

An Empirical Analysis of the Influence of Corporate Social Responsibility on Investment

Wei Dong Huang, Shan Yue Jin*

Abstract--- *This study empirically analyzes the impact of corporate social responsibility on investment using data from listed companies on both the Shanghai Stock Exchange and Shenzhen Stock Exchange from 2010 to 2017 in China. Corporate social responsibility has a positive impact on investment, especially in state-owned enterprises, and the more positive the cash holdings of the company, the greater the positive impact. This study concludes that listed companies should strengthen their emphasis on social responsibility, actively fulfill their social responsibilities, and enhance the scale of investment to achieve a win-win situation.*

Keywords--- *Social Responsibility, Investment, State-owned Enterprises, Cash holdings, Listed companies.*

I. INTRODUCTION

Corporate social responsibility (CSR) policies and investment are important factors in the development and progress of a company. From the perspective of enterprise development, correct CSR decision-making can affect the company's external financing, promote corporate sustainable development, and increase the scale of corporate investment [1]. Companies with good CSR reduce corporate risk and increase the scale of corporate investment. Luo and Bhattacharya in 2009 consider that CSR reduces non-systemic risks [2]. This is because companies with higher levels of social capital have a greater burden of increasing corporate capital, accelerating the turnover of liquidity, and thereby promoting the scale of corporate investment [2]. Companies can receive more external financing, and thus, the probability of reducing the size of the investment for dividend distribution is smaller. The ability to be impacted contributes to the sustainable growth of the company [3]. The company pays attention to the interests of stakeholders and assumes more social responsibilities. This can help the company to expand and increase the stock of corporate funds, accelerate the turnover of working capital, and promote the scale of investment [4].

In China, there are differences in the collective social responsibility practiced by state-owned and non-state-owned enterprises. According to Luo and Liu in 2000, conventional enterprises play a leading role in the socialist market economy and social responsibility [5]. They indicate that state-owned enterprises play a leading role in the socialist market economy, and their social responsibility is compulsory [2]. Comparing the social responsibility of Chinese and western state-owned enterprises, they conclude that China's state-owned enterprises have assumed more social responsibilities, which has had a great impact on the economic benefits of state-owned enterprises. Although state-owned companies should abandon some of their recent interests, these activities typically help the company to realize

Wei Dong Huang, Ph. D Student of Global Business Department, Gachon University, Seongnam, South Korea.

Shan Yue Jin (Corresponding Author), Assistant Professor of Global Business Department, Gachon University, Seongnam, South Korea.

E-mail: jsyrena0923@gachon.ac.kr

long-term interests, while also increasing the company's strength and its scale of investment.

There are different impacts on CSR and investment size for companies with different levels of cash holdings. Dittmar and Mahrt in 2007 compare the CSR scores and cash holdings of companies with different governance levels to analyze the relationship between CSR score and cash holding value, and conclude that there is a significant positive correlation between corporate governance level and cash holding value [6]. Orlitzky in 2013 shows that the pressures faced by companies are significantly positively correlated with CSR [7]. Meng, Chen and Zhang in 2016 show that cash holdings are significantly positively correlated with social responsibility performance [8]. Therefore, the difference in cash holdings also affects the scale of investment in enterprises. Arouri and Pijourlet in 2017 study the relationship between CSR and cash holding value [9]. The literature regards the value of cash holdings from the perspective of investment, and considers the degree of CSR fulfillment to be positively related to the value of cash holding [9].

II. THEORETICAL BACKGROUND AND LITERATURE REVIEW

A. Stakeholder Theory

Since the 1990s, stakeholder-related theories have become the theoretical framework for evaluating the most common basis for CSR, and there has been a trend toward comprehensive integration.

Based on the stakeholder theory of CSR, Orlitzky in 2013 considers that CSR performance and information asymmetry are significantly negatively correlated, while information transparency is positively related to investment scale [11]. The more CSR activities a company undertakes, the more the information transparency and the higher the scale of investment. The better the implementation of CSR, the better the company's ability, the better its financing results, and the better its scale of investment [7].

B. Agency Theory

Peng in 2016 proposes that in the absence of a regulatory mechanism and less equity for managers, managers would excessively engage in socially responsible activities for personal gain [10]. If the owner of the enterprise were also the manager of the enterprise, the interests would coincide, and there would be no principal-agent problem; however, when the manager of the enterprise is not the shareholder but a professional, the interests are not the same [10]. The owner's goal is to obtain residual income from the production and operation of the enterprise. The manager's goal is to meet the individual's economic needs, such as on-the-job consumption, in addition to fulfilling fiduciary responsibility and increasing the enterprise's capital [10].

