate social responsibility as a strategic shield against costs of earnings management practices. *J. Bus. Ethics* **2016**, *133*, 305–324. [\[CrossRef\]](#)

16. Coldwell, D.A.; Billsberry, J.; Van Meurs, N.; Marsh, P.J. The Effects of Person–Organization Ethical Fit on Employee Attraction and Retention: Towards a Testable Explanatory Model. *J. Bus. Ethic* **2007**, *78*, 611–622. [[CrossRef](#)]
17. Schneider, T.E. Is Environmental Performance a Determinant of Bond Pricing? Evidence from the U.S. Pulp and Paper and Chemical Industries*. *Contemp. Account. Res.* **2011**, *28*, 1537–1561. [[CrossRef](#)]
18. Luo, X.; Wang, H.; Raithel, S.; Zheng, Q. Corporate social performance, analyst stock recommendations, and firm future returns. *SMJ* **2014**, *36*, 123–136. [[CrossRef](#)]
19. Colle, S.; Henriques, A.; Sarasvathy, S. The Paradox of Corporate Social Responsibility Standards. *J. Bus. Ethic* **2013**, *125*, 177–191. [[CrossRef](#)]
20. Cho, S.Y.; Lee, C.; Pfeiffer, R.J. Corporate Social Responsibility Performance Information and Information Asymmetry. *J. Account. Public Policy* **2012**, *32*, 71–83. [[CrossRef](#)]
21. Ge, W.; Liu, M. Corporate social responsibility and the cost of corporate bonds. *J. Account. Public Policy* **2015**, *34*, 597–624. [[CrossRef](#)]
22. Dhaliwal, D.S.; Li, O.Z.; Tsang, A.; Yang, Y.G. Corporate social responsibility disclosure and the cost of equity capital: The roles of stakeholder orientation and financial transparency. *J. Account. Public Policy* **2014**, *33*, 328–355. [[CrossRef](#)]
23. Cao, Y.; Myers, J.N.; Myers, L.A.; Omer, T.C. Company reputation and the cost of equity capital. *Rev. Account. Stud.* **2014**, *20*, 42–81. [[CrossRef](#)]
24. Hill, R.P.; Ainscough, T.; Shank, T.; Manullang, D. Corporate Social Responsibility and Socially Responsible Investing: A Global Perspective. *J. Bus. Ethic* **2006**, *70*, 165–174. [[CrossRef](#)]
25. Manchiraju, H.; Rajgopal, S. Does corporate social responsibility (CSR) create shareholder value? Evidence from the Indian Companies Act 2013. *J. Account. Res.* **2017**, *55*, 1257–1300. [[CrossRef](#)]
26. Lys, T.; Naughton, J.P.; Wang, C. Signaling through corporate accountability reporting. *J. Account. Econ.* **2015**, *60*, 56–72. [[CrossRef](#)]
27. Dechow, P.M.; Dichev, I.D. The Quality of Accruals and Earnings: The Role of Accrual Estimation Errors. *Account. Rev.* **2002**, *77*, 35–59. [[CrossRef](#)]
28. Doyle, J.; Ge, W.; McVay, S. Accruals Quality and Internal Control over Financial Reporting. *Account. Rev.* **2007**, *82*, 1141–1170. [[CrossRef](#)]
29. Francis, J.; LaFond, R.; Olsson, P.M.; Schipper, K. Costs of Equity and Earnings Attributes. *Account. Rev.* **2004**, *79*, 967–1010. [[CrossRef](#)]
30. Gao, F.; Lisic, L.L.; Zhang, I.X. Commitment to social good and insider trading. *J. Account. Econ.* **2014**, *57*, 149–175. [[CrossRef](#)]
31. Jo, H.; Na, H. Does CSR Reduce Firm Risk? Evidence from Controversial Industry Sectors. *J. Bus. Ethic* **2012**, *110*, 441–456. [[CrossRef](#)]
32. Dhaliwal, D.S.; Li, O.Z.; Tsang, A.; Yang, Y.G. Voluntary Nonfinancial Disclosure and the Cost of Equity Capital: The Initiation of Corporate Social Responsibility Reporting. *Account. Rev.* **2011**, *86*, 59–100. [[CrossRef](#)]
33. Choi, H.J.; Moon, D.C. Perceptions of corporate social responsibility in the capital market. *J. Appl. Bus. Res.* **2016**, *32*, 1507–1518. [[CrossRef](#)]
34. Callen, J.L.; Khan, M.; Lu, H. Accounting Quality, Stock Price Delay, and Future Stock Returns*. *Contemp. Account. Res.* **2012**, *30*, 269–295. [[CrossRef](#)]
35. Christensen, D.M. Corporate Accountability Reporting and High-Profile Misconduct. *Account. Rev.* **2016**, *91*, 377–399. [[CrossRef](#)]
36. Francis, J.; LaFond, R.; Olsson, P.; Schipper, K. The market pricing of accruals quality. *J. Account. Econ.* **2005**, *39*, 295–327. [[CrossRef](#)]
37. Lindgreen, A.; Swaen, V.; Johnston, W.J. Corporate Social Responsibility: An Empirical Investigation of U.S. Organizations. *J. Bus. Ethic* **2008**, *85*, 303–323. [[CrossRef](#)]
38. Prawit, D.F.; Smoth, J.S.; Wood, A.W. Internal Audit Quality and Earnings Management. *Account. Rev.* **2009**, *84*, 1255–1280. [[CrossRef](#)]
39. Smith, C.W.; Watts, R.L. The investment opportunity set and corporate financing, dividend, and compensation policies. *J. Financ. Econ.* **1992**, *32*, 263–292. [[CrossRef](#)]
40. Frankel, R.M.; Johnson, M.; Nelson, K. The Relation between Auditors' Fees for Nonaudit Services and Earnings Management. *Account. Rev.* **2002**, *77*, 71–105. [[CrossRef](#)]

41. Shivakumar, L. Do firms mislead investors by overstating earnings before seasoned equity offerings? *J. Account. Econ.* **2000**, *29*, 339–371. [[CrossRef](#)]
42. Spathis, C.; Doumpos, M.; Zopounidis, C. Detecting falsified financial statements: A comparative study using multicriteria analysis and multivariate statistical techniques. *Eur. Account. Rev.* **2002**, *11*, 509–535. [[CrossRef](#)]
43. Choi, J.H.; Kim, J.; Zang, Y. Do Abnormally High Audit Fees Impair Audit Quality? *Auditing* **2010**, *29*, 115–140. [[CrossRef](#)]
44. Kothari, S.P.; Leone, A.; Wasley, C. Performance matched discretionary accrual measures. *J. Account. Econ.* **2005**, *39*, 163–197. [[CrossRef](#)]
45. Roychowdhury, S. Earnings management through real activities manipulation. *J. Account. Econ.* **2006**, *42*, 335–370. [[CrossRef](#)]



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