
Board Composition, Board Gender Diversity and Firm Performance: Evidence from India

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ABSTRACT

Corporate governance is the burning topic of discussion all around the world amid the corporate frauds happened in the last two decades. For better corporate governance in firms, the board of directors collectively play a major role. Board composition matters a lot in the governance of the company because independent directors will not have any incentive to adhere to all the proposals of the management. Again worldwide it is also seen for the last couple of years, that board is increasingly represented by women directors. So the study has been made in that direction to find out the possible effect of board composition and gender diversity on the firm performance. Another dimension has also been studied here in this paper is to see the effect of the above two variables on firm performance in the presence of CEO duality (when CEO becomes the Chairman of the board) and in the absence of CEO duality. The study has been done taking NSE 200 companies, which represent 86% of total market capitalisation of NSE. After excluding the banking and financial companies and few companies for incomplete data the final data set is of 141 companies. A positive association has been observed in relation to firm performance.

Key words: *Corporate governance, Board composition, Board gender diversity, CEO duality*

1. Introduction

In spite of important development in the field of corporate governance reforms, there are many examples of corporate delinquencies and unethical conduct, even in countries like USA, long considered a bastion of best practices in corporate governance. Corporate misconduct and accounting frauds done by companies like Worldcom.com, Enron, etc damaged the

fiduciary relationship between the corporate management and investors. To reduce the recurrence of such frauds, US came with the Sarbanes-Oxley Act of 2002, a new act to deal with the emerging situation and provide a strict guideline for corporate to follow in governance, at the same time there is regular interventions by the Securities and Exchange

Commission (SEC) of US. Worldwide, there was a need felt to have better corporate governance measures and regulations to protect the interest of the investors and stakeholders, so that the current format of corporation based on capital market should not get damaged.

In India the reform in the field of corporate governance started with establishment of Securities and Exchange of Board of India (SEBI) in 1992, to protect the interest of investors in securities and to promote the development of securities market. Since then, SEBI has gone a long way by taking measures to establish the faith of investors and specially by introducing Clause 49 of listing agreement for submission of quarterly reports by the corporate to bring more transparency in the system. From time to time different committees are made in India to strengthen corporate governance structure, many of the recommendations are voluntary in nature and some need mandatory compliance. In 1998, The Confederation of Indian Industry brought out its 'Desirable Corporate Governance-A Code'. It was a welcome step towards governance measure on a voluntary basis.

Then in year 2000, SEBI formed a committee under the chairmanship of Kumar Mangalam Birla, which made far-reaching recommendations in governance arena. Since then various committees are formed by either the government or SEBI (i.e., Naresh Chandra Committee, Narayan Swamy Committee, etc) and their

recommendations are accepted and now followed by the companies. India has also passed the New Companies Act, 2013 which also stipulates the provisions relating to corporate governance, in harmony with global practices.

The need to further strengthen the corporate governance regulation was felt, when India came across the biggest accounting fraud of Satyam (once considered as the best practicing corporate governance firm). This brought out the failure of our corporate governance structure, which centres around the independent directors, who are supposed to oversight the function of the board and bring more effectiveness in the governance. It is not possible in the part of the individual independent director to bring good governance, instead it should be a collective effort.

If governance is to be seen in this perspective, then board composition may play a measure role in improving the governance of company. Different committees have also given lot of emphasis on board independence and board composition. If, collectively board takes decisions, where independent directors play a major role, it will lead to good governance and in the long run the firm will perform better in comparison to firms having poor governance record.

In this study, it has been tried to find out the impact of board composition on firm performance. The composition of board of directors remains a focus

whenever the effectiveness of board is tried to be studied (Fama and Jensen, 1983). Van der Walt and Ingley (2003) express diversity in the context of governance as the composition of the board and the combination of the different qualities, characteristics and expertise of individual member. In the current study board diversity is taking two major aspects into consideration, board independence and gender diversity in the board.

