Impact of Corporate Governance on Firm Performance: The Moderating Role of Corporate Social Responsibility

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Abstract

The paper aimed to analyze the moderating role of CSR between corporate governance and firm performance relationships. The sample comprised 761 US-listed firms for which data for the period 2010-2018 was collected from Thompson Reuters ASSET 4, COMPUSTAT, and annual reports. Using 2SLS regression, the findings of the study reveal that the presence of female board members (FBM) has a significant positive impact on ROA and that CSR does moderate the FBM /firm performance relationship. Financial Institutional Investor (FII) also has a strong positive impact on ROA and CSR does moderate the FII/firm performance relationship. These findings are valuable for governmental agencies to encourage CSR due to its positive impact on firm earnings as well as on meeting the social obligations of the firm. These findings can be used as a basis to further liberalize the financial markets considering the positive impact of foreign ownership on firm performance.

Keywords: Corporate governance, Female board members, Foreign institutional investor, CSR, firm performance

JEL Code: G30, G32

1. Introduction

In the past few years, numerous scholars have emphasized the importance of corporate social responsibility (CSR) purely from the business perspective and categorized CSR as an important subject matter for researchers, academicians, businesses, managers, etc. (see Famiyeh, 2017; Akben-Selcuk, 2019; Rehman, Khan & Rahman, 2020). Although, a large number of empirical literature is dedicated to CSR, which proves the importance of CSR yet there is no commonly agreed method as to how to conceptualize CSR (Peloza & Green, 2011). Previous studies on CSR indicate that the concept of CSR has been explained and debated from various theoretical perspectives (Mc-Williams & Siegel, 2006). For instance, Carroll (1991) describes CSR as something in which the business incorporates the legal, economic, business, ethical, and discretionary anticipation of human societies by considering CSR not only as a contribution by the firm for business gains but also to contribute for the betterment of society at large. Similarly, Mohr et al., (2001) defined CSR as a commitment by firms to increase their

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contributions for the betterment of society and to reduce or remove unhealthy and unsafe business practices.

In this respect, CSR's existence depends on the commitment by the firm to play its role for the betterment of society thus benefiting various stakeholders (Mohr et al., 2001). Hence, it is important to realize that an organization needs to be socially responsible and contribute to society rather than focusing only on earning profits by initiating social programs like protecting the environment, efforts directed at resolving social problems, and community development. These are some of the critical indicators or parameters based on which organizations are judged as socially responsible organizations (Sekhon & Kathuria, 2019). Organizations can express themselves as socially responsible organizations by complying with their CSR commitments and maintaining ethical standards that will benefit all stakeholders (Lee & Lee 2019). The findings of previous studies reveal that consumers and other stakeholders generally hold a positive perception of socially responsible organizations (Yoon & Chung, 2018; Ali et al., 2020). At the same time, some empirical studies point to CSR's significant influence on customer satisfaction (see Luo & Bhattacharya, 2006). Additionally, investment in CSR is considered to be the basis of deriving competitive benefits thus leading to superior financial performance (Sial et al., 2018).

Generally, in a corporate governance system, the board of directors' monitoring role is an important tool for corporate control particularly in countries where external controls are considered to be weak. The quality of monitoring is significantly influenced by the gender mix maintained at the firm's board thus leading to superior financial performance if the firm manages to make an appropriate gender mix. The participation of female board members is generally encouraged as it improves the quality of monitoring, however, ethical considerations in this regard if any need to be addressed (Bennouri, Chtioui, Nagati, Nekhli, 2018). Moreover, gender diversity in the boardroom is attracting greater interest from researchers concerning its influence on firm's performance around the world (Green & Homroy, 2018). In some states in the US, the induction of female members on corporate boards is coming into law. Currently, female directors' presence on corporate boards in the US is about 27% in 2019. However, new regulations are coming into effect making it mandatory for firms to include females on corporate boards for example, in California a new regulation has been issued directing firms whose headquarters are in the state of California to include at least one female director on their boards in 2019 and raising it to three females' directors on boards by 2021 comprising of six or more board members. Other states in the US are following California like New Jersey approving similar legislation to California Law (Mishra, 2019).

