Board Composition and Firm Performance: Panel-level Analysis of Firms in Emerging Market

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ABSTRACT

The paper analyses the relationship between Board Composition (proportion of non-executive directors) and Firm Performance of 145 non-financial NSE listed companies in India for a period of five years. The firm performance measures include Tobin's Q, Return on Assets, Return on Capital employed and Return on Equity. Econometric analysis is performed using Pooled OLS and Random Effect Model. The research findings reveal that Board composition has a negative and significant impact on firm performance. The results are robust for both econometric models and various performance measures used. The paper concluded that the negative impact of Board composition on firm performance is due to the fact that non-executive directors lack information about the operations of the firm which reduces their ability to function effectively hence reduces firm performance.

Introduction

Corporate Governance issues gained momentum after the plethora of corporate scandals worldwide. The failure of the major corporate giants emphasized the importance of corporate governance issues in last few decades. Board composition is an important corporate governance mechanism. The relationship between board composition and firm performance is highly debatable in most of the researches. Board composition studies classify directors as executive or non-executive directors. In most of the researches Board composition is defined as the proportion of non-executive directors to the total number of directors (Baysinger and Bulter, 1985; Hermalin and Weisbach, 1991; Daily and Dalton, 1992; Pearce and Zahra, 1992). No clear conclusion is reached till date on the issues of whether directors should be the employees of the firm or affiliated directors (inside/executive directors) or outsiders (non-executive directors). On one hand, inside directors are more familiar with the firm's activities and they can act as monitors to top management. On the other hand, outside directors may act as "professional referees" to ensure that competition among insiders stimulates actions consistent with shareholder value maximization (Fama, 1980).

Non-executive directors are considered as the custodians of the governance process. They are not actually involved in day-to-day business operations but they monitor performance and help in developing strategy for the organization. In corporate governance context, in light of agency

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theory adequate monitoring mechanisms are required to monitor the performance so that the interests of the shareholders can be protected. Therefore higher proportion of non-executive directors in the board of directors would positively impact the firm performance by effective monitoring (Fama& Jensen, 1983; Shleifer &Vishny, 1997). Raheja (2005) argues that "insiders are an important source of firm-specific information for the board and their experience can improve firm performance, but they can have distorted objectives due to private benefits and lack of independence from the CEO. Compared to insiders, outsiders provide superior firm performance as a result of their more independent monitoring, but are less informed about the firm's constraints and opportunities."

According to Cadbury Report (1992) non-executive directors "should bring an independent judgement to bear on issues of strategy, performance and resources including key appointments and standards of conduct." The corporate governance codes developed worldwide require that board of directors of a company must consist of an optimal mix of executive and non-executive directors such that no individual or small group of individuals can dominate the board's decision-taking. The Clause 49 of the listing Agreement in India has made it mandatory to have atleast half of the directors to be non-executive. The resource dependency theory also favours the higher proportion of non-executive directors in the board as they can bring external knowledge and skills to the management team required for the competitive advantage. Non-executive directors also provide access to the resources (raw material, manpower, technology etc) due to their contacts in the other industries of similar or different nature. The studies against this notion are based on the stewardship theory that argues that Non-executive directors are less

able to monitor managers as they lack of the specialist knowledge of the day-to-day functioning of firm's internal operation as they are the part time employees of the organisation. Thus they impact the performance negatively.

Literature Review

The theoretical literature on Board Composition is reflected in various empirical studies. Previous literature showed mixed evidence of the relationship between Board Composition and firm performance results. While some studies support agency theory and resource dependency theory favouring higher proportion of outside directors (Bijalwan and Madan, 2013; Ameer R. et. al., 2010; Uadiale, 2010; Peng, 2004), others provide evidence for stewardship theory (Agrawal and Knoebar, 1996; Kumar and Singh, 2012) and some studies found that the relationship between Board composition and firm performance insignificant. (Kota and Tomar, 2010; Hermalin and Weisbach, 1991; Rashid A. et. al., 2010).

Bijalwan and Madan (2013) analyzed the relationship between board composition and firm performance for 121 firms listed on BSE for the year 2010-2011. Financial performance of the firm is measured with the financial ratios viz. Return on Capital employed, Return on the equity, Profit after tax and Return on assets. The study found that there exist a significant positive relationship between board composition and firm performance. Peng (2004) conducted a study of Chinese listed firms and found that the outside directors are able to make a difference in firm performance and there has been a bandwagon effect behind the diffusion of the practice of appointing outsiders to corporate boards. Uadiale (2010) in his study on Nigerian firms, analysed the board characteristics of the firms using ordinary least square and found that a strong

positive association exists between board composition and firm performance when measured using both ROE and ROCE as performance measures. In a similar study of Malaysian firms, Ameer R. et. Al. (2009) used a panel data of 277 Malaysian firms and found that firm-boards that are populated by outside directors have a significant and positive impact on firm performance.