Board independence in the eyes of organizational theorists is a signalling tool that works to protect the interest of investor community (Peng, 2004; Certo, 2003) and the presence of independent directors increases the effective monitoring of managers (Jensen and Meckling; and Shleifer and Vishny, 1997; Fields and Keys, 2003). Research has also stressed the requirement of having more non-executive directors in the board to protect the interest of stakeholders from the opportunistic behaviour of executive directors (Jensen and Meckling, 1976). The other positive aspect of independent directors in the board is their experience and the important connections they bring to the firm, which can ultimately enhance performance of the firm (Fama and Jensen, 1983).

1.1. Board composition

Board composition can be studied from two perspective, one is the mix of independent and executive directors and the second one is the mix of people in the

board based on diverse attribute (gender, age, ethnic background). This paper specifically investigates the board independence and gender diversity, these two factors of board composition on the firm performance. Board independence is measured on the basis of proportion of independent directors in the board and women diversity is calculated on the basis women directors in the board.

Agency theory says that there is a natural conflict between the interest of management and the shareholders of firm (Fama & Jensen, 1983), therefore adequate monitoring is required to protect the interest of shareholders from management's self-interest. One of the device in the hands of the shareholders to have a board consisting of more number of independent director to have better monitoring and supervision the activities of the management. From agency theory perspective a high proportion of outside directors is considered good for governance. Lot of study has been done on this and have different findings.

Board diversity takes many other characteristics like age, gender, socioeconomic roots and educational and functional background and forms a heterogeneous group, while undoubtedly vulnerable to more prolonged discussions and disagreements, have been observed to produce more balanced and better results. Resource dependence theorists are having the view that diversity might bring divergent and unique opinions that would not come from directors from homogenous

background. In this study, the impact of gender diversity is tried to be observed on the firm performance because it is the most easy distinguished characteristics of diversity and can be easily noticed from the annual report of the firm.

In 2013, taking S&P 1500 firms, EY (Ernst and Youngs) has done a survey and found that only 15% of the board of directors positions are held by women which was a 4% increase from 2006 survey. The study also find that gender diversity is more in the case of larger firms (S&P) rather than smaller firms and since 2010, more and more opening in the board positions have been filled by women. In other part of the world also gender diversity in board is recognized as a major challenge. In 2007, the European average was 8.4%, an increase from 5% in year 2001, gradually increasing. In India Based on 2091 Bombay Stock Exchange listed companies filings, it is found that only 4.9% were women directors. This is more or less the story in other countries, but an interesting fact is that representation of women on board has increased in last few years. Therefore, a study of their influence on firm performance becomes relevant in that context.

The impact of board composition gets diluted when the Chief Executive becomes the board chair. Most of the governance failure (Enron, WorldCom and HIH) has been observed in companies where the CEO, was at dual role, therefore all most all committees on governance reforms have

given lot of stress on separating the position of CEO and board chairman. CEO duality increases the agency cost (Jensen, 1993), the board could not able to address the poor performance of the firm (Goyal and Park, 2002) and also, board find it difficult to replace the poor performing CEO. In this study, CEO duality is taken as a moderating variable, and the impact of board composition and board diversity on firm performance is observed. There is no such credible study has been done to see the impact of CEO duality as a moderating variable.

2. Literature Review and Hypothesis formation

2.1. Board Composition (Independence of board)

Agency theory says that outside (independent) directors are in a better position to monitor management because of their assumed independence from the company's managers (Fama and Jensen, 1983), and their expertise developed from prior experience (Mace, 1986). They will follow higher impartiality while evaluating the decision of the management (Baysinger and Hoskisson, 1990). Outside directors arrives at more objective solutions, as there career is not affected (salary, promotion and performance appraisals, etc) due to their decision unlike insiders (Rechner and Dalton, 1991). In many instances they act as arbitrators in resolving the disagreements among internal managers. It is found from various studies

that having more outside directors on the board improves the firm performance (Fama & Jensen, 1983; Daily and Dalton, 1994; Bijalwan and Madan, 2013), while other studies did not find a correlation between independent Non-Executive Directors and improved firm performance (Hermalin and Weisbach, 1991; Kota and Tomar).