This paper aims to analyze the moderating role of CSR on corporate governance's impact on firm performance of listed firms in the US. Keeping in view, the essential role played by the globalization of capital markets in addressing regimes of corporate governance, it is important that countries must strike a balance between corporate governance principles and ensuring gender diversity by keeping them aligned with the cultural and legal environment of their respective

country. The US corporate governance system is considered to be the best in the world. The US corporate governance system has certain unique features. These include 1) single-tier board structure, 2) leadership duality, 3) the presence of permanent audit, nomination, and standing committees, 4) protection of minority shareholder rights, and 5) comprehensive disclosure requirements (Block & Gerstner, 2016).

This study contributes to empirical literature in three ways. First, most probably this is the first study that examines CSR's moderating role in corporate governance's impact on firm performance in US-listed firms. This study is not relevant only for US firms but also for potential and foreign investors planning to invest in US markets. Second, a large number of empirical studies have analyzed female directors' influence on the firm's financial performance using primary data whereas related studies in this context using secondary data are limited. Third, since corporate governance-related studies generally have severe endogeneity issues, we employ a two-stage least squares (2SLS) approach in our estimation to tackle potential endogeneity concerns and also provide a robustness check.

Based on a sample of 761 firms covering a period from 2010-2018, the findings of our study reveal that firm financial performance is positively influenced by female directors. Moreover, CSR moderates FBM's influence on ROA in the US market. Additionally, it was also found that firm financial performance is positively affected by foreign institutional shareholders and that CSR moderates the foreign institutional shareholder/firm performance relationship.

2. Literature Review

2.1 Female Board Members (FBM) and Firm Performance

In the empirical literature, gender diversity on corporate boards has been adequately discussed and identified three important reasons that signify the importance of females on corporate boards (Dutta & Bose, 2006). First, females generally are found to have a better understanding of the business as compared to their male counterparts thus leading to an increase in the quality of decision-making at the corporate board level. Secondly, firms having females as corporate board members generally enjoy a good reputation in society which leads to a positive influence on a firm's profitability. Lastly, the appointment of a female board of directors enhances the overall understanding surrounding the business (Smith, Smith & Verner, 2006).

Empirical findings concerning gender diversity's relationship with corporate performance are mixed and contradictory (Post & Byron, 2015). Some empirical studies conclude a significant positive influence of FBM on corporate performance (see Carter & Simkins, 2003; Bennouri *et al*, 2018) whereas other studies have concluded FBM's negative impact on corporate performance (see Ahern & Dittmar, 2012; Matsa & Miller 2013). At the same time, some studies also found no or weak relationship between FBM and firm profitability (Adams & Ferreira, 2009; Carter et al., 2010). These mixed and contradictory empirical results could be due to different estimates techniques and models employed to assess the said relationship (Ferreira, 2015). These mixed results provide further

justification for further analysis on the subject concerned involving the same variables but in different contexts to broaden our understanding and find out the real impact of female board directors on corporate performance (Post & Byron, 2015).

Findings of earlier studies also indicate that ethnicity, foreigners, gender diversity, and external shareholders improve the quality of discussion and decision-making on various issues at the board level (Francoeur et al., 2008). Virtanen (2012) highlighted the active role played by female directors on corporate boards than male directors. It is generally believed that the appointment of females to senior positions enhances the bar of moral principles and ethics at their respective organizations (Pan & Sparks, 2012), are always open to raising questions (Bilimoria & Wheeler, 2000), show greater skills by working at the top level and carries a participative style of leadership keeping open communication with key stakeholders on issues concerned (Ingley & Van der Walt, 2005). Adler (2001) concluded that female directors' friendliness significantly impacts corporate performance. The findings of his study further revealed that the influential ability of females in decision-making can significantly increase on corporate boards if two or more female directors are present (Torchia & Calabro, 2011). Furthermore, the presence of female members on corporate committees and superior monitoring has led to an increase in the firm's earnings quality and public disclosure (Gul, Srinidhi & Ng, 2011). Female board members not only show high attendance but also come better prepared for board meetings than male directors. Therefore, we can safely assume that corporate performance can be enhanced through quality supervision.

