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## **BOARD INDEPENDENCE, CORPORATE SOCIAL RESPONSIBILITY AND FIRM PERFORMANCE: EVIDENCE FROM CHINA**

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### **ABSTRACT**

The purpose of this paper was to investigate the relationship between board independence and the firm performance of Chinese firms listed in the Shanghai Stock Exchange, under the moderating role of Corporate Social Responsibility (CSR). A total of 860 firm-year observations over a period of ten years, that is from 2010 to 2019 was collected. The panel data regression technique was employed to analyze the data and determine the relationship between board independence and the firm performance of the Chinese firms under investigation. After a robustness check, the empirical results showed that the level of the CSR moderated (reduced) the positive relationship between board independence and firm performance. Therefore, the results seemed to imply that although the CSR has been seen as a useful business strategy, the level of the CSR in China still needed to be improved.

In order to improve firm performance through practicing the CSR, the Chinese government and enterprises should be encouraged to continuously improve the level of the CSR.

**Keywords:** Board independence, firm performance, CSR, panel data regression, China stock market.

JEL Classification: G3.

## INTRODUCTION

The world market in the 21st century has already undergone profound and complex changes due to the accelerated development of economic globalization. today's enterprises are facing great challenges and even cutthroat market competition as a result of the unstable and uncertain business environment in this new century (Taouab, 2019). It seems that high and stable business performance is the key driving force for the firm's long-term sustainability in today's dynamic business environment. The rapid growth in the capital market in Asia, especially in China, has emphatically underscored the contribution of corporate governance (CG) performs in influencing future firm's performance.

Corporate governance is considered an important element in improving a firm's performance. Li et al. (2012) highlighted that the topic of corporate governance has become a central discussion among academicians after the 1997 Asian financial crisis as a result of frequent outbreaks of disgraceful incidents such as the infamous Enron and WorldCom scandals. As a result of these corporate scandals, corporate governance has become increasingly important for firms to establish reasonable and good practices of corporate governance mechanisms. According to al-Matari et al. (2014), good corporate governance played a momentous role in preventing the likelihood of a financial crisis, attract more investment for enterprises to maximize its capital, as well as to solidify the pillars of the firm, which could boost firm's performance. It is undeniable that independent directors have a significant role in corporate governance codes and guidance (Merendino & Melville, 2019). Jensen and Meckling, (1976) stated that directors had to be independent as they represent the interests of shareholders, and their main function was to monitor the behaviour of managers to protect the shareholders' interests. In response to

the widespread concern of corporate governance issues, most of the governance reforms implemented by various countries have mainly concentrated on the board of directors' effectiveness in performing their responsibility as board directors. It has been suggested that there is an urgent need to raise the number of independent directors in the firm so that the board could be more effectively play a supervisory role (Gaur et al., 2015). According to report published by The Organization for Economic Co-operation & Development (OECD) in 2004, good corporate governance should be encompassed of an active board of directors, chairperson and chief executive officer (CEO) should be held by two different persons, outside directors should constitute the majority members of the board, and there should be a two-tier board which to be the supervisory board ( tier-one) and the other being the board of directors as tier-two. In terms of the role of independent directors in China, one of the key provisions of the corporate governance code has been the requirement that the composition of boards should consist of outside directors or independent directors. In August 2001, the China Securities Regulatory Commission (CSRC) had published a guidelines that highlighted on the requirement of independent directors sitting on the company's board in listed companies in China. It is clearly stated in the guidelines that all listed companies in China are required to have at least one-third of their board members as independent directors by 2003. As a consequence, both theory and practice emphasized the importance of board independence.

Kao et al. (2019) argued that independent directors in China could indeed reduce agency problems, as these independent directors could be regarded as a bridge between managers and stakeholders. However, Dian (2014) claimed that there was no conclusive research finding on the connection between firm performance and board independence in the unique setting of the Chinese listed firms. The reason behind that is whether the so-called good corporate governance practices depend on whether those practices fit into the institutional environment. Empirical findings from the West might not necessarily have a positive impact on the firm performance of Chinese companies because of the different institutional environments and culture, such as the role of the independent directors. In western countries, the agency cost between internal managers and external shareholders could be effectively mitigated by board independence. However, in the case of Chinese companies, controlling-shareholder expropriation, which has become an increasingly common phenomenon, meant

that independent directors were usually not independent to large or controlling shareholders, and even considered as having a low status and weak power. Under these circumstances, the independent directors could not play an effective supervisory role in a company, and therefore, will not be able to achieve the independent directors' goal of helping to enhance firm performance. Therefore, due to the institutional differences between advanced and developing countries, this paper will fill the research gap by examine the association between board independence and firm performance, especially in the case of growing economies like China.

