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Do Social Media Matter? Initial Empirical Evidence

Wei Jiang [a] and Hui Du [b]

[a] *Associate Professor • California State University, Fullerton*
[b] *Associate Professor • University of Houston, Clearlake*

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Center for Corporate Reporting and Governance
California State University, Fullerton
Department of Accounting
Fullerton, CA 92834-6848
Tel: (657) 278-4414
Email: ccrg@fullerton.edu

Association of Corporate Social Responsibility Performance and Earnings Management: Evidence from China

Abstract

This research examines the association of corporate social responsibility (CSR) performance and quality of financial reporting for a set of state owned (SOE) and non-state owned (NSOE) enterprises in China. We find that non-state-owned Chinese firms engaging in a higher level of CSR activities are associated with higher discretionary accruals and are more likely to report a small increase in earnings. These results are consistent with the private firms in China engaging in social responsibility practices based on opportunistic incentives and CSR disclosure being used by these firms as a window-dressing tool for earnings management. In further analysis, we find that audit firms charge higher audit fees for NSOEs receiving higher CSR ratings, consistent with auditors assessing earnings management risk associated with CSR reporting and incorporating it into their pricing decisions.

1. Introduction

We study the association of corporate social responsibility (CSR) performance and quality of financial reporting for a set of state owned (SOE) and non-state owned (NSOE) enterprises in China. Increase in CSR performance and disclosure has been found to improve the quality of financial reports, resulting in lower cost of equity capital (Dhaliwal et al. 2011) and improvement in analyst forecast accuracy (Dhaliwal et al. 2012). Kim et al. (2012) document that increase in CSR performance is negatively associated with earnings management, with ethical managers engaging in enhanced CSR activities and less earnings management. However, the CSR data in these studies was voluntarily disclosed, and as Moser and Martin (2012) state "can provide only limited insight regarding the consequences of mandatory disclosure of general or specific types of CSR data" (pp. 802)[1]. A subset of firms in China offers a unique opportunity to study the consequences of CSR data where the state mandates CSR initiatives and the stock exchanges mandate CSR disclosure.

The key driver of CSR in China is the state, which has over the years by laws and regulations required firms to initiate and report on CSR performance. In recent years, Chinese authorities have introduced several CSR initiatives and stock market regulators have issued guidelines for CSR reporting requirements on a subset of

[1] Moser and Martin (2012) suggest that this issue may be better addressed in experimental studies.

Chinese firms. The Company Law of the People's Republic of China (effective 2006) in Article 5 requires companies to comply with social morality, business morality, and bear social responsibility. In 2006 the Shanghai Stock exchange and Shenzhen Stock Exchange issued guidelines for CSR disclosure which in 2008 was made mandatory for a subset of listed firms. The results of prior studies that show that CSR disclosure provides additional information that can be beneficial to investors and that increase in CSR performance by a firm leads to constraints on earnings management (EM) may not be applicable to firms in China where the firms have been subject to mandatory reporting requirements. The question that arises therefore is whether mandatory CSR disclosures in China can reduce the incentives for managers to manage earnings.

Earnings management varies widely across countries and is highly correlated with a country's institutional characteristics (Leuz et al. 2003; Chih et al. 2008). Although the study by Leuz et al. (2003) did not include China, the institutional characteristics in China would most probably place it in the same cluster of countries that exhibited the highest incidence of earnings management. The observed common prevalence of earnings management in China has been attributed to the absence of a tradition of responsible corporate governance structures and a weak legal environment (Ding et al. 2007; Li et al. 2011; Yang et al. 2012). At the same time, the greater emphasis on the

interests of a broader spectrum of stakeholders in China and mandatory disclosure requirements can be expected to mitigate managements' incentives to manage earnings in a manner that may be harmful to the firm (Chen et al. 2012).

Our sample of firms is derived from a list issued by The *Social Sciences Academic Express* published by the CSR Research Center of Chinese Academy of Social Sciences (the "Center"), which compiles an annual CSR development index for the top 300 or so Chinese firms that were mandated to issue CSR reports. The Center's index is used by us to develop two variables, a CS Score and CS Rank to measure the quality of social performance. We utilize two distinct and complementary proxies for earnings management: discretionary accruals (accruals-based) and earnings benchmark (non-accruals based). We begin our analysis by testing the relation between CSR performance and EM using the full sample of Chinese firms with mandatory CSR disclosure. In light of past studies reporting differences in the incentives and incidence of EM in SOEs and Non-SOEs in China (Liu and Lu 2007, Shao and Zhang 2009, Tang 2012), we partition our sample of firms into SOEs and NSOEs to study whether the association of CSR performance to EM is different for these two firm groups. Allowing for differences between firms within China should permit the study of the effects of differing incentives and other forces on quality of financial reporting even if all firms are subject to the same mandatory requirements.

The descriptive statistics for the two subsamples show significant differences in firm characteristics between the SOEs and NSOEs on CSR score, size, and profitability leverage ratio, type of auditor and ownership concentration, and regional legal environment. These differences could potentially influence management's ability and incentive to manage earnings. SOEs being more closely monitored may not exhibit the same results as NSOEs and we expect a differential correlation between CSR performance and EM for these two distinct groups. Our results indicate that non-state-owned Chinese firms engaging in a higher level of CSR activities exhibit higher levels of discretionary accruals and are more likely to report a small increase in earnings, but such a relation does not exist for state-controlled Chinese firms. It appears that the private firms in China may be engaging in social responsibility practices based on opportunistic incentives and CSR disclosure is used by these firms as a window-dressing tool. In further analysis, we find a significant relationship between higher audit fees and higher levels of CSR activities for NSOEs, consistent with auditors assessing earnings management risk associated with CSR reporting and incorporating it into their pricing decisions.

This paper contributes to the literature on CSR and EM in several ways. First, we study this relationship in a mandatory rather than a voluntary reporting environment. Chih et al. (2007) and Prior et al. (2008) report differences between the relationship of

CSR performance and EM across a number of countries. These differences are attributed to the varied influence of institutional and cultural factors within countries. Recently, Kim et al. (2012) reported that firms in the US that received higher CSR ratings were less likely to manage earnings. These studies, it should be noted, considered the voluntary disclosure of CSR to be a signaling mechanism whereby managers provide additional information to the markets to support their claims of transparency and reliability of the financial reports. We extend this research, but unlike the earlier studies, we analyze the relationship between CSR and EM for firms in China where firms face a unique set of circumstances in a transitional economy and where the state is a key driver of CSR reporting. The results reported in this study contrast with those obtained from the US firms (Kim et al 2012), suggesting that differential reporting environments and country-level institutional factors could potentially impact the motives and consequences of CSR reporting. Second, we note that China also has a substantial proportion of SOEs operating in various sectors of the economy. Recognizing that managers of SOEs face very different incentives and forces than NSOEs allows us to study the influence of these incentives on financial reporting quality and relationship to CSR. We find that only NSOE firms that engage in a higher level of CSR activities are associated with greater earnings management, highlighting the importance of differentiating between the SOEs and NSOEs when

studying the earnings management behavior for Chinese firms. Overall, these findings provide insight into the role of CSR reporting in the context of financial reporting behavior in China and have important implications to policy makers who develop CSR-related standards and capital market participants (e.g. investors and analysts) who use CSR disclosure in assessing the validity and reliability of financial information.

The rest of the paper is organized as follows. Section 2 describes relevant literature and our development of the hypotheses. Section 3 describes the sample selection process and the model specifications and in Section 4 we present the empirical results. In Section 5 we summarize and conclude.

