BOARD GOVERNANCE, OWNERSHIP STRUCTURE AND FINANCING DECISIONS IN EMERGING MARKET

Md Safiullah*

*Assistant Professor, Department of Banking and Insurance, University of Dhaka, Bangladesh

Abstract

This paper aims to contribute to the corporate governance literature by examining the effects of board governance and ownership structure on financing decisions in an emerging country context. Using hand collected corporate governance data from a panel sample of 110 publically-listed firms in Bangladesh over 2009-2012, this study finds that the corporate debt ratio is not related to standard board of directors mechanisms. The results indicate that board of directors play little role in resolving conflicts in an environment with the presence of strong principal—principal agency conflict. The study also finds no evidence of institutional investors’ activism in a manner that is consistent with the goals of other outside stockholders due to the weak regulatory and market discipline. This empirical evidence from the principal—principal agency conflicts (conflict of interest between majority shareholders and minority shareholders) offers insights to policy makers in emerging countries interested to protect minority shareholders’ rights and to ensure effective corporate governance of capital structure decisions.

Keywords: Ownership Structure, Emerging Markets, Corporate Board

1. INTRODUCTION

The field of corporate governance addresses a wide variety of topics with firm performance as focus. But a significant issue in corporate governance in recent years has been how to resolve the agency problem of financing in large corporations, particularly, after the collapse of major corporations in developed countries (e.g., Enron, WorldCom, Bear Sterns, Lehman Brothers). More recently, similar issues have been highlighted in major corporations in developing countries (e.g., Petrobras in Brazil). Therefore, this paper attempts to examine the effect of corporate governance mechanisms on financing decisions in publicly listed firms in Bangladesh.

The link between corporate governance and debt financing has been an issue of concern in both the corporate governance and corporate finance literatures (Morellec et al. 2012; Cain and Mckean, 2014). The extant literature has found that agency conflicts have a strong influence on capital structure decisions of the firm (Jensen and Meckling, 1976; Shleifer and Wolfenzon, 2002). Researchers have extensively investigated the impact of ownership structure (e.g., management ownership, institutional ownership, block holders ownership) on capital structure decisions (Kim and Sorensen, 1986; Vivek, Young and Myungssoo, 2012; Erwan, Boris and Norman, 2012; Bathala, Moon and Rao, 1994; Magdalina, 2012; Fosberg, 2004, Chen and Steiner, 1999). However, there have been few studies that have considered the impact of board governance and ownership structure on debt financing decisions (Monks and Minow, 2004; Dallly and Dalton, 2003) and even less research has been carried out to investigate this relationship in emerging country context.

The issue of agency problem in debt financing is particularly significant in emerging economies. It has been found that principal—principal agency conflicts between dominant insider shareholders (or directors/promoters) and outsider minority shareholders are much more prevalent in emerging economies (La Porta, Lopez and Shleifer, 1999; Claessens et al., 2000, 2002; Young et al. 2008) than in the countries of dispersed shareholders as pictured by Berley and Mean (1932). Therefore, insider shareholders have incentives and the ability to expropriate outsider shareholders. Studies have shown that dominant insider shareholders in emerging economies employ management from their own block and strategically use debt to expropriate outsider minority shareholders (Harvey, Lins and Roper, 2004; Faccio, Lang and Young, 2001).

The expropriation risks can be minimized with an efficient capital market, strong regulatory institution and effective corporate governance. However, the lack of well-developed capital markets and weak regulatory institutions in emerging economies places a greater reliance on internal corporate governance mechanisms in resolving agency problems in corporate financing. A particular issue in emerging markets is that ownership and control are often not fully separated and the controlling shareholders in firms have significant power. Therefore, the board’s role is crucial in safeguarding the interests of minority shareholders (Bebchuk and Hamdani, 2009).

Previous studies explore a subset of known corporate governance variables. But we know that individual governance mechanisms do not work in isolation but are often interrelated at different levels of analyses. Therefore, we tested the direct effects of for each set of board and ownership structure
variables against debt financing decision. We then tested interaction effects between variables and thus contribute to the field by analysing the possible interactions among these actors to explore how they might matter in financing decision. The latter represents an area of literature that has been largely unexplored in a systematic way.

This paper is the first to comprehensively examine the direct and interaction effect of board governance, ownership structure on financing decisions in an emerging country context. The rest of this paper follows this introduction with an overview of the corporate governance context in Bangladesh, a theoretical and empirical literature review, research methodology, empirical results and discussion and conclusion.

2. CORPORATE GOVERNANCE IN BANGLADESH

It is important to note that there are significant differences between the corporate governance context in Bangladesh and other developed economies. The Companies Act 1994 and Banking Companies Act 1991 and SEC Act 1993 are the main regulatory frameworks of Bangladesh. The Bangladesh Securities and Exchange Commission (hereafter BSEC) issues the corporate governance codes for listed firms.

The listed companies of Bangladesh are a mix of government and private companies, joint ventures and multinational enterprises dominated by family owned companies (Farooque et al. 2007). Family-based boards of directors/sponsors have more controlling ownership (up to 50%); see company Act, (1994) and influence in policy decisions. Even though institutions hold significant ownership rights in many companies, these are also family-run institutions. Minority shareholders have fewer legal protections from the expropriation of corporate insiders.

The accounting system of Bangladesh is similar to that followed in developed economies and can be categorized as operating at a satisfactory level (Karim and Ahmed, 2005). However, the ownership structure differs from Anglo-Saxon countries (e.g., UK, USA, Australia). The operational control of the company mostly resides with family controlled boards that intensify information asymmetry problems. Therefore, agency conflict between dominant shareholders (directors/promoters) and minority shareholders is more acute than between management and shareholders (Oman et al., 2003).

