

The Influence of Corporate Social Responsibility on Earnings Management

Houyi Wang¹, Dr. Maisarah Binti Mohamed Saat², Lijie Wang³, Xin Luan⁴

¹mirandawang96@163.com, ²maisarahsaat@utm.my, ³lijiewang2@ln.hk, ⁴lx990129@126.com

*Corresponding Author Name: Dr. Maisarah Binti Mohamed Saat

Abstract - This paper uses Shanghai and Shenzhen A-share listed companies as a sample from 2011 to 2020 to study the relationship between corporate social responsibility and earnings management. The research results show that the higher corporate social responsibility score of this year is, the lower the level of earnings management will be. This inhibit effect is more effective in large scale companies and companies from Southern China. For state-owned companies and non-state-owned companies, there is no significant difference. In the relationship between corporate social responsibility and earnings management, internal control plays an important mediating effect role. The research conclusions cannot only provide empirical evidence of the relationship between corporate social responsibility and earnings management, but also have research value for improving firm value and the development.

Index Terms - Corporate Social Responsibility; Earnings Management; Internal Control; Nature of Companies; Size of Companies; Region of Companies.

INTRODUCTION

Under the background of China's economic transformation and development, improving the quality of development and achieving sustainable development is the future direction and inevitable choice. Various problems have become increasingly prominent in the process of deepening reform of enterprises, and all sectors of society are increasingly concerned about the implementation of corporate social responsibilities. Government issued the "Guiding Opinions on the Performance of Social Responsibilities of Central Enterprises" in 2008, which summarized the main content of corporate social responsibility with Chinese characteristics. In 2011, government issued the Twelfth Five-Year Plan. It is proposed to promote the harmonious development of enterprises, society and the environment with the promotion of corporate social responsibility as a carrier. The overall goal of "Guiding Opinions on the Better Performance of Corporate Social Responsibility " in 2016 is to form a group of leading industries to fulfill social responsibilities and have an excellent company with international influence and respect. From a corporate perspective, undertaking corporate social responsibility is also an inevitable choice for companies to achieve sustainable development. Reasonable corporate social responsibility decisions can help companies and society develop together (Zhu, 2021; Porter & Kramer, 2006).

At present, the correlation between corporate social responsibility and earnings management is an important issue in China. Therefore, whether enterprises actively participating in social responsibility activities create opportunities for their earnings management behaviors is one of the main contents of this study. It has been documented that the relationship between corporate social responsibility and earnings management is not only likely to be related to the internal governance environment of enterprises (Song, Teng & Qin, 2017; Zhang, 2018). Li, Chai and Di (2019) found that the power of corporate executives can effectively inhibit earnings management behaviors. In order to effectively check and balance management's control over the enterprise, the enterprise tries to weaken the moral risk and reverse selection caused by the entrustment agent through internal control, but because of the imperfection of the internal governance structure of the enterprise, the management power is more and more inflated, the supervision and balance system of the internal control of the enterprise is more easily broken by the management, in order to cover up the management's rent-seeking behaviors of earnings management problem is becoming more serious (Li, Wang & Qing, 2018).

THEORETIC ANALYSIS AND RESEARCH HYPOTHESES

Although there are many studies on corporate social responsibility and earnings management, the number of previous studies on the relationship between corporate social responsibility and earnings management is still in low level. The results are not uniform due to the lack of uniform and standardized evaluation criteria and relevant data (Peng & Pan, 2019). On the basis of existing references, this study mainly investigates the impact of corporate social responsibility and media attention on earnings management, and further analyzes the role of internal control in regulating the relationship between corporate social responsibility and earnings management, enriches the existing research, and provides an empirical reference for future related research.