In India, as per clause 49 of the listing agreement based on Birla committee recommendation, there should be at least 50% of the board members be independent, if the chairman is a full time executive director. So it is known assumption that board independence leads to effective monitoring of management and brings more transparency to the functioning of the board. In the absence any confirm research result whether outsider directors add value to a firm or not, the following hypothesis is taken:

H1: There is no relation between board composition (independence) and firm performance.

2.2. Board Gender diversity

New insights and perspectives are given in diverse board and that increases the firm performance (Siciliano, 1996).; thus Keeping with these arguments, While several researchers have found that gender diversity of the board bolsters firm's returns, other have found no such impact (Dimovski and Brooks, 2006; Carter, et al., 2010) and still others have found negative relationships (Shrader and Blackburn, 1997). As such, evidence as

to the notion that board diversity is associated with better firm performance is still inconclusive (Adams and Ferreira, 2009).

McInerney-Lacombe et al., 2008, in their study found that group dynamics of communication, interpersonal interaction changes due to the presence of women on boards leading to more creative and innovative decisions and results in better performance of firms. Study says that women are less tolerant than men towards opportunistic behaviour (Srinidhi, et al, 2011) and exhibit greater diligence in monitoring the management and maintaining transparency in reporting. Normally, women are considered as more empathetic, caring and having concerns for others and shows interest in creating values in relationships of great importance to community (Dobbins, 1985; Boulouta, 2013), thus women can create long lasting relationship between firms and stakeholders.

It suggests that the presence of female directors in boardrooms helps firms maximize access to critical resources through their skills, competencies and knowledge, which are different from those of male directors (Hillman, et al., 2007). The above views suggest that diverse boards monitors the management more effectively as a result the firm performance will increase (Smith et al., 2006). (Gul et al. 2011) document that board gender diversity improves stock price information through the mechanism of increased public disclosure in large firms and by

incorporating private information in small firms.

In contrast, Lau and Murnighan (1998) says that with women on board, the board will have more diverse opinion and critical thinking leading to delay in decision making and the board will become less effective. Women directors will raise more questions than the other directors and might be more active and tougher monitors than usually required (Adams and Ferreira, 2009). Among other things, they find evidence that boards with women directors are more likely to remove chief executive officers (CEOs) after poor stock performance and compensate directors with higher levels of equity-based compensation. In their study, Adams and Ferreira (2009) also observed a negative correlation between the percentage of female directors on the board and Tobin's Q. Greater gender diversity leads to more differing opinions and critical questions can be time consuming which hold back the firm, which affect the performance of the badly, especially if the firm is competing in a turbulent business environment (Smith et al., 2006). We get a mixed empirical evidence in relation to women on board and firm performance.

Resource dependence theory regards corporate boards as an essential link between the company and its environment and the external resources on which a company depends. This link is necessary for good performance, as the firm gets benefit from the stakeholders (Pfeffer and

Salancik, 1978). From having female directors, companies get better connected with the stakeholders, including current and prospective employees (Hillman et al. 2007). As there is no confirm established relationship between the variances, hence the hypothesis is formed as follows:

H2: There is no relationship between Gender diversity and firm performance.

2.3. CEO duality

The proponent of agency theory say that separating the CEO and Board chair ensures a balance of power and no one has unfettered authority of decision making. The CEO is responsible for the initiation and implementation of plans and policies; the board chairman is responsible to see that board of directors monitor and guide the CEO. By combining the roles of CEO and chairman, one person is having so much power that the board becomes ineffective in monitoring opportunism, which leads to scandals and corruption. But there are contrasting views also regarding the duality. Stewardship theory suggests that CEO duality gives unity of command, it avoids the role ambiguity (Anderson and Anthony, 1986), which fastens the process of decision making. Researchers have found that in certain circumstances, CEO duality results in better performance where as in other cases CEO duality (Boyd, 1995; Lam and Lee, 2008). Contingency theorists seek to identify factors within a firm and its environment that are positively or negatively related to CEO duality (Boyd,

1995). The current study is one, in that direction to identify the effect of factors like board composition and board diversity on firm performance with or without CEO duality.

