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Efficiency of Board Composition on Firm Performance: Empirical Evidence from listed Manufacturing Firms of Bangladesh

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Abstract

Corporate governance has received massive attention in academic research nowadays due to several recent corporate failures. Inefficiency of corporate governance mechanisms have driven the minds of the researchers and the policy makers to look with more insights into this area. Board composition, as part of corporate governance mechanism, plays a significant role to achieve company's goals or objectives and ensure transparency and accountability. The objective of this study is to find out the efficiency of board composition through board size, independent directors and female directors on firm performance in the listed manufacturing firms of Bangladesh. In this study, a sample of 162 firm years are considered as the sample during the period of 2011 to 2016. This study finds that large board is the significant explanatory variable in improving firm performance. This study also shows that board independence and female directors have no significant association with firm performance which implies that instrument of corporate governance mechanism particularly board composition is very weak. This study recommends that code of corporate governance, specially the role of independent directors and female directors, should be reformed in the light of cultural and institutional context along with the effective enforcement.

Keywords: Corporate governance, Board composition, Independent director, Firm performance, Manufacturing firms, Bangladesh.

JEL Classification Code: G34, L25, M48.

1. Introduction

Corporate governance has received massive attention in academic research nowadays due to several corporate failures like Enron, World.com. Inefficiency of corporate governance mechanisms have driven the minds of the researchers and the policy makers to look with more insights into this area. Many corporate governance codes have been developed such as the Sarbanes-Oxley Act in the US, the Organization for Economic Development (OECD) Code, Cadbury Committee report, CLERP 9 in Australia and Combined Code in the UK. Effectiveness of Corporate governance plays a pivotal role in fulfilling the company's objectives or shareholder goals. Corporate governance ensures the better transparency and accountability through the implementation of governance guidelines (Rahman & Khatun, 2017b).

But prior studies find that failure of corporate governance are occurring frequently and compliance of code of corporate governance is also very low. Rahman and Khatun (2017a) study found that quality of corporate governance is not satisfactory in most of the countries. In Bangladesh, corporate governance guidelines firstly introduced in 2006 and later revised in 2012. The revised corporate governance guidelines incorporated some new issues such as requirements of independent directors, additional statements in the directors report, separation of CEO and CFO, composition of audit committee, role and responsibilities of CEO and CFO, compliance certificate from the professional accountant etc. (Rahman & Khatun, 2017b). These changes in corporate governance guidelines especially in board structure is to ensure good governance practices, transparency, accountability and improve the firm performance. Prior research documented a mixed result regarding efficiency of board characteristics on firm performance in different country context. But there is lack of research of efficiency of board composition on firm performance after revising the corporate governance guidelines 2012.

Thus, the objective of this study is to find out the efficiency of board composition on firm performance in the

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listed manufacturing firms of Bangladesh after revising the corporate governance guidelines 2012. In this study, a sample of 162 firm years are considered as the sample during the period of 2011 to 2016. In this study, board composition is examined through board size, board independence and female directors and firm performance is measured by return on asset (ROA).

This study finds that large board is the significant explanatory variable in improving firm performance. This study also shows that board independence and female director have no significant association with firm performance which implies that instrument of corporate governance mechanism particularly board composition is very weak.

This research paper has some contributions, First, This study will help to identify whether the instruments of board composition are effective enough or not. Second, the findings of the study will help the regulator and policymaker to improve the governance mechanism especially the board composition that ultimately improve the firm performance. Finally, this paper will also address the efficiency of the board composition after revising the corporate governance guidelines 2012.

The rest of the paper is organized as follows: section 2 discusses background of CG guidelines and board practices in Bangladesh; section 3 presents literature review and hypothesis development; section 4 discusses the research methodology used in this study. Section 5 shows empirical results including descriptive statistics, correlation matrix and regression analysis, section 6 presents the additional analysis and section 7 ends with discussion and conclusion.