In this regard, the BSEC promulgated a corporate governance code and compliance order for listed companies in 2006 to protect the rights of minority shareholders and to make firms more accountable and transparent in their financial and nonfinancial transactions. This order is primarily centered on the insider system of corporate governance (board composition and structure). Moreover, the stock market is less liquid, firm size is much smaller, firms are highly dependent on bank finance even the tax system is also different from other developed countries. Previous studies show that differences in ownership structure, market characteristics and legal environment have significant impacts on financing decision of firms (Faccio, Lang and Young, 2001; La Porta, Lopez and Shleifer, 2000). Given the above differences between corporate governance system in developed and developing countries the motivation for this study is to examine whether the corporate governance mechanisms in Bangladesh play a role in resolving agency conflicts between dominant shareholders (directors/sponsors in Bangladesh) and minority shareholders in relation to debt financing and whether the factors which have found to be significant in developed countries hold in a developing country like Bangladesh.

3. REVIEW OF PREVIOUS RESEARCH

Debt financing has become an integral part of the mainstream research literature in corporate finance because of its impact on firm performance and value. For instance, Modigliani and Miller (1963) argue that debt increases the value of the firm and return on equity because of its tax deductible feature. Ghosh and Doocheol (2010) state that debt financing considerably affects organizational survival, growth and earnings quality. Scott (1977), Chang and Rhee (1990), Harris and Raviv(1991), Ozkan (2001) provide evidence that debt financing tends to provide a positive signal of management performance and efficiency. In contrast, Hamada (1969) argues that the debt ratio is positively associated with cost of new equity financing and risks faced by shareholders. Debt ratio beyond the optimal level increases the risk of investment, reduces further access to capital and reduces firm performance and reputation (Cantor, 1990; Whited, 1992 also see Enron case).

It is evident that debt financing also creates agency conflicts as the objectives of shareholders and managers may differ. One view in the literature is that self-interested managers generally prefer to use less debt than the shareholders expect to avoid further monitoring from the lender and their self-interest seeking behaviour tends to lead to a capital structure which is not in the best interests of shareholders (Hart and Moore, 1993; Jensen, 1993). Capital structure, therefore, depends on the severity of agency conflict (Fischer, Robert and Josef, 1989). Managers' self-interest sometimes leads to underinvestment or sub-optimal investment decisions (Shleifer and Vishny,1989), results in more control over the firm's resources and lowers returns for shareholders (Harris and Raviv, 1990; Jensen and Meckling, 1976). Managers also tend to dislike debt capital as it increases firm risk (Berger, Ofek and Yermack, 1997), reduces the possibilities for potential fund diversion and reduces available free cash flow because of covenants and fixed financial obligation (Jensen and Meckling, 1986; Erwan, 2004). In contrast, equity investors tend to prefer more use of financial leverage, which is likely to be at odds with managerial preferences. In other cases, managers may take on excessively high debt in order to protect firm profits, for example, where the firm is in financial distress (Opler and Titman, 1994) and managerial compensation is linked to firm performance (John and John, 1993).

Corporate governance mechanisms are a means to discipline such managerial excesses. Luo (2007) categorizes corporate governance mechanisms on the basis of market, discipline and culture, but this classification itself incorporates broad components which can also be characterized under internal and
external mechanisms. Internal governance mechanisms govern the functioning of senior management where the board is seen as an independent institution and an apex body of the internal control system. Internal mechanisms of corporate governance include the characteristics of the board (e.g., board size, composition of the board, board diversity, board orientation), CEO duality, managerial ownership, institutional shareholding, management compensation and incentive plans (Cremers and Nair, 2005; Gillan, 2006). External governance mechanisms are embedded with the rules, laws, and factors that influence the operations of a firm from the perspective of capital providers i.e., shareholders and debt-holders. External mechanisms are used to evaluate all firms in the same jurisdiction while internal mechanisms are firm specific and are used to evaluate the individual firm and very useful for investment decision. These are viewed as effective in resolving agency conflict or deterring corporate managers seeking self-interest on a macro-economic or market-wide level (Shleifer and Wolfenzon, 2002; Shleifer and Vishny, 1997). Both types of governance mechanisms complement each other rather than substitute for each other and work together in a system to stimulate the long-term returns and governance of firms (Cremers and Nair, 2005). However, owing to the weak external governance mechanisms in Bangladesh, this research study focuses on the internal governance mechanisms.

4. DETERMINANTS OF CAPITAL STRUCTURE

Existing research literature on corporate governance mechanisms and financial leverage has the following two strands. Firstly, financial leverage itself plays a role as a corporate governance mechanism to resolve the shareholder-management conflict. Financial leverage increases engagement of the bond market, credit rating agencies, banks and financial institutions and relies on covenants to discipline self-interest seeking managerial behavior. Secondly, strong corporate governance practices increase the firm’s value, reduce the cost of debt financing, and hence lead to more debt (Jensen and Meckling, 1986). However, the impact and the relationship between capital structure and governance mechanisms depend on the structure of the financial market and, of course, on the extent of debt financing in the firm.

Florackis and Ozkan (2009) provide strong evidence of a significant effect of corporate governance practices on capital structure. It can be expected to reduce agency conflict and discipline management to act for the best interests of the shareholders and resolve low debt problems (Erwan Boris and Norman, 2012; Berger, Ofek and Yermack, 1997). Corporate governance can also be used as a risk and cost mitigation tool. The idea is that default risk is an important determinant of debt cost and corporate governance mechanisms can minimize factors causing default risk e.g., informational risk, agency risk, etc. Therefore, corporate governance influences both cost reduction and reduction of risk. According to Bhvoraj and Sengupta(2003) effective corporate governance reduces agency costs and improves managerial performance resulting in a lower default risk.