Hypothesis 3: The proportion of independent director does not have any association with firm performance in a firm without CEO duality

Hypothesis 4: Gender diversity does not have any association with firm performance in a firm without CEO duality

3. Data and Methodology

This paper uses the Nifty 200 companies, ranked on the basis of National Stock Exchange(NSE) market capitalisation and includes high and mid capitalised companies, as the beginning dataset. As per the estimation on March 31, 2016, Nifty 200 includes around 86% of the free float market capitalisation on NSE. Hence, this dataset reasonably covers the population of interest i.e., Indian public corporations.

The data has been collected primarily from two sources i.e., CMIE data base and Company Annual reports. The Accounting and Market related data has been collected mostly from CMIE database, where as most of the governance data has been collected from the Annual reports of the companies.

Banks assets includes the loans which is consisting of depositor's fund , therefore the banks were excluded by Kiel and Nicholson(2003) from the sample size

for their analysis. In this study also the banks are excluded from the sample size because of mainly two reasons, first one is the above reason and the second one is, banks are governed by the RBI guidelines hence little scope remains for the board to decide the governance structure. Also, because of lack of comparable data in some financial institutions and missing data in some other firms, the size of the sample has been reduced further. The final list of 162 companies are obtained as the sample for the study.

The board composition has been measured in this study based on two dimensions, independent directors in the board and gender diversity of the board. The annual report of the companies, clearly discloses the independent directors as well as the women directors in the board. The board composition and financial data has been assessed at one point of time i.e., 31st March, 2014 as disclosed in the annual report and CMIE database.

The firm performance has been majorly assessed by various researchers taking Tobin's Q, return on Assets(ROA), Return on equity(RoE). Here in this study, the firm performance has been measured through two variables, accounting profit and market value and book value of equity ratio(a replacement of Tobin's Q). Accounting profit is considered as ROA i.e, EBIT/Total Asset and the following model is used to observe the association at two different conditions of CEO duality and No CEO duality.

$$ROA = \hat{\alpha}_1 + \hat{\alpha}_2 \text{BdGenDiv} + \hat{\alpha}_3 \text{BdComp} + \hat{\alpha}_4 \text{BdSize} + \hat{\alpha}_5 \text{LnSize} + \hat{\alpha}_6 \text{LnAge} + \hat{\alpha}_7 \text{Lev} +$$

The second model used for the purpose of regression is to observe the impact of Board composition and Board Gender diversity on market value and book value ratio. This ratio represents the capital market performance of firms, again for both the conditions.

$$MVBV = \hat{\alpha}_1 + \hat{\alpha}_2 \text{BdGenDiv} + \hat{\alpha}_3 \text{BdComp} + \hat{\alpha}_4 \text{BdSize} + \hat{\alpha}_5 \text{LnSize} + \hat{\alpha}_6 \text{LnAge} + \hat{\alpha}_7 \text{Lev} +$$

Firm age, firm size, leverage and board size are taken as control variables in the model to remove the endogeneity problem and to account for potential advantages of large scale economies, market power and financial risk features of firm. Many prior studies (Hermalin and Weisback, 1991; Boone et al., 2007) have taken these variables in the model and found that they are correlated with firm performance.