2. Background of CG Guidelines and Board Practices in Bangladesh

At present, corporate governance related issues have become a topic of discussion and concern in Bangladesh due to poor corporate performance and different corporate failures. Basically, the Companies Act of 1994, the

Securities and Exchange Rules of 1987, the Banking Companies Act of 1991 are the existing legal framework for corporate governance in Bangladesh. Corporate Governance guidelines are issued by the order and notifications of Bangladesh Securities and Exchange Commission (BSEC). On 20th February, 2006 BSEC introduces corporate governance guidelines on “comply or explain” basis to protect the minority shareholder interest and ensure capital market development. If any non-compliance occurs, there should be an explanation for that. Later, on 7th August, 2012 BSEC revised the 2006 guidelines and issues new guidelines 2012 on “comply’ basis. A number of changes have been made in respect to board effectiveness, audit committee formulation, role of audit committee, directors’ report to shareholder, duties of CEO and CFO and reporting and compliance of corporate governance.

Typically, in Bangladesh, corporate board consists of both executive and non-executive directors except in banking sector. Total board size is within 5 to 20 and the number of independent directors on the board has now been increased from one tenth to one fifth of total number of directors. Also, chairman and CEO position are filled by different persons and it should be mandatorily followed. However, in Bangladesh there are no guidelines or rules regarding female directors especially from family members on the board. Generally, high concentration of ownership and domination by sponsor directors are observed.

3. Literature Review and Hypothesis Development

Prior studies documented the mixed evidence between the board characteristics and firm performance. To find out the efficiency of board attributes on firm performance, the variables such as board size, board independence and proportion of female directors on the board are considered. The summary of prior studies are presented in the Table 1.

Table 1. A summary studies on Board composition and firm performance

Study	Sample	Time Period	Methods	Dependent Variables	Independent Variables	Results
Abdullah (2004)	KLSE main board companies	1994-1996	t-test	-ROA -ROE -EPS -Profit Margin	-Board Independence -CEO duality	No relationship
Adams & Ferreira (2009)	1939 companies from S&P	1996-2003	Fixed effect Instrumental variable approach	-ROA -Tobin's Q	-Firm Characteristics -Board Characteristics -Director Characteristics	Overall gender diversity on firm performance is negative

Study	Sample	Time Period	Methods	Dependent Variables	Independent Variables	Results
Ahmed & Gabor (2011)	DSE listed 27 banking companies	2003-2008	-OLS -Lag Model	-ROA -ROE -Tobin's Q	-board size -share of independent directors -share of non-independent non-executive director -ownership of directors -institutional ownership -general public ownership -CEO remuneration -the number of audit committee meetings	-No impact -Negative impact or no impact -No impact -No impact -positive impact or somewhere no impact -No impact
Baysinger & Butler (1985)	266 major US corps from Forbes	1970 and 1980	Simultaneous equation regression	Relative return on equity	Proportion of independent directors	Significantly positive
Bhagat & Black (2001)	934 large US corporations	1985-1995	OLS and 3SLS regression	-Tobin's Q -Operating income to asset ratio -Sales to asset ratio -stock price return -Asset growth -Operating Income growth -Sales Growth	Board independence (proportion of independent directors minus proportion of insiders)	-Significantly negative -significantly negative -Not significant -Not significant -Not significant -Not significant
Cornett et al., (2008)	100 firms of S&P Index	1994-2003	-Pooled regression -Fama and Macbeth regression	-Discretionary accruals -Adjusted EBIT/sales	-Proportion of outside directors -Lagged CEO duality	-Significantly negative -Significantly positive -significantly positive (CEOD) Significantly negative (CEOD)
Costa (2015)	157 FTSE Small Cap and Fledgling companies	2007-2009	Quantile regression coupled with OLS and pooled regression	ROA	-Board Size -Board Composition (proportion of outside director) -CEO duality	-No significant association -No significant association -Positive impact
Muttakin et al., (2012)	654 DSE listed firm- year observations	2005-2009	-OLS -Instrumental variable regression -FEM	-Tobin's Q -ROA	-Board Independence -Board Size -CEO duality -Female director -Foreign director	Positive impact except CEO duality
Ramdani, & Witteloostuijn (2010)	enterprises listed on the stock exchanges in four East Asian countries – Indonesia, Malaysia, South Korea and Thailand	2001–2002	Quantile regression analysis	ROA (average value of return on assets from 2001–2002)	-Proportion of Independent Director -CEO duality	-different across the conditional quantiles of the distribution of firm performance
Rashid et al., (2010)	90 DSE listed non-financial firms	2005-2009	Linear regression analysis	-ROA -Tobin's Q	Board Composition (Percentage of outside independent directors)	outside (independent) directors cannot add potential value to the firm's economic performance
Rutledge et al., (2016)	NASDAQ-100 firms over the period	2010-2014	-Stepwise model for OLS -Treatment effect	ROA	-Proportion of Independent Director (PID)	-No significant relation -significant positive relation