Agarwal and Knoebar, (1996) proposed that the additional outside directors added in the board for the underlying political constraints reduce firm performance. McIntyre M. L. et. al. (2007) employed cross sectional regression analysis to examine the nature of relationship between board composition & firm performance of all companies included in the Canadian TSE (Toronto Stock Exchange) 300 Composite Index. The study found that a high average proportion of directors who hold outside board positions are associated with decreased levels of firm performance. In Indian context, Kumar and Singh (2012) examined the efficacy of outside directors on the corporate boards of 157 non-financial Indian companies for the year 2008 and found that the outside directors have a negative effect on firm value mainly due to the presence of non-executive non-independent directors.

Rashid A. et al (2010) examined the influence of corporate board composition in the form of representation of outside independent directors on firm economic performance in Bangladesh. The study considered 90 non-financial firms listed on the Dhaka Stock Exchange (DSE) during the period 2005-2009. The results of linear regression analysis revealed that there is no significant relationship between board composition in the form of representation of outside independent directors & firm performance which means that outside independent directors cannot add potential economic value to the firms in

Bangladesh. Using multiple regression analysis Guo and Kga (2012) examined the relationship between corporate governance structures & firm performance of 174 Srilankan firms in the financial year 2010 listed on Colombo Stock Exchange. Using Return on Assets (ROA) and Tobin's Q as they found that the negative correlation between the proportion of non-executive directors and ROA was not significant rather indicated a positive relation.

Baysinger & Butler (1985) advocated a mix of insiders and outsiders on the board and find empirical support that this approach enhances firm performance. The sensible approach is to access the firm profile and roles of the expected directors before deciding on the issue of non-executive directors.

Thus board composition and firm performance relationship has mixed evidence from the theoretical and empirical literature. The agency theory and resource dependency theory favours the greater representation of outside directors on the board on the other hand stewardship theory believes that high proportion of outside directors negatively impact performance as non-executive directors lacks information about the operations of the firm which reduces their ability to function effectively.

Objective and Methodology

Objective

The objective of the paper is to find the nexus between Board composition and firm performance relationship i.e. to find the impact of Board composition on firm performance.

Based on the extensive literature the null and alternate hypothesis is framed as follows:

Null Hypothesis: H_0: Board Composition has insignificant impact on firm performance.

Alternative Hypothesis: H_1: Board Composition has a significant impact on firm performance.

Methodology

Variables

Independent Variable: Board composition is measured in terms of Proportion of Non-Executive directors to the total number of directors in an organization. A Non-executive director also called as outside director is a member of the board of directors of a company but he/she is not affiliated to the company nor is the employee of the company. They does not form part of the executive management team.

Dependent Variables: Firm performance is taken as dependent variable. The present paper uses both the accounting and market based measures to analyze the relationship between board composition and firm performance. Tobin's Q is used as a market based measure. The formula used for Tobin's Q in the present study is a modified version of Tobin's Q. The modifications are incorporated to make it compatible with the manner of reporting in the Indian context. Accounting based measures include Return on Assets (ROA), Return on Capital Employed (ROCE) and Return on Equity (ROE). These performance measures are the indictor of the firm's profitability.

Control Variables: Firm value is not only contingent upon proportion of non-executive directors, but also influenced by several firm specific factors and other governance parameters. The results of the relationship between ownership structure and firm performance may lead spurious conclusions if these variables are not included. These variables were included in the regression model as control variables. In line with the previous studies analysing the relationship between Board composition and firm performance, the study has included the following control variables:

i. CEO- Duality: CEO Duality refers to whether the CEO and Chairman of the board are the same person or not. It is denoted using a dummy variable indicating value 1 for CEO Duality (one person serving both the roles) and 0 otherwise.

ii. Firm Size: The size of the firm has been proxied by three variables-Sales, Total Assets and Market Capitalization. Log transformation of these variables has been used.

iii. Firm Age: It is measured as natural logarithm of the number of years between the year of incorporation and the observation year.

iv. Advertising Intensity: Ratio of expenditure on advertising to sales.

v. Research Intensity: Ratio of expenses on R & D activities to its Sales.

vi. Industry and Year Dummies: In order to control the industry and time effect; the industry and year dummies are used.