The analysis of results begins with the presentation of summary of descriptive statistics of variables in Table II. Out of the total sample size of 141 firms, it is found that 43 firms are having CEO duality, whereas majority of the firms are having separation in the chairmanship and CEO positions. Statistics show that the average of performance variances (ROA and MVBV) are more in the case of firms with No CEO duality. The average of ROA (MVBV) is 10.99 (5.98) in case of No CEO duality firms in comparison to

9.82 (3.34) in case of firms with CEO duality, but the standard deviation is very high in the case of No CEO duality firms, which says that there are some firms with very high firm performance. But the average board size (11.86) is more in case of CEO duality firms, than the firms with No CEO duality (i.e., 10.8) and proportion of independent director (BoardComp) is around almost same in both the cases. Average lady director is less than 1 in the total sample size, but in companies with CEO duality the average lady director is 0.744, where as in the case of the other companies is 0.684. Based on this statistics it can reasonably be said that in case of CEO duality to justify the board independence and board strength in decision making they have kept more number of board members and independent director, although difficult to prove the board independence from the powerful CEO and Board chair.

$$MVBV = \hat{\alpha}_1 + \hat{\alpha}_2 \text{BdGenDiv} + \hat{\alpha}_3 \text{BdComp} + \hat{\alpha}_4 \text{BdSize} + \hat{\alpha}_5 \text{LnSize} + \hat{\alpha}_6 \text{LnAge} + \hat{\alpha}_7 \text{Lev} +$$

Correlation Analysis

A positive correlation is there between MVBV and ROA and significant at 0.001 level, which is obvious because of the relationship between both the performance variable. Board composition is showing a negative relation with both the performance variable but correlation statistics shows the non significance of the variable. The board diversity is also not very significant as per the correlation table,

Annexure:

Type of variable	Variable	Definition and measurement
Dependent Variables:		
Dependent: Performance	ROA	Return on Asset
Dependent: Performance	MVBV	Market value to Book value ratio
Independent Variable:		
Independent: predictor	BdGenDiv	Women director on board
Independent: predictor	BdComp	Proportion of Independent directors on board
Independent: control	BdSize	Number of directors in the board
Independent: control	LnSize	Firm size, measured as the natural logarithms of the firms total asset
Independent: control	LnAge	Firm age, measured as the natural logarithm of the number of years since the establishment of a firm
Independent: control	Lev	Total borrowings/Total Assets
Moderating Variable	CEOduality	A dummy variable: 0, if the CEO is also the chairman of the board, 1 otherwise.

4. Results and discussions

Variables	CEO Duality			No CEO Duality		
	Mean	Std. Deviation	N	Mean	Std. Deviation	N
ROA	9.8191	9.69497	43	10.9912	15.43493	98
MVBV	3.3435	2.727	43	5.9864	7.027	
BdGenDiv	.744	.7896	43	.684	.8446	98
BdComp	.5302	.12705	43	.5107	.09255	98
Bdsize	11.86	3.219	43	10.08	2.444	98
lev	.1799	.17720	43	.1623	.17641	98
LnSize	12.0088	1.57365	43	11.3329	1.20231	98
Lnage	3.5566	.50386	43	3.6011	.64909	98

	MVBV	ROA	BoardComp	BdGenDiv	Bsize	CEOdual	LnSize	LnAge
MVBV	1.000							
ROA	.321***	1.000						
BoardComp	-.019	-.020	1.000					
BdGenDiv	.082	.120	.080	1.000				
Bdsize	-.097	-.092	-.096	.311***	1.000			
CEOdual	.198**	.039	-.086	-.034	-.292***	1.000		
LnSize	-.357***	-.258**	-.015	.106	.403***	-.230**	1.000	
LnAge	.114	-.001	-.090	-.047	.079	.034	.034	1.000

***Correlation is significant at the 0.001 level(2-tailed)

** Correlation is significant at the 0.01 level(2-tailed)

*Correlation is significant at the 0.05 level(2 tailed)