Study	Sample	Time Period	Methods	Dependent Variables	Independent Variables	Results
			approach to address endogeneity		-Committee OVERLAP -Board INTERLOCK -CEODUAL	-positive relation -Negative relation
Zabri et al., (2016)	Top 100 public listed companies in Bursa Malaysia	2008-2012	Spearman's correlation test	-ROA -ROE	-Board Size -Board Independence	-significant Negative with ROA -No relationship

3.1. Board Size

Board size is considered to be an effective tool to control the internal corporate governance of a company. The board of directors holding the top executive position of a company is in charge of setting up policies and strategies and regulating operations of the organizations (Ahmed & Gabor, 2011). Kiel and Nicholson (2003) found positive impact of board size on firm performance. Large board is equipped with more expertise knowledge and hence can effectively make strong strategic decisions which in turn help the company to maximize its profits. Consistent with the resource dependency theory, larger boards help to reduce uncertainty and improve firm performance as they have more access to external environment (Muttakin et al., 2012). Though large board has more monitoring capabilities and knowledge, some studies argue that large board is not as effective as small one.

Lipton and Lorsch (1992) and Jensen (1993) argued that large work groups create productivity losses because of poor coordination and process problems. Supporting the findings of the positive abnormal stock returns after board size reduction announcement, Yermack (1996) claimed that investors are more responsive to reduction in board size and disapproval of board expansion. On the other hand, some studies find that there is no impact of board size on firm performance. Costa (2015) found no significant result regarding board size and ROA. Similar result is also found by Rouf (2011). However, board size varies among companies around the world due to cultural differences among countries (Zabri et al., 2016). According to Bangladesh corporate governance guidelines 2006 and 2012, the board size should be within 5 to 20. On the basis of above discussion, the hypothesis is developed as:

<H1> There is a positive impact of board size on firm performance in Bangladesh.

3.2. Board Independence

The independent directors are appointed to work on behalf of the shareholders interest. It is generally expected that the higher the proportion of independent directors in the board, the higher the transparency of financial reporting and performance of the firm will be. To maximize the

shareholder wealth, agency theory suggests to have a large proportion of independent directors on the board to effectively monitor the activities of the managers (Fama & Jensen, 1983) and to reduce the self-interested behavior of the managers (Muttakin et al., 2012).

Baysinger and Butler (1985) suggest the need for more outside directors and they state that firms with inappropriate board experience poor performance whereas firms with mixed boards structure are able to survive and prosper. In contrast, as supporters of stewardship theory, Donaldson and Davis (1991) conclude that managers should be regarded as steward and hence insider directors help to achieve superior performance. There are mixed evidences regarding the relationship of board independence with firm performance. Cornett et al. (2008) and Rouf (2011) found positive impact of increasing independent directors on firm performance. But prior studies didn't find strong evidence of greater firm performance due to larger board independence (Bhagat & Black, 2001; Costa, 2015; Rutledge, Karim, & Lu, 2016).