2. Hypothesis Development

CSR is generally defined in the literature as "actions that appear to further some good, beyond the interests of the firm and that which is required by law" (McWilliams and Siegel 2001). This view is defined by Matten and Moon (2004) as *Explicit CSR* consisting of "voluntary corporate policies, programs and strategies" compared to *Implicit CSR* consisting of "values norms and rules which result in (chiefly codified and mandatory) requirements for corporations" (pp.39). The situation in China is closer to the second definition in that the key driver of CSR in China is the state, which has over the years by laws and regulations required firms to initiate and report

on CSR performance (Lin 2010).

In recent years, in response to growing concerns regarding social and environmental problems caused by the disrupting influence of rapid economic growth, Chinese authorities have introduced several CSR initiatives and stock market regulators have issued guidelines for CSR reporting requirements on a subset of Chinese firms (Noronha, Tou, Cynthia, and Guan 2012). An explicit reference to CSR is found in the revision to the Company Law of the People's Republic of China, effective in 2006, where Article 5 requires companies to "comply with social morality and business morality and bear social responsibility" (Noronha et al. 2012). Guidelines for CSR disclosure were issued in 2006 by the Shanghai Stock exchange and Shenzhen Stock Exchange, and in 2008 the exchanges mandated a subset of listed firms to start issuing CSR reports along with financial reports.

The benefits of CSR are widely recognized to improve corporate transparency and CSR performance has been considered to signal managerial integrity. Increase in corporate social responsibility (CSR) performance has been shown for firms in the United States to reduce managers' propensity to manage earnings (Kim, et al. 2012) and improve the information provided to investors (Dhaliwal, et al. 2012). However, the US firms' CSR efforts were voluntary while the firms in China have been subject to mandatory implementation and reporting requirements. The question of interest

therefore is whether mandatory CSR requirements are effective in reducing the incentives for managers to manage earnings. The sample of firms in our study differs from other studies (Kim et al. 2012) in that the firms operate under a mandatory regime.

Earnings management varies widely across countries and as Leuz et al. (2003) show is highly correlated with a country's institutional characteristics where "outsider economies with relatively dispersed ownership, strong investor protection and large stock markets exhibit lower levels of earnings management than insider countries with relatively concentrated ownership, weak investor protection, and less developed stock markets." (pp. 525). Although Leuz et al. (2003) do not include Chinese firms in their study it is most likely that the institutional characteristics in China would place it in the same cluster of countries that exhibited the highest incidence of earnings management. Rapid development of the stock markets in China and the increase in the number of firms listed has drawn increased scrutiny of the financial reporting practices of these firms and the observed common prevalence of earnings management (EM) has been attributed to the absence of a tradition of responsible corporate governance structures and a weak legal environment in China (Yang et al. 2012). At the same time it has to be noted that in the Chinese economy a greater emphasis is also placed on stakeholders other than the primary shareholders, and thus

CSR implementation and reporting can be expected to mitigate managements' incentives to manage earnings in a manner that may be harmful to the firm. On the other hand, unscrupulous managers can take advantage of a broader stakeholder perspective to hide their activities and garner increased benefits to themselves at the expense of shareholders.

It is difficult to predict on the basis of past studies what the relationship between a firm's CSR performance and EM should be as the results have been mixed based upon differences in specification and measurement of CSR performance, measure of EM used, and in different countries (Trebucq and Russ 2005, Prior et al. 2008, and Chih et al. 2008). Kim et al. (2012) describe two possible, but contradictory, explanations for expecting correlation between CSR performance and EM. The first explanation, that they call the "Transparent Financial Reporting Hypothesis", posits a negative relationship based on the presumption that better CSR performance should reduce managers' incentives to manage earnings. Their second explanation, the "Opportunistic Financial Reporting Hypothesis" on the other hand suggests that managers may take advantage of other stakeholders' interest to opportunistically manage earnings and thus result in a positive relationship. In a study of US firms that had voluntarily reported CSR initiatives they find support for the transparent financial reporting hypothesis in that the CSR reports signal to outsiders of managerial integrity.

In China where, CSR developments are mostly directed by the state and there exists a high degree of control by the state on the management of firms, Hung, Shi, and Wang (2012) report that the imposition of mandatory CSR reporting requirements in 2008 has reduced the information asymmetry among different types of investors and improved quality of financial reports of firms subject to the requirements. The mandatory requirements of CSR performance reports along with financial reports should not only reduce managers' incentives for EM but also reduce their ability to do so. We therefore state our first hypothesis in null form as follows:

H1: There is no relationship between corporate social responsibility performance and the level of earnings management in a firm.

Although it is helpful to study financial reporting regimes in different countries by categorizing countries as code or common law (Leuz et al. 2003), caution is required in treating firms homogenously within the countries, especially in a transitional economy like China's where a large proportion of firms are state owned and there also exist firms that have little or no state ownership. Degree of earnings management and earnings management practices have been found to vary across the universe of Chinese listed companies (Liu and Lu 2007, Shao and Zhang 2009, Tang 2012). These differences have been most pronounced between firms that are state owned, SOEs, and firms that are privately owned, NSOEs. The SOEs are more

closely monitored and the managers may not have the same incentive or ability to manage earnings as their counterparts at NSOEs. Chen and Zhang (2012) report that NSOEs engaged in less pronounced EM than SOEs in the period that they studied after the 2002 Chinese Code of Corporate Governance for Listed Companies was issued. Firms with higher corporate governance levels engaged in lower levels of EM (Liu and Lu 2007). While the central government in China has issued regulations to improve financial reporting quality of listed firms, local governments have colluded with firms to manage earnings (Chen et al. 2008).

While all the firms in our sample are subject to the same mandatory requirements, they have the discretion in determining the level and extent of CSR activities they engage in. Given the differing incentives and other forces on the quality of financial reporting between the SOEs and NSOES, we conjecture they could lead to a differential relation between CSR and EM for these two distinct groups. We therefore state our second hypothesis in null form as follows:

H2: The association between corporate social responsibility performance and the level of earnings management does not vary between SOES and NSOEs.

3. Sample selection and model specification

Our sample of CSR reports is collected from *Social Sciences Academic Express* published by the CSR Research Center of Chinese Academy of Social Sciences (the

"Center"). In 2009, the Center began to compile an annual CSR development index for the top 300 or so Chinese firms that were mandated to issue CSR reports. The data required for constructing the index are gathered from a variety of sources including the companies' annual report, CSR reports and corporate websites. The CSR score is constructed by assessing a firm's CSR-related practices along four dimensions: economic, social and environmental performance, and responsibility management. The specific indicators examined in each dimension are adapted from a set of widely accepted international CSR standards including ISO26000 [2] and Global 500 companies' CSR reporting metrics.

Our initial sample comprises 1,186 firm-year observations in the period of 2009-2011. The starting year of 2009 was chosen to coincide with the first year that the two major stock exchanges in China imposed mandatory requirements on a subset of listed firms to provide CSR disclosure (Noronha et al.2012). We exclude 60 financial firms because these firms have unique financial characteristics and earnings management incentives distinct from other companies in our sample. Financial and corporate governance data are obtained from the CCER China Center for Economic Research) Finance database and TEJ (Taiwan Economic Journal) research database. A total of 495 observations are deleted because they are not available in the CCER/TEJ

[2] ISO26000 is a set of social responsibility standards developed by the International Standardization Organization and was first adopted in July 2010.

database. We also exclude firm years with missing industry code or where there is insufficient information to calculate the discretionary accruals measures. These restrictions yield a final sample of 626 firm year observations. Our sample selection process is summarized in Panel A of Table 1.