Table IV	Regression of 141 companies					
	ROA			Market value/Book value		
	Unstandardized Coefficients Beta	Std. Error	t Value	Unstandardized Coefficients Beta	Std. Error	t Value
Board Diversity						
Board Independence	-2.199	10.458	-0.21	0.607	4.61	0.131
CEO duality	-0.638	2.454	-0.26	1.804	1.082	1.667
Board Size	-0.336	0.451	-0.746	0.061	0.198	0.308**
Firm Leverage	-30.955	6.531	-4.739	-9.002	2.879	3.126**
Natural log of Total Asset	-1.159	0.922	-1.257	-1.185	0.406	-2.915*
Natural log of Age of the firm	-0.515	1.779	-0.289	0.99	0.784	1.262
R Square	0.22				0.23	
Adjusted R Square	0.18				0.19	
F statistics	5.48***				5.69***	

* significant at 0.1 level

** significant at 0.05 level

*** significant at 0.01 level

Table V	Results of Regression(Dependent Variable: Return on Asset)						
	CEO duality				No CEO duality		
	Unstandardized Coefficients Beta	Std. Error	t value	VIF	Unstandardized Coefficients	Std. Error	t value
Board Diversity	3.995	1.531	2.610*	1.08	1.502	1.878	0.799
Board Independence	5.483	10.17	0.539	1.24	-3.278	16.33	-0.201
Board Size	-0.702	0.44	-1.596	1.48	-0.152	0.663	-0.23
Firm Leverage	-33.03	7.47	4.41**	1.3	-30.43	9.002	-3.381
Natural log of Total Asset	0.175	0.987	0.177	1.79	-1.784	1.389	-1.284
Natural log of Age of the firm	-0.763	2.565	-0.297	1.24	-0.688	2.25	-0.304
R Square				0.484			0.191
Adjusted R Square				0.398			0.138
F statistics				5.633***			3.580***

*** At 0.01 significance level

Table VI	Results of Regression(Dependent Variable: Market Value/ Book Value)					
	CEO duality			No CEO duality		
	Unstandardized Coefficients Beta	Std. Error	t Value	Unstandardized Coefficients Beta	Std. Error	t statistic
Board Diversity	.734	4.174	1.681	.614	.847	.725
Board Independence	4.468	.436	1.541	.377	7.364	.051
Board Size	-.208	2.899	-1.657	.200	.299	.669
Firm Leverage	-6.194	.125	-2.908**	-10.500	4.058	-2.587**
Natural log of Total Asset	-.330	2.130	-1.175	-1.541	.626	-2.460**
Natural log of Age of the firm	.686	.281	.937	1.094	1.018	1.075
R Square		0.470		0.207		
Adjusted R Square		0.382		0.154		
F statistics		5.328**		3.950**		

**significant at 0.01 level

but otherwise it shows a small positive relationship with ROA and MVBV. Board size is having a positive relationship with board diversity with statistical significance, which shows that increased board size encourages more women on board. CEO duality is positively associated with MVBV and is a significant variable but not significant in relation to ROA, although having a positive relationship with it also. It is also found that natural log of total asset is having a negative relationship with firm performance at 0.001 significance level. The collinearity problem is not there because the correlations are less than 0.70.

Table IV shows the regression table of all 141 companies. Here, it is found that Board composition and board diversity both variables are statistically significant to have any effect of firm performance (both ROA and MVBV). Therefore it becomes more important to study by splitting the firms into two groups i.e., CEO duality and No CEO duality. The F statistics show that the model is significant with Adjusted R^2 of 18(19) for accounting performance and Market performance. Firm leverage and board size is having negative association with the firm performance at 0.01 significance level. It is required to study in longer perspective taking data for few years to confirm the result, specifically for assets.

Table V states that the model is significant at 0.01 level for both the conditions i.e., CEO duality and No CEO duality. VIF less than 3 says that there is no multicollinearity among the independent

variables. It reports the effect of independent variables on Return on Asset (ROA) at the conditions of CEO duality and No CEO duality. It is observed that Board independence is having a positive coefficient when there is CEO duality, but a negative coefficient in case of No CEO duality, although but statistically not significant. Board diversity is positively associated with firm ROA, in case of CEO duality at 0.05 significant level but without CEO duality board diversity is not a significant variable. Firm leverage is negatively associated with firm accounting performance again in the case of CEO duality but not in the case of with No CEO duality and also significant at 0.01 level.