According to Bangladesh corporate governance guidelines 2006 the proportion of independent directors should be at least one tenth of total directors on the board and later in 2012 the proportion has been increased to one fifth of total Board of directors. That means the regulatory body is recognizing the need for independent directors as they have the capability to protect the minority interest in Bangladesh, a country with family dominated firm and poor regulatory oversight body (Muttakin et al., 2012). On the other hand, Rashid et al. (2010) claim that introducing independent directors in Bangladesh may increase transparency but due to institutional and cultural differences it may not result in firm value addition. Ahmed and Gabor (2011) also argue that independent directors just do the supervision and should not guarantee earning profit. Thus the hypothesis is as follows:

<H2> There is a no impact of board independence on firm performance in Bangladesh.

3.3. Female Directors

Women are now participating and contributing in every sector of the economy in Bangladesh. In corporate sector

they are playing a big role either as entrepreneurs or members of board of directors and effectively ensuring corporate governance of corporations. Generally females are perceived to have patience, sincerity, greater managing and decision making ability by looking into details than their male counterparts. Thus they facilitate the governing process of a firm. Muttakin et al. (2012) also find positive association of female directors on firm performance in Bangladesh. Adams and Ferreira (2009) find that female directors' attendance is greater than the male ones and due to females' monitoring on the board male directors attendance problems become less and also poor performing CEOs are held accountable. However, they find a negative impact of gender diversity on firm value. It is really necessary to consider cultural and organizational context in studying female directors' role in increasing firm performance.

Most of the firms, especially the manufacturing ones in Bangladesh are family ownership concentrated. Muttakin et al. (2012) pointed out that in Bangladeshi family firms, female directors are generally wives and daughters of sponsors and managing directors and they are appointed on the basis of family ties, irrespective of their business skills and educational background. Rahman (2016) stated that female directors are appointed by the controlling shareholders and controlling shareholders control everything according to their own way and female directors have no voice or remain silent in the board meeting. As our sample of this study consists of manufacturing firms and the arguments given above, the hypothesis is developed as:

<H3> There is no impact of proportion of female directors on firm performance of Bangladesh.

4. Research Methodology

4.1. Sample and Data source

To find out the impact of board characteristics on firm performance, a random sample of 27 firms during 2011-2016 has been taken from listed manufacturing Companies in DSE. So the data set consist of total 162 firm- year observations. The sample firms have been taken from textile, Engineering, Chemical, Paper and printing, tannery and food sectors. Initially, the plan was to collect data of all firms of those above sectors mentioned. But finally most of the firms have to be excluded due to several reasons. One reason is that maximum firms have changed their reporting year during the sample period and so annual reports are not available for all 6 years. Secondly, some firms have annual reports but only the audited financial statements and

corporate governance related information is missing there. Thirdly, as most of the firms are newly listed in DSE, prior year information is not available for those firms. Finally, we ended up with 162 firm-year observations. Annual reports are downloaded from the respective firms' website. Some firms have kept only recent 3 to 4 years annual report in their website. In that case annual reports have been collected from website of Lanka Bangla Financial Portal. Corporate governance related data i.e. board characteristics information and other variables information are hand collected from corporate governance report, profit and loss account, balance sheet, notes to the financial statements or any other part of the published annual reports of the firms.

4.2. Research Model

A multivariate regression model is applied to test the hypotheses following the methodology used by Ahmed and Gabor (2011) and Muttakin et al. (2012).

$$\text{Firm Performance} = \beta_0 + \beta_1 \text{LNBSIZE} + \beta_2 \text{BIND} + \beta_3 \text{FEMD} + \beta_4 \text{LNFSIZE} + \beta_5 \text{LNAGE} + \beta_6 \text{LEV} + \epsilon$$

In this study, ROA, a proxy measure of firm performance, has been taken as dependent variable. Many prior studies (Ramdani & Witteloostuijn, 2010; Rashid et al., 2010; Muttakin et al., 2012; Rutledge et al., 2016; Zabri, Ahmad, & Wah, 2016) used ROA as a measure of firm performance. Following the works of Adams and Ferreira (2009), Rashid et al. (2010), Ahmed and Gabor (2011), Muttakin et al. (2012) and Zabri et al. (2016), board size, board independence, and percentage of female directors have been used as board characteristics measures i.e. independent variables of this study. At first, CEO duality is also included in the board characteristics variables. But later it has to be excluded this variable as CEO duality does not exist in any firms except 3 firms in the sample taken. Those 3 firms also have separated CEO and Chairman Position after 2012. So, it can be said that there is no existence of CEO duality in Bangladeshi manufacturing firms right now. The impact of board characteristics on firm performance has been determined by controlling for firm size, age, and leverage ratio.