In addition, good governance plays a role in reducing the cost of debt financing, reducing credit risk and maximizing utilization of available resources. Corporate governance practices also reduce information asymmetry by disclosing credible financial and operational information (Ajinkya, Bhojraj and Sengupta, 2005). It can ensure a balanced capital structure decision and sustainable development of the firm which protects the rights of principals (Al-Najjar and Hussainey, 2011; Vakilifard,2011).

Evidence from the literature suggests that firms’ characteristics e.g., liquidity, the size of the firm, growth, profitability and the tangibility, also have significant effects on the capital structure decision(Chang and Rhee,1990; Asteriou et al.,2007;Titman and Wessels, 1988; Harris and Raviv; 1990, Lipson and Mortal, 2009; Rajan and Zingales,1995; Ozkan,2001). Since a firm’s capital structure is likely to be affected by many factors other than the board composition and ownership structure variables, the paper controls the above firm’s characteristics variables. Control variables aim to provide more accurate and unbiased results, absence of these may inflate the regression results.

5. EFFECT OF CORPORATE GOVERNANCE MECHANISMS ON CAPITAL STRUCTURE

Some studies have considered the board characteristics in corporate financing research. Previous research shows that the board’s size is closely related to group dynamics, coordination and efficiency in decision making. Research on board size show mixed results. For instance, board member size is significantly and positively related to the capital structure decision (Abdoli et al.,2012; Jensen, 1986). However other studies find no relationship between board size and financing decisions (Zong-jung, 2006; Kajananthan, 2012). Additionally, extant literature also finds a negative relationship between board size and debt financing (Berger, Ofek and Yermack, 1997; Magdalina, 2012; Wen et al., 2002). Based on these previous studies, we test the following hypothesis:

$H_1. \text{There is a positive relationship between board size and capital structure of firms.}$

Another aspect of board structure that is often investigated in financing decisions is board composition (Daily and Dalton, 1994). Board composition affects the independence of the board (non-executive directors) to ensure board decisions free from the influence of executives and chairman. The literature suggests that outsider-dominated boards provide better monitoring of management activities than insider-dominated boards and generate lower costs for companies (Mayers et al., 1997; Weisback, 1988). Specifically, many studies have considered the impact of board composition on board independence in financing policy and demonstrate mixed results. The literature suggests that independence of board members is inversely related to financial leverage (Abdoli et al., 2012; Zong-Jung, 2006; Fosberg, 2004; Magdalina, 2012). However other studies also find a positive impact of board independence on leverage (Firth, 1995; Friend and Hashbrouck, 1988; Kajananthan, R., 2012), which implies that an independent board mitigates
manager’s incentives to low debt. We, therefore, test the following hypothesis:

\( H_2 \): There is a positive relationship between board independence and capital structure of firms.

Chairman of the board and CEO duality is concerned with the concentration and control of power in one person’s hand (Booth, Cornett and Tehranian, 2007; Hart, 1995). It has been shown that the collapse and scandals of large corporations (Enron, WorldCom etc.) can materialize because of over empowering CEO as Chairman of the board. Even though there is an additional cost of monitoring the monitor (chairman) potential benefits supersede the cost (Bebchuk and Fried, 2003). However, very few studies have investigated the impact of CEO duality on capital structure and the existing work shows mixed results. For instance, (Ahmadpour et al., 2012) find that CEO duality influences financial leverage positively but other studies (Zong-Jung, 2006; Maryam et al. 2012) find that CEO duality has no significant relationship with the capital structure decision. Therefore, in this study we test the following hypothesis:

\( H_3 \): There is a positive relationship between CEO-Chairman separation and capital structure of firms.

In addition to this, the diversity of board has also acquired a higher strategic salience within organizations and generates wide-ranging interest (Erhardt, Werbel and Sharder, 2003). Moreover, it is evident that gender diverse boards generate high quality solutions and lead to higher company performance (Nielsen and Huse, 2010). It also increases competition within the firm’s internal labour market and serves the best interests of both primary and secondary stakeholders improving its reputation (Rose, 2007). Other measures of diversity have not been investigated widely except director’s experience, expertise and demography (Bear, Rahman and Post, 2010). But as far we know studies of financing policy have rarely investigated the impact of board diversity as an explanatory variable. Therefore, this study tests the following hypothesis:

\( H_4 \): There is a positive relationship between board diversity and capital structure of firms.

Another aspect of board structure is the orientation of board. An audit committee composed of board members is such a structure. The International Organization of the Securities Commission (IOSC 2002) explains an audit committee is a proxy of shareholders. The audit committee is responsible for governing the functioning of the organizations in compliance with the shareholders’ interests. The audit committee is also responsible to ensure transparency and accountability of transactions and to ensure credible financial information disclosure. In order to enhance corporate governance quality and a good monitoring system within the listed firms, the Bangladesh Securities Exchange Commission (BSEC) has also strongly recommended setting up an audit committee with independent directors in the audit committee. Therefore, this study considers the impact of the presence of an audit committee and independence of audit committee and tests the following hypothesis:

\( H_5 \): There is a positive relationship between board audit committee and capital structure of firms.

\( H_6 \): There is a positive relationship between independence of audit committee and capital structure of firms.