Table VI shows the association of independent variable with that of firm market performance (MVBV). The model is found to be significant at 0.01 level. But both Board diversity and board composition are not significant variable in determining firm performance. It confirms to the finding given by Dimovski and Brooks, 2006; Carter, et al., 2010, that there is not significant association has been found between gender diversity and firm performance. Similarly board composition is not found to have any association with MVBV, confirms to the finding of Hermalin and Weisbach, 1991; Kota and Tomar, where they observed that there is no statistically significant correlation between the firm performance and board independence. At 0.01 significance level, firm leverage is negatively associated with

firm market performance that shows that increasing debt in the capital structure will negatively impact the firm performance, but it is only 2014 data, so more no. of years are to be taken to confirm the result.

5. Conclusion

This study examines whether the board composition consisting of board independence and board diversity influence the firm performance. NSE 200 data year 2014 has been used for this study. The banking and financial service companies data has been excluded from the sample size. The second part of the study was to see the impact of board independence termed as board composition in the study and gender diversity on firm performance in the presence of CEO duality and absence of CEO duality. The whole data has been splitted into two groups, one with CEO duality and the other with No CEO duality. Firm performance variable measured through one accounting performance i.e., Return on Asset (ROA) and Market performance i.e., Market value to Book value(MVBV) ratio. In addition, a number of control variables(e.g. firm size, board size, age of the firm and leverage) are also added in the prescribed model.

The study found that with CEO duality, the board gender diversity is positively associated with firm's accounting performance, whereas in case of No CEO duality it becomes a significant variable. Board composition(board independence) is a insignificant variable in case of

accounting performance. when firm performance is measured through market value, both the variables are found to be statistically insignificant. Taking the whole data(without splitting into groups), it is found that board size is positively associated with Market value and Book value ratio and statistically significant.

The limitation of this research is the data, which is consisting of only year 2014. Taking a period more than 1 year will have better consistency in result. Banking and financial companies data has not been considered in this study. Only two governance components are studied. The research can be extended by taking other governance factors into the model.

References:

- Adams, R. B. and Ferreira. D. (2009). Women in the boardroom and their impact on governance and performance. *Journal of Financial Economics*, 94(2), 291-309.
- Anderson, C.A. and Anthony, R.N.(1986). *The new corporate directors*: John Wiley and Sons, New York.
- Baysinger, B.D. & Hoskisson, R.E.(1990). The composition of boards of directors and strategic control: Effects on corporate strategy. *The Academy of Management Review*, 15(1), 72-87.
- Bijalwan, J.G. & Madan, P.(2013). Board Composition, Ownership Structure and Firm Performance. *Research Journal of Economics and Business Studies*, 86-101.