The resource dependency theory states that female board members bring more valuable information, viewpoints, ideas, experiences, and unique connections. Findings of previous studies reveal that females generally have a more diversified network as compared to their male counterparts on corporate boards (Ibarra, 1993). Additionally, it is also widely believed that females have a better understanding and knowledge about the markets and their customers (Arfken, Beller, & Helms, 2004). The more the variety of viewpoints and perspectives that females bring on board, the greater will be the novelty and innovation in approaches to solving problems. In this context, the theory related to gender roles highlights the differences that males and females carry concerning their prescribed manners of communication. For example, while communicating females show more empathy and gentility which normally is associated with the characteristics of females (Eagly, 1987), whereas males are more aggressive and more selfconfident in decision-making. Moreover, females are comparatively more flexible and are more likely to manage uncertain environments better than males due to their distinctive capabilities (Rosener, 1995). Therefore, we expect female directorship to positively influence firm performance. Studies from (Huang, 2013; Harjoto & Laksmana, 2015), reveal that gender diversity at the top management level leads to a positive influence on a firm's performance. Alternatively, some studies have particularly focused on examining the impact of females at top positions on firm performance including Shrader and Blackburn (1997), who found that those firms having females at the top-level show better financial performance. At the same time, some studies concluded that there is no clear impact of the presence of a female in top management and firm performance. One possible explanation for this can be that the sample selected for the study contains a limited number of females at the top level. Carter and Simkins (2003) found that gender board diversity has a strong positive impact on firm performance. Based on the above discussion we proposed the following hypothesis:

 H_1 Female board members positively influence firm performance.

2.2 Foreign Institutional Investors (FII)/Firm Performance-related Literature

Following theories of corporate governance, a sizable number of empirical studies have focused on examining ownership structure's impact on firm performance. Minority shareholders have been dispersed from the ownership structure of most Western firms which has made the control of the firm by small groups or individuals virtually impossible (Donaldson & Preston, 1995). Hence, such shareholders delegate their decision-making rights to managers and directors working as agents of shareholders. These managers or directors act at the behest of the shareholders to perform to the best of their abilities to safeguard the interests of shareholders. This arrangement is called separating management from (Berle & Means, 1932). However, this arrangement of separation of ownership from managers led to problems that were first identified by Smith, (2007). In his findings, Smith (2007) explained that in any public limited company, a manager's status is equal to that of the shareholder. But this arrangement more often than not leads to a conflict of interest commonly known as an agency problem between shareholders and managers leading to an increase in agency costs thus affecting the firm's earnings negatively (Fama & Jensen, 1983).

Foreign institutional investors' role concerning its impact on firm performance is an emerging issue around the world that grabs the attention of researchers. In the US, for the most part of the 20th century, private individuals held a majority of ownership in publicly traded firms which greatly influenced the rules of corporate governance. However, of late the structure of firm ownership has changed and there is an increasing trend in share ownership by institutional investors primarily comprising mutual funds, public and private pension funds, large firms, banks, foundations insurance companies, etc. (Pinto, 2011). Moreover, liberalization and deregulation of financial markets have provided many opportunities for investment, trade, and internationalization of local businesses, bringing many economic benefits to local economies through the transfer of technology, knowledge sharing, skills development, and increasing employment opportunities. The share of institutional investors in firm ownership in the US has risen significantly to 73% by 2016 which makes institutional investors by far the largest category of private equity holders in the US (Medcraft, 2018). Institutional investors significantly influence decision-making at the firm level through their voting rights (Shleifer & Vishny, 1997). Therefore, institutional investors are more likely to grab the attention of the firm's management as already pointed out in the stakeholder theory (Lin & Fu, 2017). Moreover, institutional investors are likely to support activities that are related to CSR and firm performance (Waddock & Graves, 1997; Lin & Fu 2017). We have chosen the US market because the corporate governance mechanism is very well developed and strictly monitored. Moreover, very few studies involving US firms have attempted to analyze foreign institutional investors' impact on the firm's financial performance.