Research on the economic consequences of corporate social responsibility is mainly focused on corporate financial performance, brand influence, consumer response, employee response and so on. In terms of earnings management, there have been many relevant studies, and the research conclusions are inconsistent. Roman (1999) analyzed 55 papers and found that 33 papers concluded that corporate social responsibility and earnings management are positively related, 5 negatively related papers, and 14 unrelated papers. In general, there are more studies on positive correlations (Schnietz & Epstein, 2005; Yang & Shen, 2008; Zhu, 2011; Chen, 2012; Jo & Harjoto, 2012; Xu & Yi, 2013; Yu, 2015; Zhang, 2018). However, some studies have reached negative or unrelated conclusions (Gary & Kohers, 2002; Brammer, 2007; Li, 2006; Shi, 2009; Lin, Liu & Zhao, 2019). In the short term, assuming social responsibility will increase the cost of the enterprise. However, from the perspective of a longer time, the benefits of assuming social responsibility outweigh the disadvantages for enterprises, so the relationship between corporate social responsibility and earnings management is positively correlated (Zhang & Cao, 2021). Zhang (2013) further applied the systematic GMM method to empirically analyze the intertemporal impact of the interaction between corporate social responsibility and earnings management. The results of the research show that the social responsibility that lags one year has a significant positive impact on the current financial performance.

Hence, these three hypotheses are proposed as followed:

H1a: The fulfillment of corporate social responsibility has an inhibitory effect on corporate earnings management behavior.

H1b: The fulfillment of corporate social responsibility can promote corporate earnings management behavior.

H2a: Keep other conditions unchanged. The fulfillment of corporate social responsibility has an inhibitory effect on corporate earnings management behavior. This phenomenon is more obvious in larger companies.

H2b: Keep other conditions unchanged. The fulfillment of corporate social responsibility has a restraining effect on corporate earnings management behavior. This phenomenon is more obvious in state-owned enterprises.

H2c: Keep other conditions unchanged. The fulfillment of corporate social responsibility has a restraining effect on corporate earnings management behavior. This phenomenon is more obvious in northern Chinese companies.

H3: Limit other conditions unchanged, and internal control play a part of the mediating effect in the impact of corporate social responsibility on earnings management.

RESEARCH DESIGN

I. Sample selection

This study selects the Chinese A-share listed firms from 2011 to 2020 as sample. In order to ensure the validity of the data, this study screens the data according to standards as follows: (1) exclude the samples of financial and insurance firms; (2) eliminate ST and *ST firms; (3) eliminate the samples with the missing data in the model. There are 4,497 firm-year observations remaining in the sample of this study. The data of corporate social responsibility are taken from the Runling Global Corporate Social Responsibility Database. The data of internal control are derived from the DIB Database, and the nature of enterprises is from the CCER database. Other financial data are collected from CSMAR database and WIND database. To ensure that the results are not driven by the outliers, this study winsorises all continuous variables at 5% and 95%.

II. Model setting and definitions of variables

In order to verify the research hypotheses of this study, the regression model to be tested is set as follows, which is based on the studies by Li & Zhang (2018).

$$EM_{i,t} = \alpha + \beta_1 \times CSR_{i,t} + \beta_2 \times Lev_{i,t} + \beta_3 \times Size_{i,t} + \beta_4 \times Age_{i,t} + \beta_5 \times Cash_{i,t} + \beta_6 \times Growth_{i,t} + \beta_7 \times Roa_{i,t} + \beta_8 \times Roe_{i,t} + \beta_9 \times Industry_{i,t} + \varepsilon_{i,t}$$

The definition of dependent variables, independent variable and control variables are shown in the table 1 as follows.