Given the foregoing description of the background situation, the present study has, therefore, sought to examine the relationship between board independence and firm performance in the context of listed firms in China can be moderated by the Corporate Social Responsibility (CSR) disclosure. The idea of CSR, which was initiated from the West, has created a mixed reaction in China market. As a consequence of the imposition of the Chinese Firm Law in 2005, which required that enterprises had to undertake social responsibilities while engaging in business activities. Yang et al. (2019) has highlighted that since the 20th century, the field of CSR has begun to develop in value creation, especially the business value it could bring, including attracting, retaining and motivating valuable employees; reducing costs by saving energy and reducing a firm's unnecessary inputs; promoting corporate innovation; improving firm brand image by developing new products and providing services to help deal with social problems.

Yang et al. (2019) further pointed out another important reason why the CSR issue has received much attention; it is basically because CSR could promote sustainable corporate development. This view was in line with Mohr et al.(2001), who argued that CSR is seen as a commitment by companies to maximize and minimize their long-term positive and negative impact on society. Similarly, numerous past studies support that CSR was related to a firm's sustainable development (Cheng et al., 2016a; Feng et al., 2017; Liu and Zhang, 2016) and there was the consensus that firm performance would be improved along with the enhancement of corporate competitiveness as a result of implementing the CSR (Famiyeh, 2017). Therefore, awareness of the critical role of social responsibility incorporates sustainable development has been increasing over the years, and

firms wanting to undertake more social responsibility has become an indispensable part of the corporate management system when ensuring a firm's sustainable development.

However, Kao et al. (2018) believed that most empirical studies on CSR have been concentrated on developed economies, such as the United States and Europe, where the agency cost between managers and shareholders was low, so it was widely reported that CSR has had a positive impact on firm performance. Companies in emerging and developed markets were seen to practice organizational and behavioural differences as compared to firms from developed countries (Fan et al., 2011). In particular, the study by Yang et al. (2019) indicated that developing countries had incomplete CSR frameworks, which has made it interesting to see how CSR activities could affect firm performance in emerging markets such as China.

The foregoing discussions of some past studies have shown that both board independence and CSR did have a significant influence on firm performance. Hence, it has become clear the relationship between board independence and firm performance can be moderated by the level of CSR (either enhance or reduce). However, there remains a paucity of evidence on the role the CSR disclosure as a moderator of the relationship between board independence and firm performance. Therefore, this paper will fill this research gap through further investigating the contribution of CSR in moderating the relationship between board independence and firm performance of listed firms in China.

## **LITERATURE REVIEW**

### **Theoretical Discussion**

In this paper, the agency theory was employed to investigate the association between board independence and firm performance under the unique Chinese market environment. According to Hu, Tam & Tan (2010), Chinese enterprise reform and corporate governance reform in China, were largely influenced by the agency theory. In China itself, China Securities Regulatory Commission (CSRC) is the authority given the responsibility to introduce the guidelines with regards to monitoring the role of independent directors, In addition,

Chinese listed companies were required to have at least one-third of their board members as independent directors by 2003.

Referring to Jensen and Meckling (1976), the principal (shareholder) and the agent (manager) are agency relationships. Under this agency relationship, the principal grants certain power to the agent, such as giving the agent decision-making power, and the agent can carry out certain services on behalf of the principal. However, the interests of the two parties are not always in alignment under this agency relationship. Therefore, agency theorists of corporate governance have held the idea that under any given situation, it would be impossible for managers to maximize shareholders' interests unless there was in place a proper governance structure (used to monitor costs) to protect shareholders' interests. therefore, an appropriate corporate governance structure could guarantee that the managers would be able to act to maximize the interests of shareholders, instead of their interests. To protect the interests of shareholders, monitoring the managers' behaviours has been considered as the primary function of the boards. Therefore, the directors in the boards must be independent. In this paper, an independent director was defined as an outside director who had no business relationship with the company, except for having one seat on the board (Shao, 2019).