The extant literature has also investigated the impact of managerial shareholdings on debt financing decisions but the relationship is not precisely defined (Brailsford, Oliver and Pua, 2002). For instance, managerial shareholding is negatively related to leverage decisions, which suggests that managers want to keep the debt ratio as low as possible to avoid risk of debt (Bathala et al., 1994; Jensen, 1992; Friend and Lang, 1988; Firth, 1995). This may occur because increased managerial ownership increases the control over the firms and, therefore, controlling rights shift from shareholders to management (Timothy, Barry and Sandra, 2002). However, research also finds a positive relationship between managerial ownership and debt capital and infers that getting the rights of ownership motivates management to act for the best interests of shareholdes and increase optimal behaviors in financing decisions reducing expropriation of shareholders wealth (Jensen and Meckling, 1976; Kim and Sorensen, 1986; Agrawal and Mandelker, 1987; Mehran, 1992; Berger, Ofek and Yermack, 1997 Chaganti and Damangour, 1991). However, the practicing company Act (1994: Sec:91) in Bangladesh states that the subscribers of the memorandum shall be deemed to be the directors of the company until the first director is appointed and also requires directors to hold qualification shares to be elected as directors of the company. Therefore, this study examines the effect of managerial shareholdings as a proxy of director’s shareholdings and tests the following hypothesis:

\( H_7 \): There is a negative relationship between managerial shareholdings and capital structure of firms.

Another variable that has been examined widely in the corporate financing and governance literature is the role of institutional shareholders. It is argued that institutional shareholders (mutual funds, trust funds, pension funds, etc.), by owning a large proportion of ownership right influence the strategic policies of corporations both in domestic and international financial markets. Since the twentieth century institutional share ownership has increased significantly compared with individual share ownership even in the UK where 65-80% of shares are owned by institutions and the US where the figure is 55-60% (Mallin, 2006). Institutional shareholders’ dissatisfaction against management plays a prominent role particularly where the management of the firm does not practice good governance (Cremers and Nair, 2005). Moreover, institutional investors play a key role in promoting stakeholders’ interest and engagement in their invested companies (Armour, Deakin and Konzelmann, 2003). However, the extant literature also shows mixed effects of institutional shareholdings in capital structure. For instance, it is evident in the literature that a significant positive association exists between institutional ownership and financial leverage (Chen and Steiner, 1999; Abdoli, et al., 2012). However, evidence of an inverse relationship (Bathala et al., 1994; Zong-Jung, 2006; Hussainey and Aljifi, 2008) and no significant relationship (Nedal and Abuuzayed, 2009; Magdalina, 2012) between institutional
shareholdings and debt capital is also documented in several studies. Following the previous research we included institutional shareholdings as an explanatory variable and test the following hypothesis:

$$H_0: \text{There is a positive relationship between institutional shareholdings and capital structure of firms.}$$

6. SAMPLE, SAMPLE PERIODS AND OBSERVATIONS

This study uses a sample of 260 companies listed on the Dhaka Stock Exchange (DSE) before 2009 as the initial data-set. Following some prior studies of this genre, financial institutions including investment funds are removed from the list because of a lack of comparable data in the financial institutions sections. A sample of 130 companies is then obtained. The sample is further reduced to 110 companies due to missing data.

This is a balanced panel data study and sample firms are selected from 17 different economic segments for the period 2009-2012. Dependent variable, independent variable and control variable data for each sample firm were collected for this 4-year period. As mentioned earlier the Bangladesh Securities and Exchange Commission (BSEC) publicized a corporate governance compliance order and made it obligatory for all listed companies in June 2006. In order to allow time for firms to comply with the order, this study considers the 4-year period starting from 3 years after the BSEC order. Due to the structural variation of the companies and regulators in financial companies, this study only examines non-financial companies. The total no. of non-financial companies in the sample is 110 and the total number of observations for the 4-year time period is 440. Even though the sample is small, a panel data study is in line with many previous studies. For instance, Al-Najjar and Hussainey(2011) considers a 4-year study period, Wen et al. (2002) consider a 3-year study period, Magdalina (2012) also considers a 3-year study period in their research.

7. DATA AND VARIABLES

This study consists of only secondary data. Intended data of corporate governance provisions and capital structure related data are collected from the audited annual reports and stock exchange publications. Annual reports are available on the companies’ websites as well as on the website of the stock exchange. More specifically, data for the corporate governance variables were collected from the introductory section (e.g., preview of company management, audit report, the directors’ report) of the financial report. Data for the debt ratios were sourced from the annual and semi-annual audited financial statements.

This paper includes dependent, independent, control and interaction variables. Capital structure is the dependent variable. The independent variables focus on internal corporate governance characteristics (as described in the literature review section). In addition, following previous studies (e.g. Chang and Dutta, 2012; Lipson and Mortal, 2009; Asteriou and Hall, 2007; Chen and Zhao, 2006) this study includes firm size, liquidity, profitability (return to equity) and tangibility as control variables. Interaction variables are interrelated variables of board composition and ownership structure. Detailed explanations of variables are given in table 1.

8. THE MODEL

The tests involve three stages. First, to test for a relationship between board compositions and debt financing decision, board related variables are included together with the control variables. This paper uses following model for cross sectional regression and panel data regression (pooled model) in line with the study of Farinha (2003) and Crutchley and Hansen (1989):

$$\text{Debtr} = \alpha + \beta_1 \text{BInd} + \beta_2 \text{Bsz} + \beta_3 \text{CcS} + \beta_4 \text{Acom} + \beta_5 \text{AcomInd} + \beta_6 \text{Bdiv} + \beta_7 \text{X} + \epsilon \quad (1)$$

Second, to test for a relationship between board compositions, ownership structure and debt financing decision all independent variables are included together with the control variables and also use the following regression equation:

$$\text{Debtr} = \alpha + \beta_1 \text{BInd} + \beta_2 \text{Bsz} + \beta_3 \text{CcS} + \beta_4 \text{Acom} + \beta_5 \text{AcomInd} + \beta_6 \text{Bdiv} + \beta_7 \text{Insh} + \beta_8 \text{Msh} + \beta_9 \text{X} + \epsilon \quad (2)$$