Here, the definition of the research model is explained below:

Firm Performance	Measured by ROA (Net profit after tax divided by total assets)
LNBSIZE	Natural logarithm form of total board size (measured as total number of directors on board)
BIND	Proportion of independent directors (measured as the percentage of independent directors to total board size)

FEMD	Proportion of female directors (measured as percentage of female directors to total board size)
LNFSIZE	Natural logarithm form of firm size (measured as total sales revenue of the firms)
LNAGE	Natural logarithm form of total firm age (measured as age of firm from the incorporation date to sample year period)
LEV	Firm Financial leverage (measured as total debt divided by total assets)

At first, pooled OLS regression is applied. One potential problem with OLS method is that it doesn't take into account for endogeneity problem arisen in corporate governance research and hence produces biased results (Ahmed & Gabor, 2011). Researchers use several methods to resolve the endogeneity problem. Following Ahmed and Gabor (2011), lag model has also been used to resolve endogeneity problem in the analysis and hence lagged dependent variable is considered in the respective model. Heteroskedasticity test has also been conducted using Busch-Pagan test to check whether any heteroskedasticity problem exists and White's (1980) heteroskedasticity consistent-error adjustment has been applied to remove the problem. Moreover, as there may be firm specific heterogeneity (unobserved fixed effects) in the data set, fixed or random effect model is also used based on the Hausman test analysis.

5. Empirical Results

5.1. Descriptive Statistics

Table 2 represents results of descriptive analysis regarding the dependent and independent variables used in this study. This table shows mean, median, minimum, maximum, and standard deviation of the observed values for the year 2011-2016 i.e. total 162 firm years. Total board size (BSIZE) and firm age (FAGE) are expressed in actual value in the table. Also, BIND, FEMD, leverage (LEV) and ROA are expressed in percentage and firm size (FSIZE) is in logarithm form. The mean board size is 6 ranging from 3 to 11 with a standard deviation of 1.627.

According to corporate governance guidelines 2012 board size ranges from 5 to 20 but results of the table shows a violation of this rule. Later, observing the whole data set it has been found that actually one firm in 2011 has a board size of 3 members but after that it increased the number of board members. That's the reason the minimum number is less than 5. On an average 21.80% of total board directors is independent directors meaning that requirement of keeping at least 20% independent directors has been

complied by maximum firms in Bangladesh. The number of female directors is almost same as independent directors but the maximum percentage of female directors is 80% meaning increased number of female participation. The average firm size is 21.061 implying average firm sales of BDT 4150.68 million. The mean firm age is 31 years ranging from minimum 31 years to maximum 67 years. The debt to total asset ratio (LEV) is 53% ranging from 15% to 532.20% with standard deviation of 44%. The average firm performance measured by ROA is 9.67% ranging from negative 3% to positive 262%.

Table 2. Descriptive Statistics

Variable	Obs.	Mean	Min	Median	Max	Std. Dev.
BSIZE	162	6	3	6	11	1.627
BIND(%)	162	21.80	0	20.00	43.00	8.90
FEMD(%)	162	18.90	0	20.00	80.00	15.40
FSIZE(ln)	162	21.061	14.73	21.23	24.5	1.679
FAGE	162	31	10	31	67	13.513
LEV	162	53.00	15.00	51.00	532.2	44.00
ROA	162	9.67	-3.00	4.1	262.2	26.9

5.2. Correlation Matrix

Table 3 represents Pearson correlation matrix between dependent and independent variables. The correlation matrix shows that board size (0.155) and board independence (0.088) are positively associated with firm performance ROA but female directors (-0.056) are negatively associated with firm performance.