Table 1: Description of Variables

Independent Variable		
BC	Board composition	Proportion of Non-executive directors to the total number of directors
Control Variables		
Dual	CEO Duality	Dummy Variable showing 1 if Dual Structure, 0 otherwise
FS1	Firm Size 1	Natural Logarithm of Total Sales
FS2	Firm Size 2	Natural Logarithm of Total Assets
FS3	Firm Size 3	Natural Logarithm of Market Capitalization
FA	Firm Age	Natural Logarithm of number of years between incorporation and observation
AI	Advertising Intensity	Ratio of Advertising expenses to Sales
RI	Research Intensity	Ratio of Research and Development expenses to Sales
ID	Industry Dummies	1 for a particular industry and 0 otherwise
YD	Year Dummies	1 for a particular year and 0 otherwise
Dependent Variables		
TQ	Tobin's Q	Market value of equity(Market Capitalization) + Book value of preference shares and borrowings divided by total assets
ROA	Return on Assets	Ratio of profit before depreciation, interest, tax and amortization (PBDITA)to Total Assets
ROCE	Return on Capital Employed	Ratio of profit before depreciation, interest, tax and amortization (PBDITA) to Capital Employed
ROE	Return on Equity	Ratio of profit before depreciation, interest, tax and amortization (PBDITA) to Shareholders' Equity

Sample and Data

The sample corresponds to the NSE companies. From NSE CNX 200 Index, 160 non-financial companies were chosen for the current analysis. Due to non-availability of the data of certain companies, the sample is left with 145 non-financial companies. The period of the study is five years from 2008-2012.

Data has been majorly collected from the secondary sources. The data related to the Board composition and CEO- Duality was generated from the annual reports of the companies and the reports filed by the companies to NSE as a part of listing requirement of the companies. Data for the firm performance measures and other control variables is collected from the PROWESS Database of CMIE and annual reports simultaneously.

Econometric Modelling

The study employed the panel data of 145 companies for 5 years. The Descriptive Statistics of all the variables and Pearson Correlation Analysis to measure the linear dependence between the variables have been employed. The analysis of Data is performed using Pooled OLS and Panel Data Regression. Panel Data uses two types of regression models viz. Fixed Effect Model and Random Effect Model. The present paper used Random Effect Regression model to analyse the relationship as Hsiao (2003) has opined that **"when inferences will be made about a population of effects from which those in the data are considered to be a random sample, then the effects should be considered random".**

A typical panel data regression equation is as follows:

$$y_{it} = \alpha_i + \beta_1 x_{it1} + \beta_2 x_{it2} + \cdots \ldots \ldots \ldots + \beta_k x_{itk} + \mu_{it}$$

Where

Y is the dependent variable

i denotes the number of firms and t denotes the time period

$x_1, x_2 \ldots \ldots \ldots x_k$ are the independent and control variables.

$\acute{a}_i$ is the constant term (intercept parameter of the regression)

$\hat{a}_1 \hat{a}_2 \ldots \ldots \ldots \ldots \ldots \hat{a}_k$ are the slope parameters that represent the partial effects of x_i on y keeping all other factors constant

μ represents the unobserved factors that change over time and affect y.

The Random effect model is as follows:

$$y_{it} = \alpha_i + \beta_1 x_{it1} + \beta_2 x_{it2} + \cdots \ldots \ldots \ldots + \beta_k x_{itk} + \square_i + \mu_{it}$$

Where $w_{it} = \square_i + \mu_{it}$ is the composite error term. The $\square_i$ are assumed independent of traditional error term μ_{it} and regressors x_{it} which are also independent of each other for all *i* and *t*. A random effect model is estimated by generalized least squares (GLS).

Testing for random Effects:

Breusch and Pagan's (1980) Lagrange multiplier (LM) test is used for testing the random effect. The null hypothesis in the LM test is that variances across entities are zero. This is no significant difference across units. If the null hypothesis is rejected one can conclude that there are significant random effects in the panel data and thus the random effect model is significant.

Tests of Significance

For detecting multicollinearity pairwise correlation of the independent variable and the control variables has been employed. Also the Variance Inflation Factor (VIF) is calculated for the variables. The correlation value less than 0.8 signifies that there is no multicollinearity among the variables. Also for VIF, as a rule of thumb, a variable whose VIF values are less than 5 ignores the presence of multicollinearity.

