

A Study on the Impact of Corporate Social Responsibility on Financial Performance from a Multidimensional Perspective

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Abstract. This article combines stakeholder theory and corporate social responsibility report disclosure matters to divide corporate social responsibility into seven dimensions. Using data from A-share listed companies in Shanghai and Shenzhen from 2013 to 2022 as samples, the relationship between each dimension of corporate social responsibility and financial performance is studied. The research results indicate that from the dimensions of shareholders, employees, suppliers, government, environment, and the public, corporate social responsibility has a significant positive impact on financial performance; From the customer perspective, corporate social responsibility has a significant negative impact on financial performance. The research results have theoretical and practical significance for guiding corporate social responsibility management and improving financial performance.

Keywords: Corporate Social Responsibility , Dimension , Performance

1 Introduction

The growth and development of enterprises cannot be separated from the social environment. While pursuing their own business goals, they also need to fulfill their social responsibilities. Some unethical behaviors exposed by enterprises in order to obtain short-term benefits have a negative impact on commercial society, and also make the public lose trust in them. High quality development is a distinct theme of China's economic development in the new era. If enterprises want to maintain long-term stability, sustainable and healthy development, they must actively assume social responsibility, thereby enhancing their reputation and competitiveness. When enterprises incur additional expenses in fulfilling their social responsibility, they also receive returns from all parties, which affects their profits. Therefore, the relationship between corporate social responsibility and financial performance is worth exploring in depth.

2 Literature review

Barnett (2006) believes that fulfilling corporate social responsibility is not just a cost investment, but also an investment with financial performance returns^[1]. Tianxu Jiang (2019) divided corporate social responsibility into external social responsibility and internal social

responsibility, and found that both internal and external corporate social responsibility have a significant positive impact on financial performance^[2]. Jinsong Zhang and Muyao Li (2021) pointed out that corporate social responsibility has a significant positive impact on financial performance, and internal control positively moderates the relationship between the two^[3]. Juanjuan Jia (2022) regards corporate social responsibility as a strategic investment and studies its impact on financial performance from two aspects: charitable donation expenditure and industrial poverty alleviation project expenditure^[4].

According to existing research results, many scholars have a vague definition of corporate social responsibility and have studied the relationship between corporate social responsibility and financial performance from a macro perspective. They have not refined corporate social responsibility into each dimension, making it difficult to determine which specific factor has an impact on financial performance. In response to the above issues, this article makes the following innovations: (1) Combining stakeholder theory with the disclosure status of social responsibility reports to broaden the research scope; (2) Dividing corporate social responsibility into various dimensions is beneficial for understanding the specific impact of each dimension of corporate social responsibility on financial performance.

3 Theoretical analysis

Based on the stakeholder theory^[5], enterprises assume social responsibility for stakeholders such as customers, shareholders, employees, suppliers, and the government. In terms of environmental protection, the social responsibility undertaken by enterprises is mainly reflected in the formation of green development methods and the investment in achieving sustainable development strategic goals^[6]. For corporate social responsibility reports, the higher the quality of disclosure, the fewer cases of social responsibility deficiencies, and the more significant the improvement in financial performance^[7]. Corporate social responsibility will incur costs and expenses, as well as gain the trust and support of stakeholders and the public, thereby affecting the financial performance of the enterprise^[8]. Most studies use accounting methods to measure financial performance, and choose the return on total assets or return on net assets as the evaluation indicators of financial performance^[9].

4 Research hypothesis

Corporate social responsibility covers a wide range of areas, and the academic community has not yet formed a consistent standard for its interpretation. Therefore, research on corporate social responsibility can be conducted from multiple dimensions. Due to the inability to select all elements of corporate social responsibility and the different focus of research, this article divides corporate social responsibility into seven dimensions based on five stakeholders and two important matters disclosed in the social responsibility report. The five stakeholders refer to customers, shareholders, employees, suppliers, and government, while the two important matters refer to whether to disclose environmental and sustainable development, public relations, and social welfare undertakings.