TABLE 1
DEFINITION OF VARIABLES

Type	Name	Symbol	Definition
Independent Variable	Corporate Social Responsibility	<i>CSR</i>	Corporate Social Responsibility Score / 100
Dependent Variables	Earnings Management	<i>EM</i>	Accrued Earnings Management+ Real Earnings Management
Mediating Variable	Internal Control	<i>IC</i>	Internal control index of listed firms in China from the DIB database
	Financial Leverage	<i>Lev</i>	Asset-liability ratio
Control Variables	Firm Size	<i>Size</i>	The natural logarithm of total assets
	Profitability	<i>Roa</i>	Ratio of net income to total assets
	Return on Equity	<i>Roe</i>	Ratio of net profit to average shareholders' equity
	Growth	<i>Growth</i>	Growth rate of operating income
	Listing Age	<i>Age</i>	The number of years after IPO of firms

	Cash Ratio	Cash	Ratio of cash holdings to total assets at the end of year
	Industry	Industry	The industry classification of CSR

EMPIRICAL RESULTS AND ANALYSIS

I. Perspective from Company Scale

As can be seen from the table below, the coefficient of CSR is significant in both larger groups and larger groups, but the regression coefficient of large enterprises is mostly negative and the regression coefficient of small enterprises is positive, which indicates that corporate social responsibility is due to its high sense of social responsibility and moral awareness, ethical constraints and drivers that make the company less of earnings management behavior, and the larger enterprises have a higher social responsibility (Scholtens and Kang, 2012).

TABLE 1
REGRESSION

	(1) Large-scaled companies	(2) Small-scaled companies
	EM	EM
CSR	-0.001 (-0.903)	0.003* (1.796)
Roe	-0.019 (-0.226)	-0.008 (-0.083)
Size	0.009* (1.700)	0.017** (2.306)
Roa	0.722*** (3.549)	0.525*** (2.592)
Lev	0.089* (1.866)	0.010 (0.250)
Growth	0.073*** (7.185)	0.062*** (5.624)
Age	-0.005*** (-3.521)	-0.006*** (-3.309)
Cash	0.003 (0.671)	0.006 (1.043)
_cons	0.042 (0.557)	0.062 (0.730)
Year	Yes	Yes
Industry	Yes	Yes
Adj.R ²	0.0379	0.0365
N	4497	4497

***, ** and * indicate the significant level at 1%, 5% and 10% respectively.

All variables are as previously defined.

II. Perspective from The Nature of Company

From the perspective of heterogeneity of enterprise nature, the influence of corporate social responsibility on earnings management shows differences between state-owned and non-state-owned samples. In the state-owned sample, CSR is negatively related to earnings management, indicating that state-owned enterprises actively fulfill corporate social responsibility, while less implementation of earnings management behavior. In the non-state-owned sample, the regression coefficient is positive, which indicates that the performance of corporate social responsibility in the non-state-owned sample is positively related to earnings

management. There are the following reasons for this phenomenon: First, compared with the general enterprises, state-owned enterprises receive more media attention, more pressure on public opinion and supervision, once the state-owned enterprises in social responsibility deficiencies, will cause more negative public opinion criticism. Based on signal transmission and reputation theory, SOEs put some resources into the implementation of CSR, which can convey positive and positive information to the outside world, so as to improve the image of SOEs and enhance their financing capacity. Secondly, based on the agency theory and the selection system of senior executives of state-owned enterprises in China, the appointment and removal of senior executives of state-owned enterprises is still controlled by all levels of government departments, and one of the basis for their evaluation is the implementation of corporate social responsibility, therefore, when economic policy uncertainty rises, the more likely so-called enterprise executives for self-interest considerations, in order to avoid being removed or demoted to promote state-owned enterprises to actively disclose social responsibility information.

TABLE 2
REGRESSION

	(1) state-owned enterprises	(2) non-state-owned enterprises
	EM	EM
CSR	-0.003** (-2.482)	0.004** (2.485)
Roe	-0.033 (-0.428)	0.011 (0.102)
Size	0.011** (2.228)	0.016** (2.397)
Roa	0.686*** (3.870)	0.484** (2.156)
Lev	0.034 (0.931)	0.003 (0.060)
Growth	0.075*** (7.685)	0.059*** (4.994)
Age	-0.005*** (-4.019)	-0.006*** (-2.997)
Cash	0.007 (1.501)	-0.013** (-2.333)
_cons	0.039 (0.584)	0.346*** (4.156)
Year	Yes	Yes
Industry	Yes	Yes
Adj.R ²	0.0413	0.0426
N	4497	4497

***, ** and * indicate the significant level at 1%, 5% and 10% respectively.

All variables are as previously defined.