Wooldridge Serial Auto-correlation test of null hypothesis of first order autocorrelation, has been used to detect presence of serial correlation in panel data as devised by Wooldridge (2002) and Breusch-Pagan / Cook-Weisberg test for heteroskedasticity has been used to detect the presence of heteroskedasticity.

Results and Analysis

Descriptive Statistics:

The table-2 below shows the descriptive statistics of all the variables used viz. independent, dependent and control variables for 725 observations (145 companies across 5 years). Board Composition has a mean value of .73 with a minimum value of .27 and a maximum value of 1 implying that companies under study on an average have 73% non-executive directors on the board with a minimum percentage of 27. Maximum value of 1 signifies that some companies have all non-executive directors on their board. The variation in board composition is 12%.

Firm performance measure Tobin's Q has a mean value of 2.13 with a minimum and maximum value of 0.36 and 10.19 respectively. All Accounting measures (ROA, ROCE and ROE) depict a negative minimum value indicating negative profitability. The mean values of ROA, ROCE and ROE are 0.17, 0.27 and 0.38 respectively.

CEO Duality which is a dummy variable showing value 1 for duality and 0 otherwise shows a mean value of 0.28 indicating that 28% observations were found following the practise of CEO Duality.

Table-2-Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
Independent Variable					
BC	725	0.737783	0.12434	0.272727	1
Dependent Variables					
TQ	725	2.132906	1.609419	0.36131	10.19181
ROA	725	0.171533	0.100215	-0.16795	0.982563
ROCE	725	0.275614	0.252791	-2.75713	1.885141
ROE	725	0.38363	0.379637	-5.94727	5.282851
Control Variables					
Dual	725	0.286897	0.452625	0	1
FS1	725	4.600486	0.672895	-0.1549	6.531213
FS2	725	4.816945	0.528845	3.69282	6.470153
FS3	725	4.935698	0.553325	3.515887	6.545703
FA	725	1.483754	0.286574	0.30103	2.060698
AI	725	0.12224	2.027285	0	50.77778
RI	725	0.007811	0.020005	-0.00657	0.158415

Correlation Analysis

The results of the Pearson Correlation Analysis as shown in Table-3 depicts that Board Composition is negatively correlated with all the performance measures used. However the correlation is significant for ROA and ROCE at 10% level of significance. CEO Duality is also negatively and significantly correlated with Performance variables except for Tobin's Q with which the correlation is positive but not significant. Firm Size in terms of log of total assets is negatively correlated on the other hand firm size measures log of total sales and log of market capitalization are positively correlated with firm performance measures. Firm Age is in positive correlation with ROCE and ROE and in negative correlation with Tobin's Q and ROA. Correlation between Advertising Intensity and Research Intensity is found positive and negative with different performance measures used.

Table-3 : Pearson Correlation Matrix of the Variables

	TQ	ROA	ROCE	ROE	BC	Dual	FS1	FS2	FS3	FA	AI	RI
TQ	1											
ROA	0.5879*	1										
ROCE	0.5506*	0.7801*	1									
ROE	0.2987*	0.4346*	0.4729*	1								
BC	-0.0549	-0.0637*	-0.0782*	-0.0537	1							
Dual	-0.0225	-0.0794*	-0.0986*	-0.0877*	-0.2520*	1						
FS1	0.0914*	0.0787*	0.1159*	0.0989*	-0.1404*	-0.013	1					
FS2	-0.2806*	-0.2147*	-0.1730*	-0.1053*	-0.1962*	0.0969*	0.7176*	1				
FS3	0.3508*	0.1896*	0.1701*	0.0524	-0.1794*	0.0737*	0.5853*	0.7294*	1			
FA	-0.0269	-0.0177	0.0726*	0.0194	0.0631*	0.0007	0.1336*	0.0584	0.0447	1		
AI	0.0466	-0.0749*	-0.0487	-0.0451	0.0315	0.0835*	-0.3761*	-0.054	-0.013	-0.024	1	
RI	0.0822*	0.0245	-0.0147	-0.0252	-0.1148*	0.0847*	-0.0757*	-0.052	0.0351	-0.021	-0.021	1

*Significant at 10% Level of Significance

Regression Analysis

The VIF (Variance Inflation Factor) Values (Table-4) are less than 5 with the mean VIF of 1.86, meaning that there is no multicollinearity. Also the Correlation values as shown in Table-3 above are much lesser than 0.8 ignoring the presence of multicollinearity.