In order to achieve long-term business goals, enterprises need to continuously improve and enhance the quality of products and services with the rapidly changing social environment,

and cultivate loyal customers by formulating reasonable pricing strategies. The purpose of shareholder investment is to expect returns, and the enterprise bears the responsibility of creating wealth for shareholders. Employees provide labor value to the enterprise, and the social responsibility that the enterprise should fulfill to employees includes creating a comfortable working environment, improving salary and treatment levels, etc. In order to produce good products, enterprises must strictly control raw materials and pay suppliers in a timely manner, which is beneficial for suppliers to provide high-quality raw materials and easier to establish long-term cooperative relationships. The social responsibility of enterprises towards the government mainly refers to their tax obligations. Enterprises should pay taxes in accordance with the law. The disclosure of corporate social responsibility reflects the attitude of the company towards fulfilling its social responsibility. Disclosure of information can reveal the actions taken by the company to assume social responsibility, while also conveying positive signals to stakeholders, thereby affecting the financial performance of the company. In summary, this article proposes the following assumptions:

H1: There is a significant positive correlation between corporate social responsibility and financial performance in each dimension.

H2: There is a significant negative correlation between corporate social responsibility and financial performance in each dimension.

5 Research design

5.1 Sample selection and data sources

This article takes the data of A-share listed companies in Shanghai and Shenzhen from 2013 to 2022 as the research object, and conducts the following data screening on the sample: (1) Exclude listed companies with missing data; (2) Exclude ST and * ST listed companies (3) Exclude financial industry listed companies. All data on corporate social responsibility and financial performance are sourced from Guotai An Financial Database and analyzed using Stata17.0 software.V

5.2 Variable design

(1)Dependent variable

Financial performance. ROA (Return on Total Assets), as an accounting indicator, can more directly reflect financial performance. Drawing on the experience of many previous mathematicians, this article also selects ROA as a measurement indicator of financial performance. To ensure the robustness of the research results, ROE (Return on Equity) will be used for robustness testing.

(2)Independent variable

Agency indicators for the seven dimensions of corporate social responsibility. For the measurement of corporate social responsibility, this article combines stakeholder theory and the disclosure status of corporate social responsibility reports to divide corporate social responsibility into the following dimensions: customers, shareholders, employees, suppliers, government, environment, and the public. Drawing on existing research and considering the

availability of data, this article uses seven dimensions of corporate social responsibility as proxy indicators: operating cost ratio, earnings per share, employee compensation level, accounts payable turnover rate, taxes payable, whether to disclose environmental and sustainable development, and whether to disclose public relations and social welfare undertakings.

(3)Control variables

The basic characteristics of a company that affect financial performance. This article selects enterprise size, board size, and the proportion of independent directors as control variables, all of which will affect the financial performance of the enterprise. Considering the large value of enterprise size, logarithmic operation is performed on it.

5.3 Model construction

To examine the impact of each dimension of corporate social responsibility on financial performance, the following model is constructed:

$$ROA = \alpha_0 + \alpha_1 EPS + \alpha_2 LnSL + \alpha_3 OCR + \alpha_4 APTR + \alpha_5 LnTP + \alpha_6 ENV1 + \alpha_7 VOL1 + \alpha_8 LnES + \alpha_9 BS + \alpha_{10} PID + \varepsilon \quad (1)$$

In the equation, α_0 represents the intercept term, $\alpha_1 \sim \alpha_{10}$ represents the regression coefficients of each explanatory variable, EPS represents earnings per share, and LnSL represents the logarithm of employee compensation level, OCR represents the operating cost ratio, APTR represents the accounts payable turnover ratio, LnTP represents the logarithm of corresponding tax fees, ENV1 represents whether to disclose the environment and sustainable development, VOL1 represents whether to disclose public relations and social welfare undertakings, LnES represents the logarithm of enterprise size, BS represents the board size, and PID represents the proportion of independent directors, ε Represents the residual term.

6 Empirical analysis

6.1 Descriptive Statistics and Correlation Analysis

As shown in Table 1, from the descriptive statistics of variables, the mean ROA of the total asset return on equity of the sample listed companies from 2013 to 2022 is 0.0383, with a minimum value of -0.296 and a maximum value of 0.232, indicating that the profitability of listed companies in China is within the normal range. The average turnover rate of accounts payable is 7.633, with a minimum value of 0.566 and a maximum value of 78.63, indicating significant differences in the turnover capacity of listed companies in China.