According to the theory of CSR agency, charitable acts bring not only a good public image to the company, but also benefits and reputation to managers, such as recognition, proximity to celebrities, and new relationships. The more the CSR activities, the more personal benefits managers can obtain. The absence of a regulatory mechanism and less equity, interest, and reputation drive managers to over-invest in CSR activities. If the cost of fulfilling social responsibility exceeds the benefits of CSR activities, CSR hurts shareholder wealth and becomes a new agency problem.

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C. Information Asymmetry Theory

Lin in 2006 considers that the pursuit of profit maximization is the essential characteristic of enterprises, but for external reasons, such as information asymmetry, some types of enterprise activities harm the interests of employees, communities,

public society, and other stakeholders [11]. As a part of the society, enterprises should have certain ethical and moral obligations to the society. Therefore, we advocate a path of social responsibility for the enterprise, so that it can create wealth for the society and help disadvantaged groups in the society, thereby promoting the harmonious development of the society.

III. HYPOTHESES

Social responsibility is a kind of cost expenditure, and thus, does not reduce the enterprise cost of capital. Social responsibility has a positive effect on enterprise investment scale, because it can improve the enterprise–employee relationship, protect the environment, improve product quality, and enable the enterprise to realize its sustainable development strategy, among other channels [12]. It can also reduce the asymmetry of information and reduce the cost of capital of the enterprise. Social responsibility information disclosure is positively correlated with corporate investment level. Thus, this study hypothesizes as follows.

Hypothesis 1: Corporate social responsibility has a positive impact on corporate investment scale.

China's institutional background has led to great differences between state-owned and non-state-owned enterprises in terms of financing and resource seeking. Liu and Yang in 2014 find that property rights impact the dividend payment decision of listed companies, and thus, can impact the investment decision [13]. In addition, the financing constraints of state-owned and non-state-owned enterprises differ, with big differences when seeking external financing.

Hypothesis 2: In state-owned enterprises, the performance of social responsibility has a more significant effect on the improvement of enterprise investment scale than in non-state-owned enterprises.

Cash holdings are different in different enterprises, and thus, this study aims to examine the impact of different cash holdings on the relationship between enterprises' fulfillment of social responsibility and their investment scale. The pressure faced by enterprises is significantly positively correlated with their social responsibility [7]. Arouri and Pijourlet in 2017 study the relationship between CSR and cash holding value and conclude that CSR performance is positively correlated with cash holding value. Thus, the following hypothesis is proposed [9].

Hypothesis 3: Corporate cash holdings improve the impact of corporate social responsibility on corporate investment scale.

IV. RESEARCH METHODS

A. Data Collection

In this study, A-share data of the Shanghai Stock Exchange and the Shenzhen Stock Exchange were used as research samples, and various financial data were derived mainly from the China Stock Market & Accounting

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Research database. CSR data were manually collected from HeXun Net scores on CSR and A-share listed companies' CSR reports from 2010 to 2017. The listed companies in the financial industry, and loss-making shares designated as special treatment (ST, *ST, and PT) were excluded from the sample, and the abnormal data of listed companies with abnormal financial conditions above and below the abnormal value by 1% were integrated.

B. Research Model

Model 1 controls the influence of enterprise scale, debt Ratio, year, and industry, and verifies whether CSR has a positive effect on investment scale. If beta 1 >0, then CSR fulfillment is positively correlated with enterprise investment scale; otherwise, beta 1 <0 indicates that CSR fulfillment is negatively correlated with enterprise investment scale.

$$Invi,t = \alpha + \beta_1 CSR_{i,t} + \beta_2 Size_{i,t} + \beta_3 Levi,t + \Sigma Year + \Sigma IND + \epsilon \tag{1}$$

Model 2 adds enterprise nature to model 1, analyzes the role of state-owned enterprises and private enterprises in the relationship between CSR and investment scale, and verifies whether enterprise nature can improve the positive impact of CSR fulfillment on investment scale.

$$Invi,t = \alpha + \beta_1 CSR_{i,t} + \beta_2 State_{i,t} + \beta_3 CSR_{i,t} * State_{i,t} + \beta_4 Size_{i,t} + \beta_5 Levi,t + \Sigma Year + \Sigma IND + \epsilon \tag{2}$$