Table 4 : VIF Values

Variable	BC	Dual	FS1	FS2	FS3	FA	AI	RI	MEAN VIF
VIF	1.45	1.2	3.84	4.96	2.82	1.2	1.42	2.72	1.86

The results of the Breush Pagan LM test for Random Effects as shown in Table 5 rejected the null hypothesis for all firm performance measures used and thus we can conclude that there are significant random effects in the panel data and therefore the Random Effect Model is significant.

The results of Wooldridge test for Autocorrelation in Panel Data and Breusch-Pagan / Cook-Weisberg test for heteroskedasticity show that there is presence of autocorrelation and heteroskedasticity in panel data model for all performance variables except for ROA (Table-5). Therefore the panel data model uses Cluster Robust Standard Error to control for Heteroskedasticity and Autocorrelation in case of Tobin's Q, ROCE and ROE.

Table 5: Test Results

Specification Tests	Breusch-Pagan Lagrange Multiplier (LM) Test for Random Effects		Wooldridge Test for Autocorrelation in Panel Data		Breusch-Pagan / Cook-Weisberg test for heteroskedasticity	
VARIABLES	Chi bar sq	p-value	F Stats	p-value	Chi square	p-value
Tobin's Q	810.82	0.0000***	15.152	0.0002***	188.75	0.0000***
ROA	224.13	0.0000***	0.867	0.3534	1.58	20.89
ROCE	308.89	0.0000***	11.967	0.0007***	7.08	0.0078***
ROE	452.18	0.0000***	9.088	0.0030***	52.09	0.0000***

Pooled Ordinary Least Square Regression Model

$$y_{it} = \alpha_i + \beta_1 BC_{it} + \beta_2 Dual_{it} + \beta_3 FS1_{it} + \beta_4 FS2_{it} + \beta_5 FS3_{it} + \beta_6 FA_{it} + \beta_7 AI_{it} + \beta_8 RI_{it} + \beta_9 ID_{it} + \beta_{10} YD_{it} + \mu_{it}$$

where y represents Tobin's, ROA, ROCE and ROE for Model 1, 2, 3 and 4 respectively.

Results of the Pooled OLS regression are shown in Table-6. Board Composition is negatively and significantly related with all firm performance measures; however the level of significance varied from 1 % to 10%. Board composition is significant to firm performance at 1% with ROA, 5% with ROCE and ROE and 10% with Tobin's Q. The null hypothesis of insignificant relationship is thus rejected. CEO Duality is negatively related with firm performance except with Tobin's Q. The relationship is significant only with ROE. Proxies of Firm size- log of Sales and Market Capitalization are positively and significantly related with firm performance. Log of Total Assets have a significant negative

relationship with firm performance. Firm Age is negatively and insignificantly related with Tobin's Q and ROA and positively and insignificant related with ROCE and ROE. Advertising Intensity has a positive and significant relation with firm performance. On the other hand Research Intensity showed mixed relationship with firm performance. R-Square value ranged for 14% to 77%.

Table 6: Regression estimates of Pooled OLS

	(1)	(2)	(3)	(4)
VARIABLES	TQ	ROA	ROCE	ROE
BC	-0.904*	-0.132***	-0.286**	-0.332**
	(0.513)	(0.0265)	(0.136)	(0.143)
Dual	0.00902	-0.00562	-0.0438	-0.0594**
	(0.108)	(0.00662)	(0.0278)	(0.0296)
FS1	0.170	0.0495***	0.142***	0.168***
	(0.113)	(0.00796)	(0.0311)	(0.0335)
FS2	-3.532***	-0.201***	-0.484***	-0.395***
	(0.331)	(0.0115)	(0.0851)	(0.0834)
FS3	3.385***	0.138***	0.307***	0.194***
	(0.212)	(0.00830)	(0.0485)	(0.0472)
FA	-0.0671	-0.00498	0.0448	0.00689
	(0.208)	(0.0104)	(0.0576)	(0.0613)
AI	0.0236**	0.00135	0.00740**	0.00950***
	(0.0114)	(0.00160)	(0.00289)	(0.00320)
RI	-1.221	-0.180	0.0286	0.128
	(2.516)	(0.225)	(0.641)	(0.683)
Industry Dummies	YES	YES	YES	YES
Year Dummies	YES	YES	YES	YES
Constant	2.851***	0.321***	0.590***	0.870***
	(0.441)	(0.0416)	(0.114)	(0.202)
Observations	725	725	725	725
R-squared	0.773	0.481	0.384	0.149
Number of Firms	145	145	145	145
Robust Standard errors clustered for 145 firms in parentheses for Tobin's Q, ROCE and ROE				
Standard errors in parentheses for ROA				
*** p<0.01, ** p<0.05, * p<0.1				