<table>
<thead>
<tr>
<th>Variable label</th>
<th>Variable</th>
<th>Variable definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bsz</td>
<td>Board size</td>
<td>Number of total directors on the board</td>
</tr>
<tr>
<td>BInd</td>
<td>Board Independence</td>
<td>% of independent directors to total directors</td>
</tr>
<tr>
<td>Bsz</td>
<td>Board size</td>
<td>dummy variable whereby 0 = CEO acts as Chairman and 1 = otherwise</td>
</tr>
<tr>
<td>Ccs</td>
<td>CEO and Chairman separation</td>
<td>Dummy variable whereby 0 = presence of audit committee and 1 = otherwise</td>
</tr>
<tr>
<td>Acom</td>
<td>Audit committee</td>
<td>Dummy variable whereby 1 = presence of audit committee and 0 = otherwise</td>
</tr>
<tr>
<td>AcomInd</td>
<td>Audit committee independence</td>
<td>Dummy variable whereby 1 = presence of independent directors</td>
</tr>
<tr>
<td>Bdiv</td>
<td>Board diversity</td>
<td>Gender diversity, Proportion of women on the board to total</td>
</tr>
<tr>
<td>Insh</td>
<td>Institutional shareholdings</td>
<td>Proportion of institutional shareholdings to total outstanding</td>
</tr>
<tr>
<td>Msh</td>
<td>Managers shareholdings</td>
<td>Proportion of shares held by managers/directors/sponsors to</td>
</tr>
<tr>
<td>Fsz</td>
<td>Firm size</td>
<td>Log total assets</td>
</tr>
<tr>
<td>Lq</td>
<td>Liquidity</td>
<td>Ratio of current assets and current liabilities</td>
</tr>
<tr>
<td>Profi</td>
<td>Profitability/Return on Equity</td>
<td>Ratio of Net income and Average shareholders’ equity</td>
</tr>
<tr>
<td>Tang</td>
<td>Tangibility</td>
<td>Ratio of fixed assets to total assets</td>
</tr>
<tr>
<td>Capstr</td>
<td>Capital structure</td>
<td>Total debt + total assets</td>
</tr>
</tbody>
</table>

Table 1. Description of variables
Finally, to examine the interaction effects of interrelated variables and debt financing, interaction

\[
\text{Debt} = \alpha + \beta_1 \text{Bind} + Ccs + \beta_2 \text{Acom} + \text{Bind} + \beta_3 \text{Bdv} + \beta_4 \text{Msh} + \text{Bind} + \beta_5 \text{Insh} + \beta_6 \text{Bdv} + \beta_7 \text{Acind} + \beta_8 \text{Bsz} + \beta_9 \text{X} + \epsilon
\]

where, Debt is the debt ratio; Bsz is the size of the board; Bind is the independence of the board; Insh is the institutional shareholdings; Ccs is the CEO-Chairman separation; Acom is the audit committee; Acomind is the audit committee independence, Bdv is the board diversity, Msh is the managers/directors shareholdings, X is the firm specific control variables such as firm size, liquidity, profitability, tangibility and \(\alpha\) denotes intercept, \(\beta\) for coefficients and \(\epsilon\) for error terms.

9. DESCRIPTIVE STATISTICS

Table 2 is a summary of descriptive statistics of all thirteen variables, which consist of eight independent, one dependent and four control variables.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Debt</td>
<td>3.333</td>
<td>.01</td>
<td>.83</td>
<td>.18544</td>
</tr>
<tr>
<td>Bind</td>
<td>27.55</td>
<td>10</td>
<td>63</td>
<td>.12419</td>
</tr>
<tr>
<td>Bsz</td>
<td>2.96526</td>
<td>4.00</td>
<td>14.00</td>
<td>.49568</td>
</tr>
<tr>
<td>Ccs</td>
<td>37.811</td>
<td>.00</td>
<td>1.00</td>
<td>.48665</td>
</tr>
<tr>
<td>Acom</td>
<td>6.094</td>
<td>.00</td>
<td>1.00</td>
<td>.49249</td>
</tr>
<tr>
<td>Acind</td>
<td>4.094</td>
<td>.00</td>
<td>1.00</td>
<td>.39078</td>
</tr>
<tr>
<td>Bdv</td>
<td>5.090</td>
<td>.00</td>
<td>1.00</td>
<td>.25423</td>
</tr>
<tr>
<td>Msh</td>
<td>4.179</td>
<td>.00</td>
<td>.93</td>
<td>.25423</td>
</tr>
<tr>
<td>Insh</td>
<td>1.642</td>
<td>.00</td>
<td>.62</td>
<td>.35716</td>
</tr>
<tr>
<td>Fsz</td>
<td>5.2968</td>
<td>2.33</td>
<td>11.68</td>
<td>1.30307</td>
</tr>
<tr>
<td>Lin</td>
<td>1.74727</td>
<td>.04</td>
<td>7.98</td>
<td>.95713</td>
</tr>
<tr>
<td>Profi</td>
<td>1.648</td>
<td>.58</td>
<td>.75</td>
<td>.14544</td>
</tr>
<tr>
<td>Tang</td>
<td>4.989</td>
<td>.06</td>
<td>.91</td>
<td>.17913</td>
</tr>
</tbody>
</table>

The results in the table 2 also demonstrate that the minimum and maximum values of debt- total asset ratios for the sample firms range from 1 percent to 83 percent with an average and standard deviation of 34 percent and 19% respectively. However, in this instance it is apparent there are many firms with too low a debt ratio, which prevents them from benefitting from a tax shield but there are also heavy risky firm with a high debt ratio in the capital structure.

The descriptive result also shows that on average the board in our sample companies consists of seven members with a minimum size of four members and a maximum size of fourteen members but a large standard deviation of board membership between the firms is noticeable. The mean proportion of independent directors to total directors of selected sample firms is about 33%. This proportion takes account of only independent directors without any share ownership claim. It is also apparent that there are companies with higher number of independent directors even though there are companies where the independent director's proportion should be increased significantly from the current level of only 1 percent.