We test our hypotheses by estimating the following regression model. To control for potential serial and cross-sectional correlations in the residuals, we utilize clustering at both the firm and year levels to produce robust standard errors (Petersen 2009).

$$\begin{aligned}\text{EM proxy} = {} & \beta_0 + \beta_1 \text{ CSR measure} + \beta_2 \text{ SIZE} + \beta_3 \text{ MB} + \beta_4 \text{ ADJ\_ROA} + \beta_5 \text{ LEV} \\ & + \beta_6 \text{ RD\_INT} + \beta_7 \text{ NEXT\_EO} + \beta_8 \text{ NEXT\_EO} + \beta_9 \text{ FIRM\_AGE} \\ & + \beta_{10} \text{ LEI} + \beta_{11} \text{ BIG4} + \beta_{12} \text{ UNLIM} + \beta_{13} \text{ BD\_MEET} + \beta_{14} \text{ BD\_SIZE} \\ & + \beta_{15} \text{ BD\_IND} + \beta_{16} \text{ CHR\_TENURE} + \beta_{17} \text{ CEO\_DUAL} + \beta_{18} \text{ TOP\_OWN} \\ & + \beta_{19} \text{ PER\_ATT} + \beta_{20} \text{ PRIVATE} + \text{Industry \& Year Indicators}\end{aligned}$$

where EM proxy is one of the two alternative earnings management measures (DA or EB), and CSR measure indicates one of the two alternative specifications of the CSR variable (CSR_SCORE or CSR_RANK).

DA	=	performance-adjusted discretionary accruals (Kothari et al. 2005);
EB	=	earnings benchmark indicator that equals one if the change in ROA (income before taxes scaled by total assets) from year t-1 to year t is in the interval between 0 and 0.0005, and zero otherwise;
CSR_SCORE	=	CSR Development Index, measured as the sum of scores in four social rating categories: responsibility management, economic, social and environmental responsibilities;
CSR_RANK	=	rank of CSR score;
SIZE	=	natural logarithm of equity market value at the end of year t-1;

MB	=	ratio of market value of equity to book value of equity at the end of year t-1;
ADJ_ROA	=	industry mean-adjusted ROA at the end of year t-1, where ROA is measured as operating income scaled by lagged total assets;
LEV	=	ratio of long-term debt to total assets at the end of year t-1;
RD_INT	=	ratio of R&D expense to net sales;
NEXT_EO	=	indicator variable equal to 1 if the firm has equity offering in the following year, and 0 otherwise;
FIRM_AGE	=	natural logarithm of (1+number of years a firm has been publicly traded);
LEI	=	degree of legal environment development for each province or provincial level region (Wang et al. 2008);
BIG4	=	indicator variable equal to 1 if the firm is audited by a Big 4 audit, and 0 otherwise;
UNLIM	=	indicator variable equal to 1 for partnership CPA firms and 0 for limited liability CPA firms;
BD_MEET	=	number of board meetings held in a year;
BD_SIZE	=	number of directors on the board;
BD_IND	=	ratio of independent directors to total directors;
CHR_TENURE	=	number of years that the chairman has served in that position;
CEO_DUAL	=	indicator variable equal to 1 if the chairman and CEO position;
TOP_OWN	=	shareholding percentage of the largest shareholder;
PER_ATT	=	percentage of shareholder attendance at the shareholders' meetings in a year;
PRIVATE	=	indicator variable equal to one if a firm is not state-owned, and 0 otherwise.

Dependent variable: earnings management proxy

We use two distinct and complementary approaches to measure earnings management: discretionary accruals (accruals-based) and earnings benchmark (non-accruals based).

Discretionary accruals:

Discretionary accruals reflect subjective accounting choices made by managers. They are a common, if not the most common, metric used to assess earnings management. Because prior research documents that discretionary accrual estimates are correlated with firm performance (Dechow et al. 1995; Kasznik 1999; Kothari et al. 2005), we employ a measure of discretionary accruals that adjusts for firm performance.

Following Kothari et al (2005), the performance-adjusted discretionary accruals are calculated as the residuals from the following total accruals regression:

$$TA_{it} = \beta_0 (1/ASSETS_{it-1}) + \beta_1(\Delta SALES_{it} - \Delta AR_{it}) + \beta_2 PPE_{it} + \beta_3 ROA_{it-1} + \varepsilon_{it}$$

where TA is total accruals, defined as the difference between net income and cash from operation[3], and

$ASSETS_{it-1}$ = total assets for firm *i* in year *t-1*;

$\Delta SALES_{it}$ = change in net revenues for firm *i* from year *t-1* to *t*;

ΔAR_{it} = Change in accounts receivable for firm *i* from year *t-1* to *t*;

PPE_{it} = gross property plant and equipment for firm *i* in year *t*;

ROA_{it-1} = Return on assets for firm *i* in year *t-1*;

ε_{it} = error term for firm *i* in year *t*.

[3] Most earnings management studies using the US data define total accruals as net income before extraordinary items and operating cash flows. However, as noted in Liu and Lu (2007), one-time items such as extraordinary items are reported as part of operating income under the Chinese GAAP. Therefore, we measure total accruals as the difference between net income and cash from operations.

Unless otherwise specified, all variables are scaled by lagged total assets ($ASSETS_{it-1}$) to mitigate heteroskedasticity. The regression model is estimated by year for each industry classified by its two-digit SIC code. ROA_{it-1} is included in the accruals regression to control for firm performance. The lagged ROA variable is used, as opposed to the current ROA, because Kothari et al. (2005) report that the use of lagged firm performance measure helps eliminate any mechanical relation between current period's discretionary accrual estimate and the performance metric.

Earnings Benchmark measure:

Our second proxy for earnings management is related to management's incentive to meet or beat simple earnings benchmarks. Prior research (e.g. Burgstahler and Dichev 1997; Degeorge et al. 1999) documents an abnormally high frequency of firms reporting small earnings increases or positive earnings surprises, consistent with managers using accounting discretion to achieve or exceed earnings targets. A recent survey of managers by Graham et al. (2005) finds that just-meeting-or-beating prior period's earnings is one of the most important benchmarks for corporate managers. Given that investors in publicly held firms rely on simple heuristics such as earnings-based benchmarks in assessing firm performance, managers have the incentives to report consistently and steadily increasing earnings and project a smooth earnings path. We therefore use the likelihood of a small increase in earnings as our

earnings benchmark. Similar to the definition in Burgstahler and Dichev (1997), a small earnings increase occurs when the change in net income from year t-1 to year t scaled by beginning of year total assets falls in the interval between 0 and 0.005.

Test variable:

Our main variable of interest is CSR_SCORE**,** a social performance index developed by the CSR Research Center of Chinese Academy of Social Sciences. The indexing system assesses a firm's CSR activities in four main categories: economic responsibility social responsibility, environmental responsibility, and responsibility management. Within each category, a two-level indicator system is designed to provide a comprehensive evaluation of a firm's CSR policies and practices. For example, the environmental responsibility category covers three dimensions, namely resource and energy conservation, pollution and emission reduction, and environmental management. Along each dimension, a richer set of individual indicators are used to measure specific CSR activities, resulting in a total of 37 indicators in the environmental responsibility category. In constructing a firm's CSR performance score, a value is assigned to each indicator in a category and the values are then summed to arrive at the overall score. Because the relative importance of a CSR category varies by industry, weighting is used in calculating the total score.