Table 1.Descriptive Statistics of Variables

Variable	Obs	Mean	Std. dev.	Min	Max
ROA	33,089	0.0383	0.0742	-0.296	0.232
APTR	33,089	7.633	10.81	0.566	78.63
OCR	33,089	0.705	0.180	0.150	1.030
EPS	33,089	0.397	0.741	-1.914	3.599
LnSL	33,089	11.74	0.500	10.63	13.16

LnTP	33,089	17.27	1.635	13.42	21.84
ENV1	33,089	0.862	0.345	0	1
VOL1	33,089	0.800	0.400	0	1
lnES	33,089	22.09	1.332	19.59	26.15
BS	33,089	8.390	1.613	5	14
PID	33,089	37.79	5.365	33.33	57.14

Table 2 shows the correlation between various variables. At the 1% level, the correlation coefficient between the five dimensions of corporate social responsibility: accounts payable turnover rate, earnings per share, taxes payable, whether to disclose the environment and sustainable development, whether to disclose public relations and social welfare undertakings, and corporate financial performance is significantly positive, while the correlation coefficient between operating cost rate and corporate financial performance is significantly negative. In order to investigate the issue of multicollinearity between variables, the multicollinearity test found that the VIF of all variables was less than 4, with the maximum VIF of 3.26 and the mean VIF of 1.63. This indicates that there is no severe multicollinearity between variables and is suitable for multiple regression analysis.

Table 2.Correlation Analysis

	R O A	A P T R	O C R	E P S	L n S L	L n T P
R O A	1					
A P T R	0.051***	1				
O C R	-0.373***	0.196***	1			
E P S	0.732***	0.020***	-0.284***	1		
L n S L	-0.00600	-0.022***	-0.110***	0.112***	1	
L n T P	0.112***	-0.033***	0.00100	0.252***	0.245***	1
ENV1	0.022***	-0.018***	0.048***	0.076***	0.091***	0.104***
VOL1	0.032***	-0.024***	-0.011**	0.093***	0.140***	0.165***
lnES	-0.076***	-0.022***	0.204***	0.114***	0.262***	0.784***
B S	0.016***	-0.00700	0.044***	0.027***	0.028***	0.212***
P I D	-0.027***	-0.011**	-0.015***	0	0.037***	-0.009*

	ENV1	VOL1	lnES	BS	PID
ENV1	1				
VOL1	0.502***	1			
lnES	0.178***	0.220***	1		
BS	0.031***	0.051***	0.279***	1	
PID	-0.011*	-0.00300	-0.011**	-0.545***	1

6.2Regression result analysis

Observing the regression coefficients in Table 3, it can be seen that the indicators that have the same expected impact on the return on total assets (ROA) are APTR, EPS, LnSL, LnTP, ENV1, and VOL1, while the indicator that has the opposite expected impact on ROA is OCR. These indicators are significantly correlated with ROA at the 1% level. From this, it can be seen that the fulfillment of social responsibility by listed companies in China towards shareholders, employees, suppliers, government, environment, and the public has a positive impact on their financial performance, while the fulfillment of social responsibility towards customers has a negative impact on their financial performance. This may be due to the high

cost of fulfilling social responsibility towards customers and the inability to obtain customer "returns" higher than the cost in the short term. Therefore, neither Hypothesis 1 nor Hypothesis 2 holds true. The coefficient of EPS is 0.076, indicating that the higher the earnings per share, the more willing shareholders are to support the company and improve financial performance. The coefficient of LnSL is 0.011, indicating that higher employee compensation levels can motivate employees to improve work efficiency. The coefficient of APTR is 0.000353, indicating that timely payment of goods to suppliers by enterprises is a win-win behavior. The coefficient of LnTP is 0.0224, indicating that enterprises paying taxes in accordance with the law is not a one-way payment activity, and enterprises will also receive government funding and support.