The shareholding patterns of institutions demonstrate a significant discrepancy between firms. The average proportion is 16.42% even though there are firms with no institutional shareholders and also there are firms with a higher proportion (62%) of institutional shareholding. The institutional investor's equity ownership is much lower than other countries (see literature review). Chairman and CEO of selected firms are separate on an average in 37.81% cases, but in 62.11% of cases the Chairman and the CEO is the same individual who holds control in both the executive committee and in the board. This happens because a large portion of listed firms of Bangladesh are family-owned and controlled and hence there is a low level of delegation of authority and responsibility to the hired CEO. The average proportion of the presence of the audit committee is 60.94%. However the average presence of independent directors in the audit committee is only 40.94%. Although there is huge scope for improvement, the compliance with governance guidelines is progressing gradually. The board of directors of enterprises are moderately diverse. A diversity of the board is present in 50% of cases, but a higher standard deviation indicates the huge variation from the mean value that results from the perfect non-diverse board. The average managerial/directors shareholding is 41.79% and the maximum proportion is 95%. A higher percentage of the managerial/directors shareholding necessitates strong corporate governance mechanisms to protect minority shareholder rights.

10. CROSS-SECTIONAL REGRESSION RESULTS

Table 3 presents a summary of the cross-sectional regression result which shows how and which governance variables of this study impact the financing decision of firms in a particular year.

In this instance two regression models are run for each year. Model 1 explains the effects of board composition variables and model 2 explain the effect of board composition and ownership structure variables on debt financing. Results in both models for year 2012 show a significant negative relationship between audit committee independence and the capital structure of the firm. It implies that a higher percentage of independent directors in the audit committee lead firms to use less debt which is in line with management expectations. It may likely to happen because of their less financial expertise.
and less scope to play active role in the family bound directors dominated board. Even though it is evident in organizational theory that the more independent directors in the committee promotes more effective board communication to stakeholders and increase the moral capital of the organization; we found a deviation from theoretical proposition.

Table 3. Summary of cross-sectional regression results

<table>
<thead>
<tr>
<th>Variables</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 1</th>
<th>Model 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>(0.24)</td>
<td>(0.25)</td>
<td>(0.409)</td>
<td>(0.483)</td>
<td>(0.365)</td>
<td>(0.374)</td>
<td>(0.551)</td>
<td>(0.548)</td>
</tr>
<tr>
<td>Ind</td>
<td>(0.349)</td>
<td>(0.303)</td>
<td>(0.11)</td>
<td>(0.094)</td>
<td>(0.230)</td>
<td>(0.293)</td>
<td>(0.262)</td>
<td>(0.271)</td>
</tr>
<tr>
<td>Rsz</td>
<td>(0.016)</td>
<td>(0.017)</td>
<td>(0.002)</td>
<td>(0.008)</td>
<td>(-0.011)</td>
<td>(-0.007)</td>
<td>(-0.012)</td>
<td>(-0.012)</td>
</tr>
<tr>
<td>Ccs</td>
<td>(0.025)</td>
<td>(0.021)</td>
<td>(0.008)</td>
<td>(0.003)</td>
<td>(0.004)</td>
<td>(0.008)</td>
<td>(0.008)</td>
<td>(0.081)</td>
</tr>
<tr>
<td>Acom</td>
<td>(0.009)</td>
<td>(0.01)</td>
<td>(-0.01)</td>
<td>(0.011)</td>
<td>(0.003)</td>
<td>(-0.020)</td>
<td>(-0.020)</td>
<td>(-0.020)</td>
</tr>
<tr>
<td>Acomind</td>
<td>(0.112)</td>
<td>(0.108)</td>
<td>(0.02)</td>
<td>(0.020)</td>
<td>(0.034)</td>
<td>(0.036)</td>
<td>(-0.048)</td>
<td>(-0.048)</td>
</tr>
<tr>
<td>Bdv</td>
<td>(0.01)</td>
<td>(0.018)</td>
<td>(0.026)</td>
<td>(0.054)</td>
<td>(0.031)</td>
<td>(0.012)</td>
<td>(0.031)</td>
<td>(0.031)</td>
</tr>
<tr>
<td>Msh</td>
<td>(-1.120)</td>
<td>(-1.060)</td>
<td>(-2.17)</td>
<td>(-3.02)</td>
<td>(-1.21)</td>
<td>(-1.27)</td>
<td>(0.0112)</td>
<td>(0.021)</td>
</tr>
<tr>
<td>Insh</td>
<td>(0.014)</td>
<td>(0.045)</td>
<td>(0.065)</td>
<td>(0.054)</td>
<td>(0.031)</td>
<td>(0.012)</td>
<td>(0.031)</td>
<td>(0.031)</td>
</tr>
<tr>
<td>Fsz</td>
<td>(-0.028)</td>
<td>(-0.027)</td>
<td>(-0.035)</td>
<td>(-0.031)</td>
<td>(-0.031)</td>
<td>(-0.027)</td>
<td>(-0.027)</td>
<td>(-0.027)</td>
</tr>
<tr>
<td>Lq</td>
<td>(0.158)</td>
<td>(0.103)</td>
<td>(0.122)</td>
<td>(0.164)</td>
<td>(0.319)</td>
<td>(0.522)</td>
<td>(0.943)</td>
<td>(0.968)</td>
</tr>
<tr>
<td>Profi</td>
<td>(0.036)</td>
<td>(0.046)</td>
<td>(0.135)</td>
<td>(0.127)</td>
<td>(0.019)</td>
<td>(-0.004)</td>
<td>(-1.120)</td>
<td>(-1.118)</td>
</tr>
<tr>
<td>Tang</td>
<td>(0.009)</td>
<td>(0.021)</td>
<td>(0.085)</td>
<td>(0.069)</td>
<td>(0.127)</td>
<td>(0.105)</td>
<td>(0.272)</td>
<td>(0.279)</td>
</tr>
</tbody>
</table>

The results for the year 2011 shows a significant negative relationship between managerial shareholding and debt ratio in model 2 (b = -0.237, p <0.05). The negative relationship between managerial shareholdings and debt ratio supports the hypothesis of manager's desire to keep low levels of debt in the firm's capital structure than expected to establish their more control. The same outcome of the year 2011 is also persist in the year 2010 and results a significant negative relationship (b = -0.221, p <0.05) between managerial shareholding and debt ratio.