For example, power and petrochemical industries face much greater environmental responsibility because the two industries consume huge amount of energy and resources while discharging enormous wastewater, waste residues and waste gas. As a result, the environmental responsibility category assigned a higher weight when computing the CSR score for firms in these two industries relative to firms in the financial industry. Therefore, the overall CSR score is calculated as the industry-weighted sum of the individual scores obtained from each category.

As an alternative CSR measure, we rank order the CSR scores and create a variable labeled CSR_RANK. Using multiple CSR measures helps strengthen the validity and robustness of our results.

Control variables

We incorporate variables found by prior research to be associated with earnings management. These variables represent firm and auditor characteristics, as well as internal and external corporate governance attributes.

Firm Characteristics

In line with prior research (Dechow and Dichev 2002, Roychowdhary 2006), we control for the size of the firm (SIZE) using the log of the market value of equity and growth opportunities using the ratio of market to book value (MB). Prior research presents evidence that managers of highly leveraged firms have incentives to manage

accruals to avoid debt covenant violation (DeFond and Jiambalvo 1994) and seasoned equity issues manipulate earnings before the offering (Teoh et al 1998). To control for these incentives, we include the ratio of long term debt to assets (LEV) and an indicator variable for the incidence of an equity offering. Guay et al. (1996) point out that managers' incentives to manipulate earnings are probably correlated with firm performance, and hence we include industry-adjusted ROA (ADJ_ROA). The experience of a firm (FIRM_AGE) and R&D intensity (RD_INT) are additional determinants of earnings management (Kim et al 2012; McWilliams and Siegel 2000).

Auditor related variables

A long line of research shows that Big "N" auditors are of higher quality, e.g., Becker et al. (1998), Francis et al. (1999), and Reynolds and Francis (2000) find that clients of Big N auditors have lower discretionary accruals. The participation of international auditors in China has increased significantly in the past decade. A report by the China Securities Regulation Commission shows that the market share of the Big 4 audit forms was 37.32% in 2010. We incorporate an indicator variable taking the value of 1, if the auditor is one of the Big 4 and zero otherwise. The organizational form of CPA firms also matters as Firth et al (2012) find that auditors in partnership CPA firms exhibit higher reporting conservatism than auditors in limited liability CPA firms. We proxy for reporting conservatism with UNLIM, an indicator variable

indicator variable equal to 1 for partnership CPA firms and 0 for limited liability CPA firms.

Board Structure

Following research documenting that board structure affect managers' financial reporting behavior, we control for a number of board characteristics in our setting. We use the ratio of the number of outside directors on the board to (BD_IND) and the size of the board (BD_SIZE) to capture board independence and efficiency (Klein 2002). Number of board meetings (BD_MEET) and the tenure of board chairman (CHR_TENURE) are also associated with earning management (Chen et al 2006) and thus included in our model. When CEO is also the board chair, it is more difficult to minority shareholders to have a say on important issues and the controlling shareholders have larger discretionary power in their financial reporting (Liu and Lu, 2007). Accordingly, we include CEO_DUAL, an indicator variable that takes the value of 1 I the company's CEO is also the chairperson of the board and 0 otherwise.

Additional control variables

The highly concentrated ownership is an important feature of corporate governance in Chinese listed firms. Prior research argue and present evidence that when most of a firm's shares are concentrated in the hands of a few investors, the probability of earnings management increases (Ding et al 2007, Firth et al 2007).

Following Firth et al (2007), we use the percentage shareholding by the largest shareholder (TOP_OWN) to measure ownership concentration. In addition, to control for the type of ownership, we use a dummy variable PRIVATE to differentiate state-owned firms from private firms.

Finally, we include industry and year dummies to control for fixed industry and time effects.

4. Empirical results

Panel B of Table 1 reports the sample distribution by industry separately for state-owned enterprise (SOEs) and non-state-owned enterprises (NSOEs). The industry group with the largest representation in the SOEs sample is metals & non-metals (14.19%), followed by transportation (13.72%) and machinery (11.63%), while NSOEs are most concentrated in petrochemicals (16.33%), metals & non-metals (13.78%), and wholesale and retail trade (12.76%).

Table 3 provides descriptive statistics for the two subsamples showing that significant differences in firm characteristics exist between the SOEs and NSOEs. On average, NSOEs receive a lower CSR score than SOEs (0.18 versus 0.32). NSOEs are generally smaller (SIZE) and more profitable (ADJ_ROA), grow more rapidly (MB), have a lower leverage ratio (LEV), and are more likely to engage a Big 4 auditor (BIG4). In addition, the percentage of shares held by the top owner

(TOP_OWN) is significantly smaller for NSOEs. From the perspective of corporate governance, NSOEs have fewer independent directors on their board (BD_IND), smaller boards (BD_SIZE), and chairmen with longer tenures (CHA_TENURE). The NSOE boards also meet less often (BD_MEET) and the shareholder attendance at the shareholders' meetings is lower *PER_ATT*. Lastly, NSOEs tend to operate in provinces or regions where the legal environment is weaker and less developed (LEI). All these differences could potentially influence management's ability and incentive to manage earnings.

Table 3 presents the regression results for the full sample of CSR firms. The test variable is CSR_SCORE in Model (1), and CSR_RANK in Model (2). Panel A reports the estimation results of OLS regressions for the discretionary accruals tests. The coefficient on CSR_SCORE is positive but insignificant (p-value=0.165) in Model (1), while CSR_RANK is positive and marginally significant (p-value=0.089), providing mixed evidence on the impact of CSR performance on earnings quality. Panel B displays the results of logistic regressions for our earnings benchmark tests. None of the coefficients on CSR_SCORE or CSR_RANK is significant (p-values=0.671 and 0.436, respectively). Overall, we find no evidence of a significant association between CSR and earnings management for the full sample of Chinese firms. Note that these firms were mandated to initiate CSR activities and

were subject to mandatory disclosure requirements. Hence, the mandatory CSR reporting may have resulted in disconnecting the relationship between CSR performance and EM that typically exists in a voluntary disclosure setting.

However, we also note that in spite of the mandatory CSR reporting requirements, it is up to the firm to decide the level of CSR activities to engage in. Consequently, the differential EM incentives between the SOEs and NSOEs could potentially influence the CSR behavior and its impact on earnings management for these two distinct firm groups. To provide evidence on whether the relation between CSR and earnings management vary by firm type, we partition the sample into the SOEs and NSOEs. Panel A of Table 5 provides the results for the discretionary accrual tests. While the coefficients on the CSR measures for the SOE group remain insignificant, both CSR_SCORE and CSR_RANK are positive and statistically significant (p-values=0.073 and 0.026, respectively) for the NSOE partition, suggesting that non-state-owned Chinese firms with higher CSR scores are more likely to manage earnings upward through accruals manipulation. Panel B of Table 4 reports similar results for the two distinct firm groups in the earnings benchmark analysis. The positive and significant association between EB and the CSR measures (p-values =0.011 and 0.001 for CSR_SCORE and CSR_RANK, respectively) indicates that non-state-owned Chinese firms engaging in a higher level of CSR activities are more

likely to report a small increase in earnings. Taken together, this evidence support the argument that private firms in China engage in social responsibility practices based on opportunistic incentives and CSR disclosure is used by these firms as a window-dressing tool for aggressive earnings management.