In terms of the CSR-firm performance relationship, there is still an ongoing debate as to whether engaging the CSR hurts or improves performance. In this paper, two quite different theories were used to explain the CSR-firm performance relationship. Firstly, based on the classic agency theory, the CSR engagement was considered as a relationship between principal-agent or in other words relationship between shareholders and managers. According to this perspective, as was best exemplified by Friedman (1970), it was believed that CSR could be seen as a selfish act by corporate management to improve their public image at the expense of shareholders' interests. Barnea and Rubin (2010) further argued that under the agency relationship, managers were interested in overinvesting in CSR since managers could build a good reputation as social citizens through participating in CSR, but it might damage the interests of shareholders and hurt firm performance. Furthermore, Barnea and Rubin (2010) highlighted that the negative impact of the CSR on firm performance was due to a large number of agency costs in the process of implementing the CSR, and the high costs outweighed the benefit, which would then lower firm

performance and put the firm at an economic disadvantage. Li et al. (2015) noted that these additional costs associated with implementing the CSR might include substantial charitable contributions, extensive investments in projects to promote community development, and the cost of establishing environmental protection programs.

Contrary to the over-investment hypothesis based on the agency theory, the stakeholder theory (Freeman & McVea, 1984) has extended the agency problem to a multilateral relationship amongst all stakeholders, such as employees, stockholders, customers, community and other related stakeholders. Under the perspective of the stakeholder theory, managers need to pay attention to all the groups that affect and are affected by the activities of the business, rather than simply serving the shareholders' interests. The stakeholder theory highlighted the point that firms and society are interdependent. Therefore, the implementation of CSR enables firms to increase value. Empirically, the study by Jo and Harjoto (2011) confirmed that managers' active participation in CSR indeed could eliminate conflicts among various stakeholders, and thus, enhance firm performance. Consistent with the research results of Jo and Harjoto (2011), Li et al. (2015) who based their study on the assumptions of the agency theory, studied whether CEOs with considerable power were more likely to invest in more social responsibility to improve firm performance. The results showed that the implementation of the CSR was value enhancement rather than value destruction, which supported the conflict resolution hypothesis based on the stakeholder theory, yet did not support the over-investment hypothesis based on the agency theory. In this paper, CSR has been regarded as a broad concept, which referred to the responsibility that firms had to perform for its impact on society (Cheng et al., 2016a).

## **Literature Review and Hypothesis Development**

To date, there has been no consensus on how board independence could influence firm performance. Fuzi Fuzi et al. (2016) stated that independent directors are persons entrusted by shareholders to represent the organization. Thus, independent directors should act in the interest of shareholders. The results showed that there was a mixed relationship between the proportion of independent directors and firm performance. Although the company had one of the largest numbers of independent directors, this did not guarantee the improvement

of company performance. Therefore, to bring positive value to shareholders, independent directors should be effectively supervised.

Numerous empirical studies of agency theory ( Gaur et al., 2015; Assenga et al., 2018; Kao et al., 2019) have found that there was a significant positive relationship between board independence and firm performance. In particular, Donadelli et al. (2014) documented the proportion of independent directors was positively correlated with firm performance. The study employed data from eight countries, namely the USA, Canada, France, Germany, UK and Australia, Italy and Japan. Their findings were consistent with previous literature that independent directors were perceived to be better able to supervise managers and CEOs (Fama & Jensen, 1983). Kao et al. (2019) pointed out that the supervisory value of independent directors was more significant in a market with weak corporate governance mechanisms. Therefore, the findings seemly to imply that the policy to reform the corporate governance of the independent director system was successful and that it had to be implemented by newly listed companies. Liu et al. (2015) provided comprehensive evidence on the relationship between board independence and firm performance in Chinese firms. The study found that independent directors had a significant positive impact on the firm performance of Chinese enterprises.