Empirically, Beatson and Chen (2018) provided evidence that investments by FII do affect the profitability of the firm. Minority interests were promoted by FII during the recent split share reforms Huang (2013). In a study on Egyptian and Korean listed firms, it was found that the effect of FII on CSR rating is positive (Soliman et al., 2013). On the other hand, studies focusing on the European markets have found a weak association between FII and firm performance (Dam & Scholtens, 2012). In the US markets also, institutional investors have a weak (Barnea & Rubin, 2010) or negative (Borghesi, Houston & Naranjo, 2014) impact on firm performance. Arouri, Hossain, and Muttakin (2014) found that FII positive impact on the performance of banks in GCC countries. Similarly, Wang and Chen (2017) also concluded a positive impact of FII on firm performance in Chinese listed firms. Based on our above-mentioned discussion we propose the following hypothesis:

*H*₂ Foreign institutional investors positively influence firm performance.

2.3 The Moderating Role of CSR in Female Board Members and Foreign Institutional Investors's Impact on Firm Performance

Empirically, several studies have attempted to analyze the impact of CSR on firm performance, yet the results from these studies can be categorized as mixed and contradictory at times. Some studies concluded a positive impact (see Tsoutoura, 2004; Pham & Tran, 2020; Bahta, Yun, Islam & Ashfaq 2021) while others negative (Lee et al., 2013) or no impact (Kang, Lee & Huh, 2010; Lin, Yang & Liou, 2011). Despite these mixed results, Margolis, Eifenbein, and Walsh, (2007) in a meta-analysis concluded that most empirical studies concluded a positive influence of CSR on firm performance. During the last three decades or so both for academic and business purposes CSR disclosures and their association with firm performance have been the focus of discussion (Orlitzky, Schmidt & Rynes, 2003; Margolis et al., 2007; Nakao, Amano, Matsumura, Genba & Nakano, 2007). The quality and quantity of information related to CSR is valuable for all stakeholders Lynch (2010). Moreover, the availability of quality information leads to a decline in information asymmetry between the firm and its external stakeholders (Cho, Lee & Pfeiffer, 2013). Additionally, the availability of information will also help to improve the firm's reputation and make its relationship with stakeholders and society more reliable (Adams, 2002). According to Stakeholder theory, apart from shareholders, there are other stakeholders including employees, customers, community, environment, etc. that are affected by the activities of the firm and their interests should also be looked after while making decisions at the top level (Freeman, 2010). Therefore, keeping good relationships with stakeholders is beneficial as it results in a positive impact on firm performance (Brown & Foster, 2013). Stakeholders generally have limited information about firm engagement in CSR activities as compared to information on firm stock price and profitability but recent changes in corporate disclosures have made it mandatory to disclose CSR-related information (Kim, Amaechi, Harris, & Sug, 2013). Moreover, CSR engagement not only increases firm value but also reduces firm risk (Kim, Li & Li, 2014). Engagement in CSR activities positively influences firm profitability (Menguc & Ozanne, 2005).

As we discussed earlier firm performance is positively influenced by female directors (see de Villiers et al., 2011; Jo & Harjoto, 2011), and also CSR's positive impact on firm performance (Adler, 2001; Carter & Simkins, 2003; Huang, 2013; Harjoto & Laksmana, 2015; Post & Byron, 2015), it would be safe to assume that the impact of female directors on firm performance can be moderated by firm CSR activities.