Additional analysis

To provide further insight into the findings obtained from the discretionary accruals and earnings benchmark analyses, we examine auditors' responses to the CSR performance of their client firms. Given the increasing prominence of and heightened public attention to corporate social reasonability issues, auditors are likely to incorporate CSR performance into their risk assessment process. If the motive for firms reporting stronger CSR performance is to cover up opportunistic managerial behavior, the risk of earnings management could increase the likelihood of litigation against auditors. Prior research has provided evidence that links earnings management to auditor litigation risk (Heninger 2001; Barron 2001; Palmrose and Scholz 2004). To reduce their exposure to future litigation, auditors may apply more engagement effort by performing additional substantive tests, resulting in higher audit fees. In cases where such tests can't possibly uncover all possible misstatements, especially frauds perpetrated through management collusion, auditors may also charge clients a

risk premium to compensate themselves for possible future litigation losses[4]. Consistent with auditors' pricing of earnings-management-induced litigation risk, Houston et al (1999) show that when the risk of irregularities is high auditors increase the amount of audit investment and assess a higher risk premium. Johnstone and Bedard (2001) and Bedard and Johnstone (2004) both find that audit firms plan more audit hours and charge higher billing rates for clients with earnings manipulation and fraud risks to cover costs related to potential future litigation and reputational damage.

In light of the above discussion, we conjecture that audit firms in China charge higher audit fees to clients with stronger CSR performance to compensate for increased earnings management risk and associated litigation risk. To test this hypothesis, we estimate the following audit fee model:

$$\begin{aligned}\text{Audit Fee} = {} & \beta_0 + \beta_1 \text{ CSR measure} + \beta_2 \text{ SIZE} + \beta_3 \textit{RECINV} + \beta_4 \text{R } \textit{LIQ} + \beta_5 \textit{ROA} \\ & + \beta_6 \textit{BIG4} + \beta_7 \textit{TENURE} + \beta_8 \textit{ADJ\_RETURN} + \beta_9 \textit{LEI} + \beta_{10} \textit{UNLIM} \\ & + \beta_{11}\text{BD\_MEET} + \beta_{12} \text{ BD\_SIZE} + \beta_{13} \text{ BD\_IND} + \beta_{14} \text{ CHR\_TENURE} \\ & + \beta_{15} \text{ CEO\_DUAL} + \text{Industry \& Year Indicators}\end{aligned}$$

The dependent variable is the change in the natural logarithm of audit fees (*DAF*).[5] Our variable of interest is one of the CSR measures (i.e. CSR_SCORE or CSR_RANKING). We include in our models as control variables a comprehensive set

[4] According to the audit pricing model developed by Simunic (1980), audit fee is a function of two key elements: a resource cost component that is increasing in the level of auditor effort, and an expected future loss component, which arises primarily from litigation risk.

[5] We take the natural log of the audit fee variable to correct for violations of normality. The results, however, are similar when the raw measure of audit fee is used.

of firm and auditor characteristics that have been identified as determinants of audit fees from prior studies. We control for audit complexity by including firm size (*DSIZE*) and accounting receivables & inventory *(RECINV)*. Prior research has found that audit fees are an increasing function of clients' litigation risks. We therefore include three proxies for litigation risk: leverage (*LEV)*, liquidity *(LIQ*) and return on assets (ROA). We also include a Big4 indicator variable (BIG4), auditor tenure (TENURE) and CPA firm type (UNLIM) to capture auditor-related effects. Recent research has documented a link between audit fees and corporate governance (Carcello et al 2002; Hay et al 2006). We thus control for a number of corporate governance attributes including board size (BD_SIZE), number of board meetings (BD_MEET), percentage of independent board directors (BD_IND), chairman tenure (CHATEN), and whether the CEO also serves as the chairman (CEO_DUAL). Finally, we control for industry and year effects.

Table 5 displays the estimated results for the audit fee regression analysis separately for SOEs and NSOES. As expected, we find a positive association between audit fees and CSR performance for the NSOE group, but no association for the SOE group, lending further support to the main findings reported in the discretionary accruals and earnings benchmark analyses. These results indicate that auditors in China recognize management's earnings management incentives

associated with CSR reporting and incorporate this risk into their planning and pricing decisions[6].

5. Summary and Conclusions

We studied the association of corporate social responsibility (CSR) performance and quality of financial reporting for a set of listed Chinese firms subject to mandatory CSR disclosure requirements, including both state owned (SOE) and non-state owned (Non-SOE) enterprises. Unlike the results for firms in the United States where it has been found that increase in corporate social responsibility performance reduces earnings management, we find that there is no relationship between CSR performance and EM in China for the sample of firms as a whole. However, when we partition the sample into the SOEs and NSOEs, we did find that for non-state owned enterprises there was a positive relationship between CSR performance and earnings management.

Our study is among the first to investigate the CSR related activities and performance, and their association with earnings management behavior in China. While CSR reporting is voluntary in the U.S., there is a growing trend for

[6] Chen et al. (2012) find that auditors charge lower fees and reduce the propensity to issue going concern opinions for client firms with superior CSR performance. Their study differs from ours in that they use a sample of US firms for the period of 2000-2008 and assume that firms receiving higher CSR ratings behave in a more responsible manner in constraining earnings management.

governments to regulate CSR reporting in developing countries (KPMG 2011) including China. On the other hand, earnings management in China is more prevalent and has been attributed to the absence of responsible corporate governance structures, a weak legal environment, and a variety of other institutional characteristics (Ding et al. 2007; Yang et al. 2012). The combination of the mandatory CSR reporting and more prevalent earnings management practices in China thus provide a unique setting to examine the relation between CSR performance and earnings management. This research also highlights the importance of differentiating between the SOEs and NSOEs when studying the earnings management behavior for Chinese firms. Our results suggest that differential CSR incentives and efforts could contribute to the varying levels of earnings management across the SOEs and NSOEs. Overall, the findings reported in this study have important implications to policy makers who design CSR-related standards and investors who incorporate the CSR disclosure into their investment decisions.

References

Bedard, J. C., and K. M. Johnstone. 2004. Earnings manipulation risk, corporate governance risk, and auditors' planning and pricing decisions. *The Accounting Review* 79(2): 277-304.

Bedard, J. C., U. Hoitash, and R. Hoitash. 2008. Audit pricing and internal control disclosures among non-accelerated filers. *Research in Accounting Regulation* 20: 103-126.

Burgstahler, D., and I. Dichev. 1997. Earnings management to avoid earnings decreases and losses. *Journal of Accounting and Economics* 24: 99–126.

Carcello, J. V., D. R. Hermanson, T. L. Neal, and R. Riley Jr. 2002. Board characteristics and audit fees. *Contemporary Accounting Research* 19 (3): 365–384.

Chen, G., and M. Firth. 2006. Ownership structure, corporate governance, and fraud: Evidence from China. *Journal of Corporate Finance* 12(3): 424-448.

Chen, J.J. and H. Zhang. 2012. The Impact of the Corporate Governance Code on Earnings Management – Evidence from Chinese Listed Companies. *European Financial Management* 1-37

Chen, X.; C.J. Lee, and J. Li. 2008. Government assisted earnings management in China. *Journal of Accounting and Public Policy* 27: 262-274

Chih, H., C. Shen, and F. Kang. 2008. Corporate Social Responsibility, Investor Protection, and Earnings Management: Some International Evidence. *Journal of Business Ethics* 79:179-198

Chen, L., B. Srinidhi, A. Tsang, and W. Yu. 2012. Corporate Social Responsibility, Audit Fees, and Audit Opinions.

Dechow, P., R. Sloan, and A. Sweeney. 1995. Detecting earnings management. *The Accounting Review* 70: 193–225.

DeFond, M.L., Jiambalvo, J., 1994. Debt covenant violation and manipulation of accruals. *Journal of Accounting and Economics* 17, 145–176.

Degeorge, F, J. Patel, and R. Zeckhauser. 1999. Earnings management to exceed thresholds. *The Journal of Business* 72: 1-33.