- Boone, A.L., Field, L.C., Karpoff, J.M., and Raheja, C.G.(2007). The determinants of corporate board size and compositions: an empirical analysis. *Journal of Financial Economics*, 85(1), 66-101.
- Boulouta I (2013). Hidden Connections: The Link Between Board Gender Diversity and Corporate Social Performance. *Journal of Business Ethics*, 113(2), 185-197.
- Boyd, B.K.(1995). CEO duality and firm performance: A contingency model. *Strategic Management Journal*, 16, 301-312.
- Carter, D. A., D'Souza, F., Simkins, B. J., and Simpson, W.G.(2010). The Gender and Ethnic Diversity of US Boards and Board Committees and Firm Financial Performance. *Corporate Governance: An International Review*, 18(5), 396-414.
- Certo, S.T.(2003). Influencing Initial Public Offering Investors With Prestige: Signalling With board Structures. *Academy of Management Review*, 28(3), 432-446.
- Daily, C.M. & Dalton, D.R.(1994). Bankruptcy and corporate governance: The impact of board composition and structure. *Academy of Management Journal*, 37, 1603-1617.
- Dimovski, W. and Brooks, R.(2006). The Gender Composition of Boards After IPO. *Corporate Governance*, 6(1), 11-17.
- Dobbins, G. H. (1985). Effects of Gender on Leaders' Responses to Poor Performers: An Attributional Interpretation. *The Academy of Management Journal*, 28(3), 587-598.
- Fama, E.F & Jensen, M.C.(1983). Separation of ownership and control. *Journal of Law and Economics*, 26, 301-325.
- Fields, M.A. and Keys, P.Y. (2003). The emergence of corporate governance from Wall St. to Main St.: Outside directors, board diversity, earnings management, and managerial incentives to bear risk. *Financial Review*, 38(1), 1-24.
- Goyal, V.K. and Park, C.W.(2002). Board Leadership structure and CEO turnover. *Journal of Corporate Finance*, 8(1):49-66
- Gul, F.A., Srinidhi, B. and Ng, A.C.(2011). Does board gender diversity improve the informativeness of stock prices? *Journal of Accounting and Economics*, 51(3), 314-338.
- Hermalin, B. E & Weisback, M.S. (1988). The determinants of board composition. *Rand Journal of Economics*, 19, 589-606.
- Hermalin, B.E. and Weisbach, M.S.(1991). The effect of board composition and direct incentives in firm performance. *Financial Management*, 14(5), 532-49.
- Hillman, A.J., Shropshire, C. & Canella, A. A.(2007). Organizational predictors of women on corporate boards. *Academy of Management Journal*, 50(4), 941-952.

- Jensen, M.C. & Mechling, W.H.(1976). Theory of the firm: Managerial behaviour, agency costs and ownership structure, *Journal of Financial Economics*, 3, 305-317.
- Jensen. M.C.(1983). Organization Theory and Methodology. *The Accounting Review*, 58(2), 319-339.
- Kiel, G. and Nicholson, G.(2003). A framework for diagnosing board effectiveness. *Corporate Governance: International Review*, 12(4), 442-60.
- Kota, H.M. and Tomar, C. (2010). Corporate governance practices of Indian firms. *Journal of Management and Organization*, 16(2), 266-79.
- Lam. & Lee.(2008). CEO duality and firm performance: Evidence from Hong Kong. *Corporate Governance*, 8(3), 299-316.
- Mace, M.L.(1986), *Directors: Myth and Reality*, Harvard Business School Press, Boston, MA.
- Peng. M.W.(2004), Outside Directors and Firm Performance During Institutional Transactions. *Strategic Management Journal*, 25(5), 453-471.
- Pfeffer, J. & Salancik, G.R. (1978). *The external control of organizations: A resource dependence perspective*. Stanford, C.A: Stanford Business Books.
- Rechner, P.L. & Dalton, D.R.(1991). CEO duality and organizational performance: A longitudinal analysis. *Strategic Management Journal*, 12(2),155.
- Shleifer, A. and Vishny, R.W.(1997). A survey of corporate governance. *Journal of Financial Economics*, 52(2), 737-83.
- Shrader, C.B., Blackburn, V.B. and Iles, P.(1997). Women in management and firm financial performance: An exploratory study. *Journal of Managerial Issues*, 9(3), 355-372.
- Siciliano, J.I.(1996). The relationship of board member diversity to organizational performance. *Journal of Business Ethics*, 15(12). 1313-1320
- Smith. N., Smith. V. and Verner. M.,(2006). Do Women In Top Management Affect Firm Performance? A Panel Study of 2,500 Danish Firms. *International Journal of Productivity and Performance Management*, 55, 569-593.
- Srinidhi. B.I.N., Gul. F. A. and Tsui. J. (2011). Female Directors and Earnings Quality. *Contemporary Accounting Research*, 28(5), 1610-1644.
- Van der Walt. N.T. and Ingley. C.B.(2003). Board Configuration: building better boards. *Corporate Governance*, 3(4),5-17