H₃ CSR moderates female board members' impact on firm performance

In a study, Waddock and Graves (1997) also confirmed the positive role of institutional investors in supporting CSR-related activities. One possible motivation for doing so is that they can use their support for CSR initiatives as an instrument to show their clients that they are aware of their social responsibilities (Siegel & Vitaliano, 2007). Second, FIIs are generally concerned about the long-term benefits to the firm considering the costs to the firm by participating in CSR activities (Cox, Brammer & Millington, 2004).

The role of FII in deciding whether to carry out CSR activities or not has received noteworthy attention from researchers and academicians, particularly in developing countries. FII does have the power to determine which CSR activities to do and which not. In this regard, Aguilera, Williams, Conley, and Rupp (2006) concluded that in developed countries foreign institutional shareholders are more apprehensive about environmental and social concerns. Institutional investors with their voting rights are influential in determining the direction or decision-making of the firm (Shleifer & Vishny, 1997). Moreover, management and boards also focus more of their attention on institutional investors as also emphasized in stakeholder theory due to which they become more supportive of CSR-related actions (Waddock & Graves, 1997).

There is no denying the fact that around the world the demand for more CSR disclosure is growing and that FII plays an influential role in promoting the positive impact of CSR. Additionally, foreign investors prefer to invest in socially responsible firms to reduce firm risk (Fan, Wong & Zhang, 2007). For this particular reason, we expect FII's influence on firm performance to be moderated by CSR.

*H*₄ *CSR* moderates foreign institutional investors' relationship firm performance.



Figure 1: Proposed Model

3. Methodology

3.1 Sample

Data was collected from a number of sources. Data pertaining to CSR was collected from the Thompson Reuters ASSET 4 Environmental, Social, and Governance (ESG) database. Thompson Reuters ASSET 4 is one of the leading rating agencies providing systematic, objective, and comparable information of more than 5000 firms Worldwide. ESG-related data on ASSET 4 is collected from annual reports, firm CSR disclosures, NGO websites, etc. ESG data is collected from "more than 250 key performance indicators (KPIs) and more than 750 individual data points along with their original data sources and classify the collected data into three pillars of ESG. The environmental pillar consists of three category groupings: emission reduction, product innovation, and resource reduction. The governance pillar has five categories: board functions, board structure, compensation policy, shareholders policy, and vision and strategy. The social pillar is the most complex with seven categories: community, diversity, employment quality, health-and-safety, human rights, product responsibility, and training-and-development" (Thomson Reuters, 2013). To ensure objectivity, at every level, overall CSR scores are calculated by assigning equal weights and zscoring all individual data points and comparing them with other firms in the ASSET 4 database.

Firm-level data was collected from COMPUSTAT whereas data related to corporate governance was collected from annual reports. In this study, data for the period 2010-2018 was used. The final sample contained all those firms that remained listed throughout the study period and for which CSR and corporate governance-related data were available.

3.2 Measurement of Variables

3.2.1 Financial Performance.

For measuring the financial performance of firms return on assets (ROA) was taken as a measure for firm financial performance. ROA is a more stable measure of financial performance as compared to other measures including market-based measures which are subject to speculation. Moreover, in corporate governance-related studies, ROA is commonly used as a financial performance measure thus proving the efficiency and suitability of ROA in these kinds of studies (Alipour, 2013).

3.2.2 Independent and Moderating Variables.

Female board members: Data pertaining to the percentage of female members on the board is taken from the annual report section containing directors. One common metric used to measure the percentage of female members on board is the ratio of female board members to total board members (see Hafsi & Turgut, 2013).

Foreign Institutional investors: In this study, foreign institutional investors are used as a dummy variable and data pertaining to foreign institutional investors was taken from COMPUSTAT.