Table 3. Correlation Matrix

	ROA	LNFSIZE	BIND	FEMD	LNFSIZE	LNAGE	LEV
ROA	1.000						
LNFSIZE	0.155	1.000					
BIND	0.088	-0.090	1.000				
FEMD	-0.056	-0.151	-0.056	1.000			
LNFSIZE	0.178	0.128	0.148	-0.195	1.000		
LNAGE	0.133	0.085	0.105	-0.192	0.228	1.000	
LEV	-0.005	-0.125	0.056	-0.087	0.022	-0.058	1.000

In order to test whether there is any multicollinearity problem additionally VIF test has been conducted. The result also reveals there's no severe multicollinearity as the mean VIF value is less than 10 (Gujarati, 2003).

Table 4. Checking of Multicollinearity

Variable	VIF	1/VIF
LNBSIZE	1.07	0.935323
BIND	1.04	0.957163
FEMD	1.10	0.912549
LNFSIZE	1.11	0.898958
LNAGE	1.10	0.91306
LEV	1.04	0.965334
Mean VIF	1.08	

5.3. Regression Results

Table 5 represents the regression results of board characteristics on firm performance. According to the results, board size is significantly and positively related with firm performance in the three regressions. So accounting measure of firm performance is highly influenced by the larger board size. In context of Bangladesh, larger board helps to monitor management activity and have access to external network for financing thereby contributing to firm value maximization. The result is in line with the findings of Muttakin et al. (2012) and Johl et al. (2015) studies. The conclusion above supports the resource dependency theory that board size has positive effect on firm value and thus our hypothesis H1 is accepted.

On the other hand, there is insignificant relationship of board independence and proportion of female directors with ROA in each of the regression. Board independence and female directorship cannot add value to the firm performance measure. Other studies such as Abdhullah (2004), Rashid et al. (2010), Ahmed and Gabor (2011), Costa (2015), Johl et al. (2015) and Zabri et al. (2016) also found no significant association of board independence with firm performance. The result implies that independent directors are not playing their monitoring role or their role is significant only to ensure transparency and disclosure of corporate activities not to increase firm value. It can also be inferred that independent directors is not concerned about corporate performance since they only get some meeting fee as compensation which is not very much linked to the firm performance. In case of female directorship, it can be concluded that most manufacturing firms in Bangladesh are family owned business and female directors in those firms are assigned based on family relationship. Thus, they are only for ownership of shares and actually add no value to firm performance. So, our hypotheses H2 and H3 are also accepted.

Table 5 also shows significant impact of control variable-leverage on firm performance. Leverage is positively associated with ROA and it's consistent with Muttakin et al. (2012). Firm size is significant at 10% and positively associated with ROA in regression using Pooled OLS model

but is insignificant in other regressions model. Firm age is negatively and insignificantly associated with firm performance in each regression.

Table 5. Board characteristics and firm performance

	Dependent Variable: ROA		
	Pooled OLS	Lag Model	Random Effect
Constant	-0.8202386** (0.037)	-0.8168645* (0.074)	-0.6697748* (0.062)
LAGROA	-	0.1728283* (0.094)	-
LNBSIZE	0.1888492*** (0.001)	0.1763219*** (0.003)	0.1001344 (0.243)
BIND	0.2114911 (0.135)	0.1761087 (0.285)	0.1303515 (0.506)
FEMD	0.0230466 (0.899)	0.0858183 (0.720)	0.1105019 (0.451)
LNFSIZE	0.0218413* (0.077)	0.0230279 (0.134)	0.0223416 (0.120)
LNAGE	-0.0428845 (0.226)	-0.0531749 (0.183)	-0.0447054 (0.466)
LEV	0.3856907*** (0.001)	0.3979833*** (0.000)	0.4027847*** (0.000)
R ²	0.4369	0.4764	0.4258

Table-5 shows results of Pooled OLS model, Lag Model, and Random Effect model. Based on the hausman test, random effects model is chosen instead of fixed effect. The standard error and t statistics are calculated using white's(1980) heteroskedasticity-consistent error and only probability is presented in the parentheses (***significance at 1% level, **significance at 5% level, *significance at 10% level).