Moreover, 2009 shows relatively different results and shows a significant relationship between debt ratio and CEO-Chairman separation along with board independence. CEO-chairman separation is positively related to the debt ratio in both models. It is evident in the literature that CEO duality is also an important cause of the agency problem because a higher controlling power of the CEO both in board and management influences management's opportunistic behaviour and hence lowers its creditworthiness to investors. When the CEO is the chairman of the board, then it implicitly means that the board cannot play an active role as an independent institution. Therefore, separation of CEO and chairman should reflect a better performing board and should also facilitate more debt financing. The significant positive relationship does supports the above discussion and theoretical proposition that managers are keen to maximize shareholders benefit. Additionally, in line with the previous outcome board independence also affects debt financing negatively that is quite clearly against of corporate governance principle. In brief, in family owned and managed corporate environment independent directors have less scope to play role and interestingly, in many cases independent directors are appointed from the block of same family. Therefore interest of dominant shareholders comes first rather than interest of minority shareholders.

The effects of control variables on capital structure are also in line with existing literature. This paper also finds a positive relationship between capital structure and firm size for the entire sample period except 2010. It indicates higher the size of the firm the lower is the debt ratio. In the theoretical and practical literature it is also apparent that firm size matters significantly in the capital structure decision and follows the pecking order theory of capital structure in many instances i.e. small firms tend to finance more from internal source (retained earnings) and increase the debt ratio with the increasing of firms size. Kurshev and Strebulaev (2006), Asteriou et al. (2007) also argue that in general the likelihood of default is less in the case of large size firms because of a more diversified portfolio. It increases their acceptance and credit ratings to creditors and, therefore, gives easier access to finance at a lower rate. This finding is also consistent with the study of Hall, Hutchinson and Michaelas (2000), Watson and Wilson (2002).

In the year 2012 it is evident that liquidity of the firm negatively impacts the debt ratio. That implies firms are likely to use less debt in their capital structure if they experience surplus liquidity. Surplus liquidity substitutes for external financing. This also supports the pecking order theory of financial arrangements and maintains the order of financing e.g., internal source (liquidity or retained earnings), debt and then equity financing.
Additionally, a higher liquidity of firms decreases the cost of issuing equity financing and decreases use of leverage. Alternatively, it can also be argued that a higher long-term debt ratio creates more short term liabilities and decreases the level of liquidity (Erwan, 2001; Lipson and Mortal, 2009).

This research paper also finds the positive impacts of tangibility to the debt ratio in 2009 which state that a higher percentage of tangible assets increase the secured collateral and lead firms to have more debt capital. This result is also consistent to the study of Rajan and Zingales (1995), Harris and Raviv (1991) but this paper finds apparently no significant impact in the case of profitability and the debt ratio.

11. POOLED PANEL REGRESSION RESULTS

Table 4 shows a summary of the pooled panel data regression results.

Table 4. Summary of panel data regression (pooled model)

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>Model 1: Board composition</th>
<th>Model 2: Board and ownership</th>
</tr>
</thead>
<tbody>
<tr>
<td>Board independence</td>
<td>(.006)</td>
<td>(.003)</td>
</tr>
<tr>
<td>CEO-Chairman separation</td>
<td>(.028)</td>
<td>(.026)</td>
</tr>
<tr>
<td>Board orientation</td>
<td>(.003)</td>
<td>(.005)</td>
</tr>
<tr>
<td>Audit committee independence</td>
<td>(.006)</td>
<td>(.004)</td>
</tr>
<tr>
<td>Board diversity</td>
<td>(.009)</td>
<td>(.016)</td>
</tr>
<tr>
<td>Managerial shareholdings</td>
<td>(.151)</td>
<td>(.151)</td>
</tr>
<tr>
<td>Institutional shareholdings</td>
<td>(.025)</td>
<td>(.026)</td>
</tr>
<tr>
<td>Firm size</td>
<td>(.029)</td>
<td>(.026)</td>
</tr>
<tr>
<td>Liquidity</td>
<td>(.028)</td>
<td>(.028)</td>
</tr>
<tr>
<td>Profitability</td>
<td>(.056)</td>
<td>(.047)</td>
</tr>
<tr>
<td>Tangibility</td>
<td>(.105)</td>
<td>(.082)</td>
</tr>
<tr>
<td>Constant</td>
<td>(.472)</td>
<td>(.526)</td>
</tr>
</tbody>
</table>

In earlier regression model we find some of other variables affect financing decision randomly and aligned to a particular year but the panel regression results provide evidence of only statistically significant negative relationship (b = .151, p <0.1) between capital structure and managerial shareholdings. In cross-sectional regression we find the impact of managerial shareholdings is significant in all sample year except 2009 and in pooled regression we find the same direction of relationship. Therefore, we conclude that identical finding in both the cross-sectional and panel data regression analyses increases the robustness of this study. Like previous studies of capital structure, this study finds the same outcome for control variables. Firm size, liquidity and tangibility impacts capital structure decision significantly. However, it is apparent that profitability of the firms has no effect on the capital structure decision.