Conversely, there have been some other studies that showed that there was a negative correlation or even no correlation between board independence and firm performance (Allam, 2018; Merendino & Melville, 2019; Rashid, 2018). Merendino and Melville (2019) attributed these negative findings to the adherence of Italian independent directors to soft and hard laws on corporate governance, which would increase firm's costs and thus, negatively impacted firm performance. Another reason might be that the CEOs could use some strategies to offset the power of independent directors, and as such the independent directors would be unable to play an effective role in the company. In addition, Fan et al. (2020) has pointed out that the fundamental reason behind the value loss caused by the proportion of independent directors might be that enterprises were more willing to substitute the existing non-independent directors with new independent directors. New independent and non-independent directors might have the same qualifications, but engagement and responsibility toward shareholder maximization may differ. Therefore, the short supply of qualified independent directors might explain the negative valuation effect.

Considering the literature review of previous studies in the importance of understanding the role of board directors and shareholder wealth maximization, therefore, this paper hypothesis is:

H<sub>1</sub>: There is a positive relationship between board independence and firm performance in the capital market in China.

Empirical studies on firm CSR and firm performance by several scholars have generally shown mixed results. Friedman's (1970) classic argument was that CSR was an agency problem and claimed that it had a negative impact on firm performance because it had imposed costs directly or implicitly. Kao et. Al (2018) also believed that the relationship between CSR and firm performance was negative because opportunistic managers might pursue their private interests at the expense of the interests of shareholders and stakeholders. Especially when a company's performance has been poor, managers might engage in more social programs, such as CSR activities, to cover up their disappointing performance results. In addition, Brammer, Brooks, and Pavelin (2006) also found that THE firm performance is affected natively by CSR. In other different study, Nelling and Webb (2009) found that contradict finding where there was no significant connection between firm performance and CSR.

In supporting the effect of CSR on firm performance, Malik (2015) had documented the a positive relationship between CSR Disclosure and firm performance. The study of Li et al. (2015), Jo and Harjoto (2011) showed that companies engaging in more CSR activities could indeed improve firm performance as the CSR activities could resolve conflicts between managers and stakeholders by reducing information asymmetry and agency costs. Firms with a higher level of CSR would bring additional social capital to firms, attract more investors for them and therefore, improve their firm performance. Studies by Yeh et al. (2019) and El Ghoual et al. (2011) also disclosed that the CSR activities as a useful business strategy, might increase the satisfaction of all stakeholders, strengthen the company brand image, and therefore, increase firm performance and lower the cost of capital. In the Chinese context, many scholars, for example, Chen and Wang (2011), Jo and Harjoto (2011), Famiyeh (2017); and Rahman and Fang (2019), have revealed that the more Chinese firms invested

in the CSR, the better its firm performance was. Therefore, according to these previous studies, both board independence and CSR could influence firm performance. The findings seemed to suggest that it would be reasonable to assume that the relationship between corporate governance and firm performance is moderated by CSR. In light of this consensus, the research reported hypothesis is:

H<sub>2</sub>: the relationship between board independence and firm performance in the capital market in China is moderated by CSR.

## **METHODOLOGY**

### **Data and Sample**

The data consists of 860 firm-year observations spanning from 2010 to 2019. Panel data regression technique was used in order to determine the relationship between variables used. The SSE 180 index is known as the core index among all the A-shares listed on the Shanghai Stock Exchange. The SSE 180 index is represented by the industry's leading enterprises. This index acts as a market barometer of the overall performance and operation of the Shanghai securities market. Hence, this study used the individual stock composition represented by the index to represent the sample data. Data for this study was collected from the Accounting Research Database (CSMAR) and the China Stock Market. If there was missing data, a reference was made to the annual report. All the data collected from the database were analyzed through the E-VIEWS and STATA software.

### **Model Design**

This paper used a panel data analysis. Both the Fixed Effect model and the Random Effect model are used in the analysis. Hausman test was performed to detect the problem of endogeneity and the appropriateness of either the Fixed Effect model or the Random Effect model. The Ordinary Least Squares (OLS) or Random Effect could obtain a more efficient estimation will be employed if all the independent variables were exogenous. Furthermore, the Lagrange Multiplier (LM) test was used to test whether the OLS or the Random Effect model was more appropriate for this paper's data set. According to the results, the econometric model was specified as follows:

$$\begin{aligned} FP_{it} = & \alpha_0 + \beta_1 BI_{it} + \beta_2 CSR_{it} + \beta_3 BI_{it} * \\ & CSR_{it} + \beta_4 BS_{it} + \beta_5 CD_{it} + \beta_6 SO_{it} + \beta_7 CC_{it} + \beta_8 DEBT_{it} + \beta_9 FS_{it} + Year\ dummy_{it} \\ & + Industry\ dummy_{it} + \mu_i + \varepsilon_{it} \end{aligned} \quad (1)$$

(i = 1, ..., N; t = 1, ..., T)

where,

$FP_{it}$  represents the ROA to measure firm performance for firm  $i$  at time  $t$ . In this paper, the ROA has been defined as the ratio of consolidated net earnings to average assets.