6. Additional Analysis

Corporate governance guidelines in Bangladesh have been issued first 2006 and later revised in 2012. As a result there are some changes made. Increasing the number of independent directors is one of them. As the data has been collected from 2011-2016, there may be an effect of 2011board structures data on the regression result. In order to check the robustness of the results, year dummy has also been incorporated in the three models to find out whether there is any impact of previous year effect. All the results are consistent with the previous results except the pooled OLS model where board independence is positively associated with firm performance and is significant at 5% level. So there may be an effect of increase in independent director's requirement on firm performance.

Table 6. Regression results considering the time dummy

	Pooled OLS	Lag Model	RE
Constant	-0.8417949 (0.031)	-0.809756 (0.073)	-0.707791 (0.054)
LAGROA	-	0.1766513 (0.090)	-
LNBSIZE	0.1985685*** (0.001)	0.183234*** (0.004)	0.1148757 (0.187)
BIND	0.2954931** (0.031)	0.2203916 (0.178)	0.2165671 (0.330)
FEMD	0.0290337 (0.875)	0.0898623 (0.714)	0.1057747 (0.480)
LNFSIZE	0.0220639* (0.081)	0.0230355 (0.143)	0.0222144 (0.128)
LNAGE	-0.0405015 (0.262)	-0.0544436 (0.192)	-0.0394775 (0.533)
LEV	0.3800795*** (0.001)	0.3925271*** (0.001)	0.3965245*** (0.000)
R ²	0.4458	0.4841	0.4368
Year Dummy	yes	yes	yes

7. Discussion and Conclusion

Corporate board structure works as an internal corporate governance mechanism. If the board is not effective in maintaining its role properly, whole governance system may collapse. The regulatory body tries to ensure the board effectiveness by incorporating standard set of codes practiced by developed countries. But compliance with the corporate governance guidelines and its effectiveness to maximize firm performance depends on the cultural and institutional factors of a particular country also. So, major objective of this paper is to investigate whether there is any impact of board characteristics on firm performance in Bangladesh. In order to find out the relationship of board characteristics with firm performance, a sample of 162 firm-year observations of DSE listed manufacturing firms has been taken.

The study reveals that larger board size contributes to improving firm performance. This result is line with the findings of Muttakin et al. (2012) and Johl et al. (2015). Consistent with the findings of Abdullah (2004), Rashid et al. (2010), Ahmed and Gabor (2011), Costa (2015), Johl et al. (2015) and Zabri et al. (2016), this study also reveals an insignificant impact of another board characteristic-board independence on firm performance. It implies that increasing number of independent directors does not necessarily result in higher firm performance rather increased board independence contributes to more transparency and disclosure practices of the firms. It can also be argued that increasing board independence as a code of conduct will not add value in case of Bangladesh

unless their role is monitored properly. Finally, the study has found female directorship having insignificant impact on firm performance-ROA, implying that female directors are just for holding ownership in most of the family firms so that family owners play a dominant role. In context of Bangladesh culture, as most female directors have family ties with sponsor directors of the firms, they are appointed regardless of their skills in business profession and so they play inactive roles unlike those in the developed countries.

In short, the empirical results shows that large board is the significant explanatory variable in improving firm performance. This study also shows that board independence and female director have no significant association with firm performance which implies that instrument of corporate governance mechanism particularly board composition is very weak.

This study will help the regulators to look into more insight in the corporate governance related issues and reform the codes of standard practices in light of the cultural context of Bangladesh. Introducing the guidelines alone cannot help to improve performance and protect minority interest without effective execution of those rules. A way to maintain the balance properly should be sought out. Thus, this study recommends that code of corporate governance, specially the role of independent director and female directors, should be reformed in the light of cultural and institutional context along with the effective enforcement. However, this study indicates future area of research which can be done by considering large sample size, ownership structures (institutional ownership, director ownership, govt. ownership) and internal and external firm performance.

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