Dhaliwal, D.S., O.Z. Li, A. Tsang, and G. Yang, G. Y. 2011. Voluntary Nonfinancial Disclosure and the Cost of Equity Capital: The Initiation of Corporate Responsibility Reporting. *The Accounting Review* 89 (1): 59-100

Dhaliwal, D.S., S. Radhakrishnan, A. Tsang, and Y.G. Yang. 2012. Nonfinancial Disclosure and Analyst Forecast Accuracy: International Evidence on Corporate Social Responsibility Disclosure. *The Accounting Review* 87 (3) : 723-759

Ding, Y., H. Zhang, and J. Zhang. 2007. Private vs. State Ownership and Earnings Management: evidence from Chinese listed companies. *Corporate Governance: An International Review,* 15 (2): 223–238.

Francis, J. R., and D. Wang. 2008. The joint effect of investor protection and Big 4 audits on earnings quality around the world. *Contemporary Accounting Research* 25 (1): 151–91.

Graham, J.R., C.R. Harvey, and S. Rajgopal. 2005. The economic implications of corporate financial reporting. *Journal of Accounting and Economics* 40: 3-73.

Hay, D. C., W. R. Knechel, and N. Wong. 2006. Audit fees: A meta-analysis of the effect of supply and demand attributes. *Contemporary Accounting Research* 23 (1): 141–191.

Houston, R. W., M. F. Peters, and J. H. Pratt. 1999. The audit risk model, business risk, and auditplanning decisions. *The Accounting Review* 74 (July): 281–298.

Hung, M., J. Shi, and Y. Wang. 2012. The Effect of Mandatory Corporate Social Responsibility Reporting on Information Asymmetry: Evidence from a Quasi-natural Experiment in China. Working paper, The Hong Kong University of Science and Technology

Johnstone, K., and J. C. Bedard. 2001. Engagement planning, bid pricing, and client response in the market for initial attest engagements. *The Accounting Review* 76(2): 199-220.

Kasznik, R. 1999. On the association between voluntary disclosure and earnings management. *Journal of Accounting Research* 37: 57–81.

Kim, Y., M. S. Park, and B. Wier. 2012. Is earnings quality associated with corporate social responsibility? *The Accounting Review* 87 (3): 761–796.

Kothari, S.P., A. Leone, and C. Wasley. 2005. Performance matched discretionary accrual measures. *Journal of Accounting and Economics* 39(1):163-197.

KPMG, 2011. KPMG International Survey of Corporate Responsibility Reporting.

Leuz, C.; D. Nanda, and P. Wysocki. 2003. Investor protection and earnings management: An international comparison. *Journal of Financial Economics* 69(3):505-527.

Li, S., D. D. Selover, and M. Stein. 2011. "Keep silent and make money": Institutional patterns of earnings management in China. *Journal of Asian Economics* 22:369-382

Lin, L. 2010. Corporate Social Responsibility in China: Window Dressing or Structural Change? *Berkeley Journal of International Law* 28 (1): 64-100

Liu, Q. and Z. Lu. 2007. Corporate governance and earnings management in the Chinese listed companies: A tunneling perspective. *Journal of Corporate Finance* 13: 881-906

Matten, D. and J. Moon/ 2004. 'Implicit' and 'Explicit' CSR: A conceptual framework for understanding CSR in Europe. *No. 29-2004 ICCSR Research Paper Series – ISSN1479-5124* International Center for Corporate Social Responsibility, Nottingham University Business School, United Kingdom

Moser, D.V. and P.R. Martin. 2012. A Broader perspective on Corporate Social Responsibility Research in Accounting. *The Accounting Review* 87 (3): 797-806

Noronha, C., S. Tou, M.I. Cynthia, and J.J. Guan. 2012. Corporate Social Responsibility Reporting in China: An Overview and Comparison with Major Trends. *Corporate Social Responsibility and Environmental Management*. DOI: 10.1002/csr.1276

Petersen, M. 2009. Estimating standard errors in finance panel data sets: Comparing approaches, *Review of Financial Studies* 22 (1): 435 - 480.

Prior, D., J. Surroca, and J.A. Tribo. 2008. Are Socially Responsible Managers Really Ethical? Exploring the Relationship Between Earnings Management and Corporate Social Responsibility. *Corporate Governance* 16: 160-177

Roychowdhury, S. 2006. Earnings management through real activities manipulation. Journal of Accounting and Economics 42 (3): 335–370.

Shao, Z.G., and Q. Zhang. 2009. State VS Private Controlling Shareholders and Earnings Management in China. IEEE 978-1-4244-4639-1/09

Tang, B. 2012. Contemporary Corporate Social Responsibility (CSR) in China: A Case Study of a Chinese Compliant. *Seven Pillars Institute, Moral Cents* 1 (2): 13-22

Wang, Q., T. J. Wong. 2008. "State ownership, the institutional environment, and auditor choice: Evidence from China." Journal of Accounting and Economics 46(1): 112-134.

Yang, J., J. Chi, and M.Young. 2012. A review of earnings management in China and its implications. *Asian-Pacific Economic Literature* 84-92

Table 1: Sample Description

Panel A: Selection criteria

	2009	2010	2011	2009-2011
CSR firm-year observations published by *Social Sciences*				
Academic Express	380	403	403	1186
Less: financial firms	(18)	(21)	(21)	(60)
Less: firms not included in the *TEJ*/*CCER* database	(162)	(166)	(167)	(495)
Less: firms for which industrial code cannot be identified	0	0	(2)	(2)
Final sample	199	214	213	626

Panel B: Distribution by industry

	State Owned Enterprises		Non-State Owned Enterprises	
Industry	# of Obs.	% of Sample	# of Obs.	% of Sample
Agriculture, forestry, livestock farming, fishery	3	0.70%	0	0.00%
Mining	35	8.14%	5	2.55%
Food & beverage	14	3.26%	12	6.12%
Textiles & apparel	1	0.23%	20	10.20%
Paper & printing	4	0.93%	3	1.53%
Petrochemicals	42	9.77%	32	16.33%
Electronics	9	2.09%	5	2.55%
Metals & non-metals	61	14.19%	27	13.78%
Machinery	50	11.63%	21	10.71%
Pharmaceuticals	14	3.26%	8	4.08%
Other manufacturing	0	0.00%	3	1.53%
Utilities	43	10.00%	2	1.02%
Construction	20	4.65%	5	2.55%
Transportation	59	13.72%	7	3.57%
IT	19	4.42%	6	3.06%
Wholesale and retail trade	26	6.05%	25	12.76%
Real estate	11	2.56%	6	3.06%
Social Services	7	1.63%	4	2.04%
Comprehensive	12	2.79%	5	2.55%
Total	430	100%	196	100%