The econometric model of this paper has included three key variables, which were the BI, CSR and interaction beta  $BI*CSR$  respectively. If the interaction coefficient beta is significant, it would indicate that the existence of moderation effect. In this paper, Board Independence (BI) is computed as the percentage of the total number of independent directors sitting in the board. The CSR was a moderator variable. Following the study of Yang et al. (2019), the CSR was obtained via the score rating of A-shares listed in the firms' CSR reports, which could be found at the following URL, <http://www.hexun.com/>. The quality of the CSR disclosure is based on the CSR score. According to Yang et al. (2019) Hexun evaluation system was more widely used in the performance evaluation of CSR activities in Chinese firms..

In addition, CEO duality (CD), CEO Compensation (CC), State Ownership (SO), Debt (DEBT) and board size (BS), and were employed as control variables in this paper, as these variables could also have an impact on firm performance (Jiang, Fuxiu & Kim, 2015; Kao et al., 2019). Board Size (BS) was obtained by calculating the total number of directors representing the board. dummy variable equal to 1 was used to represent CEO duality (CD) if the CEO acted as the chairman of the company's board, and 0 otherwise (Kao et al., 2019). On the other hand, CEO compensation (CC) is calculated as an average of top 3 executives' salaries in the firm, excluding allowance received by them. State ownership (SO) embodies the ratio of state-owned shares in proportion to the total number of shares (Hu et. al., 2010). DEBT on the other hand was calculated by the total debt over the total assets to measure the firm's capital structure. In addition to that,  $FS_{it}$  represented the firm size, which was the control variable that was included to ensure the robustness of the analysis. The methodology of this study is adopted by Kao et al. (2019). They also

used year and industrial dummy variables in the model able to capture the regulation effect.

## EMPIRICAL ANALYSIS

### Descriptive and Correlation Analysis

Table 1 shows the descriptive analysis variables used in this study. The range of Firm performance (ROA) is in between -11.9635 (minimum value) and 47.7017 (maximum value), respectively with an average mean of 6.9889. This indicated that there are significant differences among these sample firms, and some firms demonstrated poor performance. In addition, the average proportion of independent directors (Board Independence) was 38.85 percent, and the median was 36.36 percent, which was in line with the provisions on the composition of the board of directors of listed companies in China (as of 2003, one-third of the board members must be independent). However, the minimum of BI was 12.50 percent, implying that a small number of companies in the sample did not have enough independent directors on their boards. In terms of CSR, the quality of CSR disclosure varied widely (the score of CSR disclosure ranged from 0 to 85.77).

**Table 1**

*The Descriptive Statistics of the Main Variables*

Variables	Mean	Median	Maximum	Minimum	Std. Dev.
ROA (%)	6.9889	5.6762	47.7017	-11.9635	6.1267
CSR	37.4673	28.9400	85.7700	0.0000	20.8460
BI	0.3885	0.3636	0.8000	0.1250	0.0781
BS	9.5488	9.0000	17.0000	5.0000	1.9079
CD	0.1267	0.0000	1.0000	0.0000	0.3302
SO	0.0544	0.0000	0.7682	0.0000	0.1406
lnCC	14.8625	14.7930	17.7457	11.8241	0.7664
DEBT	0.5127	0.5168	0.8858	6.1700	0.1842
lnFS	24.3930	24.3337	28.6364	19.7325	1.6891
Observations			860		

Table 2 shows the Variance Inflation Factor (VIF) analysis for each variable. The results seemed to imply that the regression models

applied to test the research hypotheses were free from the problems of multi-collinearity effect, as all the VIF values were less than 10 (Ali et al., 2020). In addition to that, Table 3 provides the correlation matrix among all key variables in the regression analysis. The correlation coefficient between all independent variables was -0.6090 to 0.2434, implying that there was no multicollinearity problem. Based on the study by Shao (2019), multi-collinearity problem might exist if the correlation between independent variables higher than the absolute value of 0.7. This is consistent with the results of the VIF analysis in the present study.