Random Effect Model

$$y_{it} = \alpha_i + \beta_1 BC_{it} + \beta_2 Dual_{it} + \beta_3 FS1_{it} + \beta_4 FS2_{it} + \beta_5 FS3_{it} + \beta_6 FA_{it} + \beta_7 AI_{it} + \beta_8 RI_{it} + \beta_9 ID_{it} + \beta_{10} YD_{it} + w_{it}$$

where y represents Tobin's, ROA, ROCE and ROE for Model 1, 2, 3 and 4 respectively.

Table-7 below shows the results of Random Effect Model estimates for all performance measures. Board Composition has a negative and significant impact of firm performance when measured using different performance variables. With ROA, Board composition is significant related at 1% level of significance on the other hand, with other performance variables (Tobin's Q, ROCE and ROE), the significance level is 5%. CEO duality has also a negative impact on firm performance however the impact is found significant only in case of ROE. All firm size proxies showed the same results as in case of Pooled OLS. Firm Age is found insignificant to firm performance. Advertising expenses to sales are positively and significantly related with firm performance measures except for ROA with which the relationship is positive but insignificant.

Table 7: Regression estimates of Random Effect Model

VARIABLES	(1) TQ	(2) ROA	(3) ROCE	(4) ROE
BC	-0.675*	-0.0907***	-0.163**	-0.327**
	(0.407)	(0.0338)	(0.0808)	(0.141)
Dual	0.0562	-0.00427	-0.0285	-0.0588**
	(0.0951)	(0.00977)	(0.0226)	(0.0293)
FS1	0.0711	0.0484***	0.120**	0.167***
	(0.0888)	(0.0106)	(0.0519)	(0.0339)
FS2	-3.343***	-0.164***	-0.335***	-0.390***
	(0.287)	(0.0161)	(0.103)	(0.0836)
FS3	3.214***	0.105***	0.200***	0.190***
	(0.202)	(0.0105)	(0.0396)	(0.0466)
FA	-0.0724	-0.00396	0.0500	0.00662
	(0.194)	(0.0176)	(0.0603)	(0.0614)
AI	0.0162**	0.00200	0.00625*	0.00941***
	(0.00651)	(0.00151)	(0.00352)	(0.00317)
RI	3.290	-0.219	-0.303	0.102
	(2.813)	(0.270)	(0.428)	(0.672)

Industry Dummies	YES	YES	YES	YES
Year Dummies	YES	YES	YES	YES
Constant	3.098***	0.289***	0.443*	0.866***
	(0.825)	(0.0625)	(0.230)	(0.215)
Observations	725	725	725	725
R-squared	81.62	61.85	49.76	46.07
Number of Firms	145	145	145	145
Robust Standard errors clustered for 145 Firms in parentheses for Tobin's Q, ROCE and ROE				
Standard errors in parentheses for ROA				
*** p<0.01, ** p<0.05, * p<0.1				

Conclusion

This paper examines the value of Board composition (proportion of non-executive directors) as an important corporate governance mechanism covering the extant literature that reveals their impact on the firm performance. Corporate boards with outside independent directors are considered as an important internal corporate mechanism in the absence of external governance mechanisms in emerging markets (Singh and Gaur, 2009). The analysis of Board composition and firm performance relationship of 145 NSE listed firms in India for a period of 5 years from 2008-2012 revealed that Board composition has a negative and significant impact on firm performance. The results are consistent with the earlier studies of Agarwal and Knoebar, 1996; MchIntyre M. L. et. al., 2007; Kumar and Singh, 2012. The results are robust across all econometric models and the various firm performance measures used. The results favor the Stewardship Theory. The negative impact of Board composition on firm performance is due to the fact that non-executive directors lack information about the operations of the firm which reduces their ability to function effectively hence reduces firm performance. CEO duality is also negatively and significantly related to firm performance implying that the separation of the roles of CEO and chairman of the board is necessary to increase board independence from management resulting in better performance due to better monitoring and overseeing (Fama and Jensen, 1983).

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