CSR: CSR is used as a moderating variable in this study. Following Cheng et al., (2014) we also used CSR scores. The CSR score is calculated based on a variety of questions related to health and safety, quality of employment, diversity, training and development, human rights, diversity, community relations, etc. Since there is no discussion from the theoretical perspective as to how each category is weighted while constructing an aggregated CSR, therefore we used the approach that is commonly used by other researchers (see Hull & Rothenberg, 2008) to determine the value of CSR. The sum of all categories is used to calculate the value of CSR. The z-score generated through this is a continuous variable from 0 to 1. A firm will be considered socially responsible if its z-score is high as compared to other firms. Hence, ASSET 4 provides a more relative measure of CSR than KLD measures which provide an absolute one.

3.2.3 Control Variables.

Based on earlier studies related to the subject area, some firm-level variables were used as control variables based on the assumption that firm performance can be significantly influenced by them. Among these variables are firm size (Chen, Kao & Lu, 2014; Sial et al., 2018), firm leverage (Alipour, 2013), and board size (Hafsi & Turgat, 2013).

3.3 Models

Since the aim of the study is to analyze the CSR's moderating role in corporate governance's impact on firm performance relationship, two-stage least squares (2SLS) regression analysis was used. Empirical models used for estimations are given below:

$$FP_{it} = \alpha_0 + \beta_1 FBM_{it} + \beta_2 FII_{it} + \beta_3 FS_{it} + \beta_4 BS_{it} + \beta_5 LEV_{it} + \beta_6 YearDUM_{it} + \beta_7 IndDUM_{it} + \mu_{it}$$

$$\begin{aligned} FP_{it} = \alpha_0 + \beta_1 FBM_{it} + \beta_2 FBM * CSR_{it} + \beta_3 FS_{it} + \beta_4 BS_{it} + \beta_5 LEV_{it} \\ + \beta_6 YearDUM_{it} + \beta_7 IndDUM_{it} + \mu_{it} \end{aligned}$$

$$\begin{split} FP_{it} = \alpha_0 + \beta_1 FII_{it} + \beta_2 FII * CSR_{it} + \beta_3 FS_{it} + \beta_4 BS_{it} + \beta_5 LEV_{it} \\ + \beta_6 YearDUM_{it} + \beta_7 IndDUM_{it} + \mu_{it} \end{split}$$

 FP_{it} is a firm financial performance measure measured through ROA for the ith firm at time t. FDM is the proxy used for measuring female directors calculated through the division of female directors by total directors on the board. FII is used as a dummy variable and measures the share of foreign ownership in a firm. CSR represents corporate social responsibility and is measured through the ESG database. FS representing firm size is measured through the natural log of sales. BS represents board size and is calculated through the total number of members on board. Lastly, LEV representing firm leverage was measured through total debt divided by total assets.

4. Empirical Results

4.1 Descriptive Statistics

Table 1 Descriptive Statistics							
•	Mean	Median	Std. Dev	Min	Max		
				-			
ROA	0.264	0.258	0.322	0.297	0.672		
FDM	0.167	0.171	0.024	0.000	8.000		
FII	0.698	0.682	0.038	0.000	0.813		
Leverage	0.473	0.552	0.128	0.000	0.797		
CSR	14.331	12.992	2.331	0.012	6.013		
Firm Size	8.182	7.802	1.216	3.995	14.823		
BS	9.710	9.349	2.110	1.000	45.000		

The above-mentioned table shows the descriptive statistics of the variables. The mean value of ROA is 0.264 which means that the average profitability of US-listed firms is 26.4%. The mean value of FDM is 0.167 which means that female representation on corporate boards is 16.7% whereas the average ownership by foreign institutional investors is 19.8%. Moreover, on average US firms are using 47.3% of external funds in their financing mix which is slightly on the higher side thus increasing the riskiness of the firms. The board size on average is 9.71 members.