Table 2: Descriptive Statistics

	State Owned Enterprises					Non-State Owned Enterprises					Difference Test: *p*-value	
Variable	**Mean**	**Median**	**STD**	**Q1**	**Q3**	**Mean**	**Median**	**STD**	**Q1**	**Q3**	**T-Test**	**Wilcoxon-Test**
DA	-0.01	-0.01	0.13	-0.07	0.05	-0.005	-0.01	0.16	-0.06	0.05	0.44	0.40
CSR_SCORE	0.32	0.28	0.22	0.12	0.52	0.18	0.12	0.15	0.07	0.25	-9.47 ***	-7.87 ***
CSR_RANK	116.16	122.00	60.99	66.00	169.00	77.02	71.00	51.68	28.00	119.00	-8.29 ***	-7.52 ***
TOP_OWN	44.50	46.61	16.33	32.44	56.12	39.62	38.45	15.36	29.66	50.65	-3.53 ***	-3.56 ***
SIZE	22.97	22.86	1.34	21.96	23.99	22.50	22.20	1.12	21.93	23.11	-4.57 ***	-3.92 ***
MB	2.87	2.02	2.81	1.45	3.48	3.14	2.48	2.91	1.98	4.08	1.13	3.47 ***
ADJ_ROA	-0.02	-0.02	0.08	-0.06	0.01	0.01	0.00	0.11	-0.03	0.04	3.97 ***	4.99 ***
BIG4	0.25	0.00	0.44	0.00	1.00	0.11	0.00	0.32	0.00	0.00	-4.58 ***	-4.03 ***
LEV	0.11	0.07	0.13	0.00	0.18	0.08	0.04	0.10	0.00	0.12	-3.86 ***	-2.91 ***
NEXT_EO	0.07	0.00	0.26	0.00	0.00	0.05	0.00	0.21	0.00	0.00	-1.45	-1.34
RD_INT	0.02	0.03	0.02	0.00	0.03	0.02	0.02	0.02	0.00	0.03	-0.75	-1.40
FIRM_AGE	2.25	2.56	1.23	1.95	2.94	2.41	2.56	0.99	2.30	2.89	1.67 *	1.30
LEI	4.64	5.53	1.81	2.62	6.98	3.58	4.69	1.37	0.00	6.29	-4.06 ***	-3.91 ***
UNLIM	0.03	0.00	5.31	0.00	0.00	0.05	0.00	5.88	0.00	0.00	1.17	1.28
BD_MEET	8.97	8.00	0.47	6.00	10.00	8.08	8.00	0.25	6.00	10.00	-1.81 *	-1.12
BD_SIZE	6.48	6.00	3.15	6.00	7.00	6.22	6.00	3.26	5.79	7.00	-1.96 *	-3.31 ***
BD_IND	0.67	0.57	0.23	0.50	0.67	0.49	0.50	0.21	0.50	0.60	-6.05 ***	-4.11
PCT_ATT	0.53	0.49	0.14	0.48	0.64	0.48	0.48	0.11	0.47	0.51	-4.41 ***	-4.74 ***
CHA_TENURE	4.30	3.00	2.89	2.00	6.00	3.55	3.00	3.08	1.00	5.00	-2.72 ***	-3.51 ***
CEO_DUAL	0.06	0.00	0.17	0.00	0.00	0.05	0.00	0.22	0.00	0.00	-0.51	-0.51

Note: *, **, *** indicate significance at the 10 percent, 5 percent, and 1 percent significant levels, respectively, based on a two-tailed test.

Table 3 Regression Analysis of the association between CSR and Earnings Management

Panel A: Discretionary Accruals model

	Model (1)		Model (2)		
Variables	coefficient	p-value	coefficient	p-value	
Intercept	0.05152	0.755	0.05172	0.753	
CSR_SCORE	**0.00037**	**0.165**			
CSR_RANK			**0.00018**	**0.089**	*
TOP_OWN	-0.00031	0.566	-0.00031	0.563	
PRIVATE	0.00736	0.669	0.00853	0.617	
SIZE	-0.00321	0.601	-0.00344	0.574	
MB	0.00215	0.547	0.00216	0.546	
ADJ_ROA	-0.06117	0.466	-0.06556	0.433	
BIG4	-0.01174	0.456	-0.01276	0.417	
LEV	-0.03552	0.584	-0.03463	0.593	
NEXT_EO	-0.01014	0.741	-0.00862	0.780	
RD_INT	0.61489	0.112	0.61346	0.113	
FIRM_AGE	-0.00025	0.966	-0.00009	0.987	
LEI	-0.00117	0.589	-0.00127	0.555	
UNLIM	-0.03280	0.393	-0.03255	0.397	
BD_MEET	-0.00006	0.958	-0.00010	0.932	
BD_SIZE	0.00514	0.203	0.00507	0.209	
BD_IND	-0.00908	0.463	-0.00932	0.454	
SH_ATT	0.01356	0.840	0.01161	0.862	
CHAT_TENURE	0.00259	0.157	0.00268	0.140	
CEO_DUAL	0.01694	0.613	0.01655	0.620	
Year Indicators	Yes		Yes		
Industry Indicators(CSRC)	Yes		Yes		
R^2	4.9%		5.1%		
N	626		626		

Panel B: Earnings Benchmark Model

	Model (1)		Model (2)	
Variables	coefficient	p-value	coefficient	p-value
Intercept	-12.91160	0.291	-14.80750	0.234
CSR_SCORE	**-0.00951**	**0.671**		
CSR_RANK			**-0.00569**	**0.436**
TOP_OWN	0.02520	0.312	0.02470	0.298
PRIVATE	-0.94030	0.179	-0.91370	0.209

SIZE	-0.22970	0.706		-0.17870	0.770	
MB	-0.26020	0.006	***	-0.27590	0.007	***
ADJ_ROA	-8.60260	0.168		-8.69510	0.150	
BIG4	0.71200	0.487		0.69980	0.489	
LEV	7.55840	0.109		7.63190	0.119	
NEXT_EO	-10.25230	<.0001	***	-11.30560	<.0001	***
RD_INT	-98.93490	0.002	***	-100.20000	0.003	***
FIRM_AGE	0.48250	0.147		0.47070	0.167	
LEI	-0.18170	0.103		-0.17620	0.118	
UNLIM	1.35450	0.467		1.44080	0.439	
BD_MEET	0.22810	0.091	*	0.22880	0.080	*
BD_SIZE	-0.15160	0.658		-0.14590	0.673	
BD_IND	2.10450	0.161		2.21420	0.157	
PCT_ATT	-0.42570	0.918		-0.13780	0.976	
CHAT_TENURE	-0.03680	0.714		-0.03390	0.733	
CEO_DUAL	4.74250	0.056	*	4.80620	0.071	*
Year Indicators	Yes			Yes		
Industry Indicators(CSRC)	Yes			Yes		
R^2	11.4%			11.4%		
Likelihood Ratio	73.1514			73.7251		
N	629			629		

Note: *, **, *** indicate statistical significance at the 10 percent, 5 percent, and 1 percent levels, respectively, based on a two-tailed test. Standard errors are clustered by firm and fiscal year.

Table 4: Regression Analysis of the Association between CSR and Earnings Management Partitioned by SOEs and NSOEs