Model 3 increases corporate cash holdings based on model 1, analyzes its role in the relationship between CSR performance and investment scale, and verifies whether corporate cash holdings can improve the positive impact of CSR fulfillment on investment scale.

$$Invi,t = \alpha + \beta_1 CSR_{i,t} + \beta_2 Cash_{i,t} + \beta_3 CSR_{i,t} * Cash_{i,t} + \beta_4 Size_{i,t} + \beta_5 Levi,t + \Sigma Year + \Sigma IND + \epsilon \tag{3}$$

TABLE 1 EMPIRICAL ANALYSIS RESULTS ON THE IMPACT OF CSR ON INVESTMENT SCALE

Dependent Variable: Inv			
Independent Variable	Model 1	Model 2	Model 3
INV	0.0247*	0.0308**	0.0244*
	(1.88)	(2.29)	(1.84)
CSR	0.0076**	0.0027	-0.0012
	(2.20)	(0.64)	(-0.22)
STATE		-0.0021	
		(-1.02)	
CSRS		0.0114*	
		(1.94)	
CASH			-0.0079
			(-1.06)

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CSRC			0.0452**
			(2.00)
SIZE	-0.0006	-0.0007	-0.0005
	(-1.04)	(-1.33)	(-0.92)
LEV	0.0010	0.0005	0.0028
	(0.33)	(0.17)	(0.85)

Year & Ind	YES	YES	YES
No. of Obs.	780	780	780
Adj. R ²	0.0077	0.0114	0.0122

Note: ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

The results of the regression analysis for the three models are presented in Table 1. The regression coefficient of investment scale in model 1 is 0.0247 at a significance level of 0.10, indicating that the investment scale of companies that actively fulfill social responsibilities is better. The regression results are consistent with the hypothesis that CSR positively impacts corporate investment scale. Based on model 1, model 2 adds the variable of enterprise property rights and the multiplicative term CSRS for the variable CSR of property rights and CSR. The regression coefficient of multiplying terms is 0.0114 at a significance level of 0.10, which is consistent with hypothesis 2, indicating that in state-owned enterprises, the performance of social responsibility by enterprises has a more significant effect on the improvement of enterprise investment scale than in non-state-owned enterprises. Based on model 1, model 3 adds the items of Cash holding and the multiplication of Cash and CSR to obtain CSRC. The regression coefficient of CSRC is 0.0452 at a significance level of 0.05, which is consistent with hypothesis 3, that is, corporate cash holding improves the impact of CSR on corporate investment scale.

V. CONCLUSION AND IMPLICATIONS

Fulfillment of CSR is one of the important factors that measures a company's progress. This study analyzes all A-share data of Shanghai and Shenzhen stocks in 2010-2017 in China, and uses theoretical and empirical verification to investigate the impact of social responsibility on investment scale. The impact is jointly analyzed based on two characteristics: the enterprise's property rights and its amount of cash holdings. Thus, this study analyzes the changes in enterprises' role in fulfilling social responsibility and in their investment scale, when enterprises differ in terms of property rights and cash-holding levels. We draw the following conclusions.

First, an enterprise's active fulfillment of social responsibility increases its investment scale.

CSR can enhance an enterprise's social reputation and enable the outside world to obtain more information about the enterprise, thereby effectively enhancing the investment confidence of external investors, reducing information asymmetry, and increasing the scale of investment.

Second, fulfilling social responsibilities has a more significant effect on improving enterprise investment scale in state-owned enterprises than in non-state-owned companies.

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The social responsibility of state-owned enterprises is not only related to the development of the enterprise itself, but also affects the social image of these enterprises and the common interests of the public. Based on an analysis of related literature at home and abroad, combined with the actual situation of state-owned enterprises in China, this study finds that when state-owned enterprises are responsible for creating economic value for themselves, they must bear an appropriate amount of social responsibility too, thereby promoting the enterprise economy and enhancing investment scale.

Third, corporate cash holdings improve the impact of CSR on corporate investment scale.

Cash, as the most liquid asset of an enterprise, is a core component of corporate governance. A lower cash holding may result in a short-term debt maturity structure in which the company holds a higher financing risk, and a company with a higher level of cash holdings can mitigate this financing risk to a certain extent, thereby increasing the scale of investment.

Private enterprises should not only pay attention to their economic development, but should also actively fulfill their social responsibilities. Also, they should retain sufficient cash flow, which would have a positive impact on fulfilling CSR, ultimately increasing investment scale and improving corporate performance.

From the government point of view, they should encourage listed companies to actively fulfill their social responsibilities.

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