Before running the regression analysis, two conditionalities that must be addressed before estimating the equation are multicollinearity and heteroscedasticity. Variance Inflation Factors (VIF) of the independent variables are given in Table 2. From Table 2 we can see that all VIF values are before the critical value of 10 therefore, we can safely say that multicollinearity is not an issue of concern here.

Table 2: Variance Inflation Factors					
Variable	VIF				
FDM	1.99				
FII	1.87				
CSR	2.01				
BS	1.61				
FS	2.17				
LEV	1.79				

4.2 Correlation Matrix

Correlation analysis of the variables is given in Table 3. The correlation analysis given in Table 3 shows that variables are not highly correlated thus providing further support to our earlier analysis that multicollinearity is not an issue here.

Table 3: Correlation Analysis							
	ROA	FDM	FII	CSR	LEV	BS	FS
ROA	1.000						
FDM	0.041**	1.000					
FII	0.272**	-0.040	1.000				
CSR	0.061*	-0.039*	0.081**	1.000			
LEV	-0.103**	-0.091	0.021	0.200**	1.000		
BS	-0.028	-0.058*	0.120**	0.199*	0.301*	1.000	
FS	0.041**	-0.069**	0.192**	0.187**	0.497**	0.413**	1.000

Note: * - p < 0.1; ** - p < 0.05

4.3 Regression Results

Since the study aims to find the moderating effects of CSR on corporate governance's impact on firm performance, we first examine the impact of FBM and FII impact of ROA. Empirical results presented in Table 4 show that both female board members and FII have a significant positive influence on ROA. The presence of females on board and foreign institutional investors brings quality to decision making thus leading to improvement in firm performance. Furthermore, our findings suggest that the involvement and presence of female directors in the process of decision-making improves the quality of decision making thus leading to improved financial performance. Hence, all efforts must be made to ensure gender diversity at the board level considering its positive impact on firm performance. Our findings are consistent with earlier findings of Carter and Simkins (2003) and Erhardt, Werbel, and Shrader (2003) in the US context.

One important driver that drives foreign investors to invest in foreign markets is the availability of profitable opportunities to invest. The positive impact of foreign institutional investors is valuable for economic managers and policymakers to encourage foreign institutional investment in the local economy because these institutional investors not only have a positive impact on firm earnings but also bring in additional capital that can be used for further growth of the firm.

Table 4. The moderating effect of CSR on FBM and FII's impact on firm performance

	Model (1)		Model (2)		Model (3)	
	P-		P-		P-	
	Coeff	value	Coeff	value	Coeff	value
FDM	0.016**	0.000	0.099*	0.019		
FII	0.121**	0.000			0.0812*	0.041
CSR*FDM			0.047*	0.015		
CSR*FII					0.055*	0.030
LEV	-0.091**	0.012	-0.143**	0.000	-0.127**	0.011
BS	-0.014	0.117	-0.019	0.212	-0.016	0.191
FS	0.021**	0.000	0.018**	0.000	0.022**	0.000
Adj-R	31.220		32.340		32.650	
F-Stat	22.100		24.560		29.310	
P-Value	0.000		0.000		0.000	

Note: * - p < 0.1, ** - p < 0.05

The results of the moderating effect of CSR on FBM's impact on firm performance are presented in model 2, Table 4. The coefficient value of CSR*FDM is significant which means that CSR does moderate female board members' impact on ROA. Hence, the role of CSR in this respect is significant. The moderating effect of CSR on FII impact on ROA is given in Table 4. Results indicate that CSR also moderates the relationship between FII and ROA. Furthermore, our findings find theoretical support from the Resource dependence theory of corporate governance and Stakeholder theory related to CSR and help us explain and understand the nexus between corporate governance, firm performance, and CSR.