Panel A: Discretionary Accruals Model

	State Owned Enterprises (No of obs=432)				Non State Owned Enterprises (No of obs=196)			
Variable	coefficient	p-value	Coefficient	p-value	coefficient	p-value	coefficient	p-value
Intercept	-0.08746	0.665	-0.09067	0.653	-0.04210	0.889	-0.03276	0.914
CSR_SCORE	**0.00016**	**0.586**			**0.00148**	**0.073 ***		
CSR_RANK			**0.00006**	**0.634**			**0.00056**	**0.026 ****
TOP_OWN	0.00025	0.685	0.00024	0.692	-0.00068	0.553	-0.00052	0.649
SIZE	-0.00196	0.807	-0.00188	0.814	0.00200	0.866	0.00124	0.915
MB	0.00067	0.871	0.00067	0.871	0.00327	0.648	0.00346	0.623
ADJ_ROA	-0.08092	0.460	-0.08149	0.457	-0.14470	0.331	-0.17073	0.253
BIG4	-0.02121	0.241	-0.02141	0.236	-0.02360	0.607	-0.02586	0.566
LEV	-0.11232	0.146	-0.11204	0.147	0.03822	0.799	0.02446	0.868
NEXT_EO	-0.05284	0.159	-0.05265	0.161	0.07132	0.043 **	0.07421	0.041 **
RD_INT	0.49563	0.300	0.49647	0.301	1.32409	0.037 **	1.23031	0.053 *
FIRM_AGE	-0.00632	0.351	-0.00632	0.352	0.00377	0.773	0.00302	0.817
LEI	0.00059	0.814	0.00059	0.814	-0.00019	0.976	-0.00061	0.920
UNLIM	0.02830	0.450	0.02829	0.452	-0.10782	0.129	-0.11722	0.094 *
BD_MEET	0.00132	0.399	0.00133	0.396	-0.00099	0.563	-0.00106	0.532
BD_SIZE	0.01367	0.004 ***	0.01373	0.004 ***	-0.00473	0.596	-0.00471	0.589
BD_IND	0.00338	0.797	0.00342	0.794	-0.02413	0.723	-0.02364	0.730
PCT_ATT	-0.07713	0.272	-0.07684	0.273	0.19433	0.170	0.17027	0.226
CHAT_TENURE	0.00356	0.100 *	0.00357	0.099 *	0.00531	0.261	0.00539	0.249
CEO_DUAL	0.04947	0.180	0.04922	0.181	-0.04370	0.613	-0.04373	0.610
Year and Industry Indicators		Yes				Yes		
R^2		9.4%				13.3%		

Panel B: Earnings Benchmark Model

	State Owned Enterprises (No of obs=432)						Non State Owned Enterprises (No of obs=196)					
Variable	coefficient	p-value		coefficient	p-value		coefficient	p-value		coefficient	p-value	
Intercept	-4.29460	0.768		-0.78110	0.958		-100.8000	<.0001	***	-98.68800	<.0001	***
CSR_SCORE	**-0.03470**	**0.121**					**0.14020**	**0.011**	*******			
CSR_RANK				**-0.01500**	**0.072**	*****				**0.04910**	**<.0001**	*******
TOP_OWN	0.04760	0.118		0.05520	0.054	*	0.25840	<.0001	***	0.24790	<.0001	***
SIZE	-1.08080	0.140		-1.27580	0.099	*	4.57510	<.0001	***	4.65800	<.0001	***
MB	-0.20700	0.083	*	-0.23610	0.042	**	0.07630	0.776		-0.08450	0.846	
ADJ_ROA	-2.22110	0.704		-2.36280	0.688		-71.18860	<.0001	***	-59.75820	0.006	***
BIG4	0.39500	0.780		0.51730	0.711		2.51850	0.163		3.56420	0.054	*
LEV	8.38600	0.107		8.41740	0.132		1.92130	0.693		-0.92450	0.879	
NEXT_EO	-9.83210	<.0001	***	-9.88640	<.0001	***	11.04270	<.0001	***	10.54710	<.0001	***
RD_INT	-77.21530	0.040	**	-81.25530	0.063	*	-7.44060	0.898		-15.32720	0.641	
FIRM_AGE	0.51700	0.150		0.54900	0.125		2.64950	0.003	***	1.89910	0.168	
LEI	-0.21090	0.117		-0.18410	0.177		0.21230	0.321		0.32400	0.082	***
UNLIM	2.09580	0.376		2.51770	0.323		-3.70530	0.261		-5.25390	0.222	
BD_MEET	0.48890	0.048	**	0.51720	0.063	*	-0.02820	0.814		-0.12970	0.391	
BD_SIZE	0.14220	0.679		0.18590	0.587		-0.25940	0.712		-0.12740	0.657	
BD_IND	3.08930	0.089	*	3.61700	0.076	*	-1.55250	0.651		-2.85450	0.434	
PCT_ATT	6.02040	0.211		6.39910	0.207		-33.86730	<.0001	***	-38.13750	0.002	***
CHAT_TENURE	-0.00707	0.939		-0.00730	0.937		0.22840	0.227		0.08730	0.806	
CEO_DUAL	5.06260	0.048	**	5.28450	0.067	*	5.61710	0.000	**	6.24290	<.0001	**
Year and Industry Indicators			Yes						Yes			
R^2			12.7%						19.5%			
Likelihood Ratio			58.5868						38.0208			

Note: *, **, *** indicate statistical significance at the 10 percent, 5 percent, and 1 percent levels, respectively, based on a two-tailed test. Standard errors are clustered by firm and fiscal year.

Table 5: Regression Analysis of the Association between CSR and Audit Fees Partitioned by SOEs and NSOEs

	State Owned Enterprises						Non State Owned Enterprises					
Variable	coefficient	p-value		coefficient	p-value		coefficient	p-value		coefficient	p-value	
Intercept	1.82732	*0.053*	*	1.86068	*0.048*	**	4.92410	*<.0001*	***	4.94236	*<.0001*	***
CSR_SCORE	**-0.10340**	***0.613***					**0.61010**	***0.046***	****			
CSR_RANKING				**-0.00035**	***0.599***					**0.00204**	***0.039***	****
LNTA	0.48430	*<.0001*	***	0.48364	*<.0001*	***	0.34755	*<.0001*	***	0.35197	*<.0001*	***
RECINV	0.21320	*0.552*		0.20707	*0.558*		0.05760	*0.873*		0.01257	*0.972*	
LIQ	0.10490	*0.051*	*	0.10451	*0.051*	*	-0.04849	*0.550*		-0.05066	*0.530*	
LEV	-0.05554	*0.159*		-0.05553	*0.159*		0.12934	*0.012*	**	0.12800	*0.013*	**
ROA	-1.77049	*0.084*	*	-1.78258	*0.081*	*	0.82763	*0.532*		0.51660	*0.699*	
BIG4	0.64436	*<.0001*	***	0.64641	*<.0001*	***	0.78270	*<.001*	***	0.77478	*<.001*	***
TENURE	-0.00789	*0.799*		-0.00777	*0.803*		0.07502	*0.100*	*	0.07206	*0.125*	
ADJ_RETURN	-0.12300	*0.375*		-0.12054	*0.380*		0.24364	*0.131*		0.22109	*0.166*	
LEI	0.08585	*0.008*	***	0.08552	*0.009*	***	-0.00388	*0.945*		-0.00938	*0.868*	
UNLIM	0.04387	*0.698*		0.04327	*0.703*		-0.10040	*0.497*		-0.09470	*0.513*	
BD_MEET	0.03396	*<.001*	***	0.03386	*<.001*	***	-0.02204	*0.074*	*	-0.02301	*0.061*	*
BD_SIZE	-0.00232	*0.927*		-0.00235	*0.926*		0.04470	*0.419*		0.03466	*0.529*	
BD_IND	-0.16330	*0.551*		-0.16177	*0.556*		0.09602	*0.792*		0.11138	*0.765*	
PCT_ATT	-0.45147	*0.032*	**	-0.45282	*0.032*	**	-0.69848	*0.021*	**	-0.72027	*0.018*	**
CHAT_TENURE	-0.00237	*0.828*		-0.00249	*0.821*		0.01803	*0.245*		0.01498	*0.317*	
CEO_DUAL	-0.52257	*0.026*	**	-0.52096	*0.027*	**	0.53613	*0.263*		0.57616	*0.236*	
Year and Industry Indicators		Yes						Yes				
R^2		9.4%						13.3%				
N		430						196				

Note: *, **, *** indicate statistical significance at the 10 percent, 5 percent, and 1 percent levels, respectively, based on a two-tailed test. Standard errors are clustered by firm and fiscal year.