Table 3.Regression Results

	(1) ROA	(2) ROA	(3) ROA	(4) ROA	(5) ROA	(6) ROA	(7) ROA
APT	0.000353						
R	***						
	(9.20)						
OCR		-0.165***					
EPS		(-74.93)	0.0760**				
LnSL			*	0.0110**			
			(209.02)	*			
LnTP				(11.21)	0.0224**		
ENV					*		
1					(56.76)	0.00609**	
						*	
VOL						(4.80)	0.0106***
1							(9.76)
	0.0717**	0.127***	0.195***	-0.0260*	0.181***	0.0793***	0.0850***
_cons	*	(15.26)	(33.09)	*	(20.75)	(8.86)	(9.48)
	(7.99)	33089	33089	(-2.02)	33089	33089	33089
N	0.0339	0.172	0.583	0.0351	0.117	0.0321	0.0343
r ² _a	Yes	Yes	Yes	Yes	Yes	Yes	Yes
ind	Yes	Yes	Yes	Yes	Yes	Yes	Yes
year	Yes	Yes	Yes	Yes	Yes	Yes	Yes

6.3 Robustness testing

To ensure the reliability of the research results, this article continues to use the following two methods for testing: (1) replacing the dependent variable. Using Return on Equity (ROE) instead of Return on Total Assets (ROA) as a substitute variable for financial performance. Perform robustness tests on regression models by analyzing different measurement methods of dependent variables. By observing Table 4, after replacing the measurement indicator of the dependent variable with ROE, the coefficient sign and significance of the explanatory variable in the regression results are consistent with the regression results in Table 3. (2) Change the sample size. The number of manufacturing industries in the sample accounts for about 50% of the total sample, and the characteristics of the manufacturing industry are obvious. Selecting

manufacturing enterprises as the sample for multiple regression, the regression results are still stable.

Table 4.Robustness Test Method 1

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	ROE	ROE	ROE	ROE	ROE	ROE	ROE
APTR	0.000708*** (8.68)						
OCR		-0.278*** (-57.49)					
EPS			0.149*** (177.11)				
LnSL				0.0157*** (7.57)			
LnTP					0.0420*** (49.47)		
ENV1						0.0144*** (5.33)	
VOL1							0.0220*** (9.51)
_cons	-0.0613*** (-3.22)	0.0332* (1.82)	0.182*** (13.29)	-0.198*** (-7.22)	0.145*** (7.71)	-0.0454** (-2.39)	-0.0340* (-1.78)
N	33089	33089	33089	33089	33089	33089	33089
r ² _a	0.0178	0.105	0.495	0.0173	0.0834	0.0164	0.0182
ind	Yes	Yes	Yes	Yes	Yes	Yes	Y e s
year	Yes	Yes	Yes	Yes	Yes	Yes	Y e s

7 Conclusion and inspiration

7.1 Conclusion

This article takes the data of A-share listed companies in Shanghai and Shenzhen from 2013 to 2022 as a sample, and analyzes the impact of various dimensions of corporate social responsibility on financial performance based on different dimensions of corporate social responsibility. This article selects 7 key dimensions from stakeholders and social responsibility report disclosures to measure corporate social responsibility. The research results indicate that from the dimensions of shareholders, employees, suppliers, government, environment, and the public, corporate social responsibility has a significant positive impact on financial performance; From the customer perspective, corporate social responsibility has a significant negative impact on financial performance.

7.2 Enlightenment

(1)Enterprises should actively assume social responsibility towards shareholders, employees, suppliers, and the government. For shareholders, enterprises should provide true and reliable business and investment information, ensure the safety of shareholders' funds, and strive to create profits for shareholders. For employees, enterprises should fully respect the rights of workers and ensure a reasonable salary level. For suppliers, enterprises should be honest and

trustworthy, and fulfill their contractual obligations. For the government, enterprises should abide by laws and regulations, operate legally, and pay taxes in accordance with the law.

(2) Enterprise development should be based on the current situation, take a long-term perspective, and adhere to assuming social responsibility for customers. In the short term, the high cost of corporate social responsibility investment towards customers will reduce financial performance. However, customers, as the service objects of the enterprise, are the source of profit for the enterprise. Only by continuously optimizing and upgrading products in the long term can the enterprise meet the higher-level consumption needs of customers and earn more profits by retaining old customers and attracting new customers.

(3) Enterprises should fulfill their social responsibility to the environment and the public, actively disclose corporate social responsibility reports, and focus on whether to disclose the environment and sustainable development, as well as whether to disclose public relations and social welfare undertakings. For the environment, enterprises should establish a green development concept and implement the requirements of pollution reduction and carbon reduction. For the public, enterprises should actively participate in public welfare and charitable causes to repay society and shape a good image of the enterprise.

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