For control variables, we can see that leverage significantly impacts ROA and the impact is negative in all three models. A rise in firm leverage increases interest costs as well as the financial risk of the firm thus leading to a negative impact on firm profitability. Board size also is negatively related to ROA in three models; however, the relationship is weak. The coefficient of firm size is also significant and positive thus indicating that large firms are more profitable as compared to small firms.

4.4 Robustness Tests

Controlling for Endogeneity

Moreover, to address the issue of possible endogeneity concerns and to ensure the robustness of the findings, the 2SLS regression model was used. In this model, the lagged values of female board members and foreign institutional investors were used. The results of 2SLS regression also validate our main findings presented in Table 5.

Table 5: 2SLS Regression results

	Model 1		Model 2		Model 3	
		<i>p</i> -		<i>p</i> -		<i>p</i> -
	Coeff	value	Coeff	value	Coeff	value
FDM	0.028**	0.000	0.128**	0.000		
FII	0.311**	0.000			0.042**	0.001
CSR*FDM			0.094	0.073		
CSR*FII					0.055*	0.048
LEV	-0.101**	0.004	-0.112**	0.000	-0.113**	0.006
BS	-0.009	0.217	-0.032	0.166	-0.044	0.102
FS	0.058**	0.000	0.061**	0.000	0.052**	0.000
Year						
Effect	Yes		Yes		Yes	
Industry						
Effect	Yes		Yes		Yes	
R-Sq	25.710		25.980		23.510	
Wald Ch						
Sq	812.220		811.120		797.560	

Note: * - p < 0.1, ** - p < 0.05

5. Theoretical and Practical Implications

Our findings present significant implications for academicians, government departments, policymakers, managers, and practitioners. These findings are valuable for governmental agencies to encourage CSR due to its positive impact on firm earnings as well as on meeting the social obligations of the firm. These findings can be used as a basis to further liberalize the financial markets considering the positive impact of foreign ownership on firm performance. For marketing practitioners and other participants, this study is beneficial to change attitudes towards the implications of CSR for the firm and society. For managers, this study is important to understand and ensure gender diversity on corporate boards due to its positive impact on firm performance. The presence of females on corporate boards not only improves the quality of decision-making but also presents a soft image of the organization. Considering the importance of foreign capital managers must ensure the firm-level factors that foreign investors consider before making their investment and work on how to make their firms attractive for investment. Like any other research study, this study also has certain limitations. The study was restricted to one country, i.e. the US only. Similar studies in the future should be conducted in different contexts for generalizability and with other moderating variables.

6. Conclusion

The paper aimed to analyze the moderating role of CSR in the corporate governance/ firm performance relationship. The findings of our study reveal that the presence of FBM has a significant positive impact on ROA and that CSR does moderate the FBM /firm performance relationship. Hence, firms must ensure that they maintain a balance between males and females on corporate boards rather than only male or male-dominated boards. The findings of this study further signify that maintaining gender diversity at the board level is advantageous and the contributions of female board members will be given value by investors. Academically, it is widely agreed that females do better than males and are more involved in making crucial household decisions. Around the world, there is a growing trend to promote and include females on corporate boards. Recently, the European Union Parliament passed a bill directing large firms to ensure at least 40% representation by females on corporate boards.

FII also has a strong positive impact on ROA and CSR does moderate the FII/firm performance relationship. The findings are helpful for potential FIIs to invest in those firms that already have some investment from foreign institutional investors thus the lowering risk of making an investment choice. Moreover, our findings are valuable for policymakers involved in identifying and evaluating drivers that foreign institutional investors consider while making their decisions to invest in foreign markets. Foreign institutional investors are sensitive to business cycles. The ever-increasing importance of foreign capital and the inability of some firms to attract foreign capital has made it necessary for firms to identify and understand some of the common factors that foreign investors consider while making their investment decisions. Empirically also it is confirmed that the performance of firms having a higher proportion of ownership by foreign investors is better than those who have a lower proportion of ownership by foreign investors (Huang & Shiu, 2009).

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