**Table 2**

*Inflation Factor Statistics*

Variables	VIF	Tolerance
BI	1.31	0.7617
CSR	1.04	0.9629
BS	1.27	0.7809
CD	1.06	0.9447
SO	1.06	0.9456
CC	1.15	0.8725
DEBT	1.28	0.7809
FS	1.48	0.6766
Mean VIF		1.21

**Regression Results**

The Hausman-test (Prob.=1.000) showed that the Random Effect model is appropriate for the data set. However, if one or more independent variables in the model correlated with the random disturbance term, the panel regression results might suffer from the problem of endogeneity. If all the independent variables were exogenous, the Ordinary Least Squares (OLS) or Random Effect (RE) could obtain a more efficient estimation. To check the problem of endogeneity, the Hausman test was carried out and the results ( $X^2 = 11.08$ , Prob=0.9953) showed that there were no endogeneity problems in the research model. Furthermore, to test whether the OLS and RE were appropriate for the data set used in this research, the Lagrange Multiplier (LM) test was also conducted. The results ( $X^2 = 461.18$ , Prob=0.000) strongly confirmed that the Random Effect

**Table 3**

*The Correlation Matrix with Probability of Main Variables in the Regression Analysis*

Correlations	1 ROA	2 BI	3 CSR	4 BS	5 CD	6 SO	7 CC	8 DEBT	9 FS
1 ROA	1.0000								
2 BI	-0.1479*** (0.0000)	1.0000							
3 CSR	0.1884*** (0.0000)	0.0028 (0.9337)	1.0000						
4 BS	0.0107 (0.7534)	-0.3699*** (0.0000)	0.1369*** (0.0001)	1.0000					
5 CD	0.0982** (0.0040)	0.0072 (0.8328)	-0.0694** (0.0420)	-0.1159*** (0.0007)	1.0000				
6 SO	-0.0231 (0.4978)	0.0570* (0.0946)	0.0701** (0.0399)	0.0949*** (0.0053)	-0.0820** (0.0162)	1.0000			
7 CC	0.1858*** (0.0000)	-0.0263 (0.4410)	0.0787** (0.0210)	0.0569* (0.0953)	0.1007*** (0.0031)	-0.1617*** (0.0000)	1.0000		
8 DEBT	-0.6090*** (0.0000)	0.2116*** (0.0000)	0.0341 (0.3171)	0.0337 (0.3235)	-0.0515 (0.1315)	0.0400 (0.2410)	0.0031 (0.9268)	1.0000	
9 FS	-0.2483*** (0.0000)	0.2354*** (0.0000)	0.1072*** (0.0017)	0.1200*** (0.0004)	-0.1422*** (0.0000)	0.0471 (0.1677)	0.2434*** (0.0000)	0.442456*** (0.0000)	1.0000

Note: \*\*\*, \*\*, \* represent significance at the 0.01 level, 0.05 level, 0.1 level respectively.

was valid. After controlling the endogeneity problems, the ROE was used to replace the ROA to measure the robustness test for firm performance. The specific results are as shown in Table 4, which displays the influence of CSR on the relationship between board independence and firm performance.

**Table 4**

*The Influence of the CSR on the Relationship Between Board Independence and Firm Performance (with Probability)*

Dependent Variable (DV): ROA	Random Effect
BI	9.6891** (0.029)
CSR	0.1446***(0.000)
BI*CSR	-0.2726***(0.001)
BS	0.2930***(0.009)
CD	1.0069* (0.052)
SO	0.2465 (0.824)
CC	1.5085*** (0.000)
DEBT	-19.7961*** (0.000)
FS	0.6775*** (0.004)
C (Constant term)	-26.2766*** (0.000)
Industry	Yes
Year	Yes
N	860
R <sup>2</sup>	0.328
F-statistic	15.6296***(0.000)
Hausman-test for choosing model	P=1.000
Hausman-test for Endogeneity problem	X <sup>2</sup> =11.08, Prob=0.9953
LM test	X <sup>2</sup> = 461.18, Prob=0.000

*Note.* \*\*\*, \*\*, \* represent significance at the 0.01 level, 0.05 level, 0.1 level respectively.