III. Perspective from Different Regions

From the perspective of the heterogeneity of geographical differences, the influence of corporate social responsibility on earnings management shows differences among enterprises in the south and in the north. In the sample of enterprises in the North, corporate social responsibility is negatively related to earnings management, and in the sample of enterprises in the South, corporate social responsibility is positively related to earnings management. The main reason is that the system environment of the enterprise is different, and the economic development is not balanced, the development ability of the enterprise is greatly affected by the external environment.

TABLE 3
REGRESSION

	(1) Companies from Northern China	(2) Companies from Southern China
	EM	EM
CSR	-0.002 (-1.374)	0.001 (0.705)
Roe	0.182* (1.919)	-0.115 (-1.389)
Size	0.005 (1.005)	0.021*** (3.858)
Roa	0.231 (1.089)	0.778*** (4.388)
Lev	0.014 (0.330)	0.002 (0.045)
Growth	0.033*** (2.733)	0.088*** (9.144)
Age	-0.006*** (-4.290)	-0.005*** (-3.005)
Cash	-0.002 (-0.334)	0.000 (0.036)
_cons	0.202** (2.551)	0.126* (1.813)
Year	Yes	Yes
Industry	Yes	Yes
Adj.R ²	0.0379	0.0365
N	4497	4497

***, ** and * indicate the significant level at 1%, 5% and 10% respectively.

All variables are as previously defined.

IV. Mediating Effect Analysis

Drawing on the intermediary effect research methods of Baron and Kenny (2009), Wen Zhonglin (2014), this paper first adopts the step-by-step regression method to test the following three steps: First, establish a model (1) to test the direct impact of CSR scores on earnings management. If the regression coefficient c is significant, the next test is carried out, otherwise the intermediary effect is not significant, and the second step is to establish a model (2) to test the influence of CSR score on the intermediary variable. The third step is to establish a model (3) to test the intermediary effect of intermediary variables such as political cost in the impact of CSR score on the quality of surplus. If all three models have significant regression coefficients, then partial mediation, if c' in model (3) is not significant and regression coefficient abc is significant, then full mediation.

$$Y = cX + e_1 \dots\dots\dots(1)$$

$$M = aX + e_2 \dots\dots\dots(2)$$

$$Y = c'X + bM + e_3 \dots\dots\dots(3)$$

TABLE 4
REGRESSION

	(1)	(2)	(3)
	Earnings Management	Internal Control	Earnings Management
CSR	-0.001***	0.047***	-0.001***
	(-4.503)	(36.954)	(-2.730)
Internal Control			-0.006***
			(-2.876)
_cons	0.190***	21.216***	0.316***
	(23.964)	(408.383)	(7.097)
N	4497	4497	4497

***, ** and * indicate the significant level at 1%, 5% and 10% respectively.

All variables are as previously defined.

CONCLUSION

This paper uses Shanghai and Shenzhen A-share listed companies as a sample from 2011 to 2020 to study the relationship between corporate social responsibility and earnings management. The research results show that the higher corporate social responsibility score of this year is, the lower the level of earnings management will be. This inhibit effect is more effective in large scale companies and companies from Southern China. For state-owned companies and non-state-owned companies, there is no significant difference. In the relationship between corporate social responsibility and earnings management, internal control plays an important mediating effect role. The research conclusions cannot only provide empirical evidence of the relationship between corporate social responsibility and earnings management, but also have research value for improving firm value and the development.

In conclusion, this research combines the results of previous studies and analyzes corporate social responsibility and earnings management based on Chinese special background. This has a positive role in improving the theoretical research and practical development of earnings management for listed companies in China. And it can provide theoretical basis and empirical support for achieving sustainable economic growth in China.

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