As shown in Table 4, the coefficient of board independence was positive and statistically significant for the ROA at the level of 1 percent, implying that board independence was positively related to firm performance. It is worth noting that the regression coefficient of the interaction term (BI\*CSR) was negatively related to firm performance at the significance level of 1 percent, indicating that

the CSR could negatively moderate the positive effect of board independence on firm performance. In other words, CSR has reduced the relationship between board independence and firm performance. In addition, there was a positive relationship between board size and firm performance; both CEO duality and CEO compensation could improve firm performance, and debt was negatively related to firm performance.

## **DISCUSSION AND CONCLUSION**

The research reported here has studied the relationship between board independence and corporate performance under the moderating effect of CSR. To test the relationship among these three variables, the study has adopted the panel data regression method to analyze the data from the SSE 180 Index of the capital market in China. The empirical results showed that board independence has had a positive impact on firm performance. More importantly, the results showed that CSR could reduce the positive relationship between board independence and firm performance. The findings of the present research have made it possible to draw the following conclusions.

Firstly, it was found that board independence could improve firm performance, a standpoint that was consistent with the agency theory. According to the agency theory, outside directors would carry out their responsibility to monitor top management because they had the incentive to develop their reputation in decision control (Fama & Jensen, 1983). They were believed to bring more diversity and greater objectivity to decision-making, and consequently were better representatives of shareholders' interests (Mutlu et al., 2018). Therefore, the possibility of collusion and expropriation of shareholder wealth by top management might be lowered with a greater proportion of outside directors on the board, which further reduce the agency costs and improve firm performance.

More importantly, in terms of the moderating role of the CSR, the interaction term  $BI*CSR$  has a negative impact on firm performance, which means that the CSR reduces the positive relationship between board independence and firm performance. According to Sial et al. (2018), one might be the possible reason is that the development of Chinese firms was at a stage of excitement ed a feeling for quick success and quick profits. With the rapid development of China's economy, most firms practice disclosure of CSR only to meet the requirements

of the government. The boundary of CSR has not been captured by Chinese firms. As a result, a lot of firms have been indecisive about what CSR actions to undertake and what CSR activities to report. Inevitably, the managers or shareholders may sometimes overinvest in the CSR or cover up a firm's improper behaviours in pursuit of their interests, engaging in themselves in negative actions which will maximizing the shareholder wealth.

Because of China's relevant laws, regulations and policies which are less compromise to encourage corporate social responsibility, the CSR did not effectively optimize the corporate governance structure, which in turn, could not improve firm performance. Although the number of CSR disclosure has been increasing, the quality of the CSR was low and many firms published information that lacked third-party certification (Cheng et al., 2016b). Therefore, managers should carefully consider CSR and invest in CSR according to a firm's ability when they make CSR decisions.

The study recommended that to strengthen the relationship between board independence and firm performance through CSR, there are alternatives implications for regulators and managers. First, law enforcement through national legislation and power execution by the government need to be reviewed and strengthened to enlighten the whole society. Firms need to emphasize the role of CSR as part of the business philosophy and social responsibility as a kind of good business strategy. Meanwhile, under the supervision of stakeholders and society, firms should create a good corporate social image and improve core competitiveness. On top of that, relevant departments should construct a suitable CSR evaluation system and implement the CSR standard certification to make China's CSR management in line with the relevant international standards.

The study reported here has been able to contribute to the field in studies. Firstly, the research found that board independence can increase firm performance in China capital market increasing the proportion of independent directors and put forward clear requirements for the selection and appointment of independent directors. Secondly, this study can be used as a business strategy in improving firm performance and maximizing shareholder's wealth. Therefore, improvise a firm's CSR strategy might improve firm business visibility and sustainability. The results also have important implications for managers involved in making CSR decisions, and they should not overinvest in resources and energy that can undermine the profitability of their businesses.

It also recommended that further study should be conducted by including a larger sample size that is categorized by industries sectors or even share type available in Shanghai Stock Exchange. This study only used A-share listing on the Shanghai Stock Exchange, only 86 representative listed large companies were selected as they represent the SSE 180 Index. It is also recommended that future studies on CSR need to be conducted using various methods and other related variables such as CSR disclosure levels, CSR ranking scores and others which help to provide greater robustness to the study findings.

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