12. INTERACTION VARIABLES REGRESSION RESULTS

This study incorporates interaction effects of related variables viewing that independent effect of a particular variable may not represent real happening while interaction of variables may explain the facts more fully.

Table 5. Results of interaction effects of variables

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>B</th>
<th>Beta</th>
<th>P-value</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>.479</td>
<td>.077</td>
<td>.248</td>
<td>1.545</td>
</tr>
<tr>
<td>Bind-Cs</td>
<td>.088</td>
<td>.035</td>
<td>.557</td>
<td>1.203</td>
</tr>
<tr>
<td>Acind-Bind</td>
<td>.051</td>
<td>.045</td>
<td>.471</td>
<td>1.374</td>
</tr>
<tr>
<td>Bind-Rdv</td>
<td>.042</td>
<td>.054</td>
<td>.123</td>
<td>1.567</td>
</tr>
<tr>
<td>Acom-Cs</td>
<td>-.049</td>
<td>-.107</td>
<td>.000</td>
<td>1.209</td>
</tr>
<tr>
<td>Edv-Acom</td>
<td>.112</td>
<td>.054</td>
<td>.914</td>
<td>1.052</td>
</tr>
<tr>
<td>Insh-Bind</td>
<td>.010</td>
<td>.006</td>
<td>.043**</td>
<td>1.050</td>
</tr>
<tr>
<td>Msh-Insh</td>
<td>-.392</td>
<td>-.111</td>
<td>.043**</td>
<td>1.050</td>
</tr>
<tr>
<td>Firm size</td>
<td>-.028</td>
<td>-.226</td>
<td>.000**</td>
<td>1.029</td>
</tr>
<tr>
<td>Liquidity</td>
<td>-.027</td>
<td>-.142</td>
<td>.011**</td>
<td>1.080</td>
</tr>
<tr>
<td>Profitability</td>
<td>.053</td>
<td>.041</td>
<td>.455</td>
<td>1.058</td>
</tr>
<tr>
<td>Tangibility</td>
<td>.095</td>
<td>.092</td>
<td>.100**</td>
<td>1.112</td>
</tr>
</tbody>
</table>

The study includes seven different interactions and shows the interaction effects of independent directors and CEO chairman separation, interaction effects of audit committee and independent directors, interaction effects of independent directors and board diversity, interaction effects of audit committee and CEO chairman separation, interaction effects of board diversity and audit committee, interaction effects of institutional shareholdings and independent directors and interaction effects of managerial shareholding and institutional shareholdings. The result shows almost no significant effect of interaction variables on debt financing in firms of Bangladesh. However, only interaction effects of managerial shareholdings and institutional shareholdings is significant and negative to the debt financing decision of firms. This finding shows that higher presence of managerial shareholdings neutralizes the role of institutional shareholders as well as board and thus increases the robustness of the study supporting previous findings.
13. COMPARISON WITH MODELS

Table 5 shows the summary statistics comparing three models where the control variables, board composition and control variables, board composition, ownership structure and control variables are included in the model 1, 2 and 3 respectively.

Table 6. Summary statistics of models robustness

<table>
<thead>
<tr>
<th>Model</th>
<th>R²</th>
<th>R² Change</th>
<th>F-statistics</th>
<th>Sig(P-value)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.090</td>
<td>0.090</td>
<td>17.828</td>
<td>0.000*</td>
</tr>
<tr>
<td>2</td>
<td>0.096</td>
<td>0.067</td>
<td>18.291</td>
<td>0.000*</td>
</tr>
<tr>
<td>3</td>
<td>0.136</td>
<td>0.046</td>
<td>24.016</td>
<td>0.000*</td>
</tr>
</tbody>
</table>

Note: In all tables values in parenthesis and [ ] indicates coefficient and beta value respectively. P-values are marked * to indicate significant at 1% level, ** to indicate significant at 5% level and *** to indicate significant at 10% level. The direction of coefficient value explains the relationship between variables.

This paper finds that 9% (R² = .090) of the capital structure decision can be explained by the control variables but model 2 and 3 provides the best prediction in explaining variance in the dependent variables. It is clear that 13.6% (R² = 0.136) of capital structure decision can be explained by the new predictors. The value of F-statistics and the value of significance for models show that the independent variables used together in all models are significantly better in predicting the dependent variable and also is an evidence of goodness of fit model without collinearity in any case.

This paper posed eight research hypotheses at the beginning that can be analyzed now in light of the evidence. Tables 3-6 provide evidence in support of the hypotheses. The financing decision depends mostly on the relative influence of managerial shareholdings. In addition, the study also finds that some of other variables affect financing decision randomly and only aligned to a particular year. Importantly, no statistically significant impact is evident between debt ratios and board size, audit committee, board diversity, institutional shareholdings in any case. Our findings are robust because our main result holds when we control for the firm characteristics affecting capital structure decision and also when we incorporate interaction effects to check for more robustness.

14. CONCLUSION

This paper aims to contribute to the corporate governance literature by examining the effect of board composition on financing decisions in an emerging country context. The empirical study finds that board compositions play no role in debt financing decision of firms in Bangladesh. The finding also finds that family bound managers/directors with more controlling power and significant share ownership prefer less debt in the firm’s capital structure which supports the strong presence of conflict of interests between dominant shareholders (directors/promoters in Bangladesh) and minority shareholders. The study also finds no significant relationship between debt ratio and institutional ownership, which is consistent with the passive engagement of institutional investors. That suggests that institutional investors are not interested in the capital structure decision of firms. This may be either because of the non-engagement tendencies of institutional investors in the firms’ decision making or the lack of a level playing field for activism by institutional investors. The study affirms that corporate governance is not working in explaining important financial decision of firms in Bangladesh.

We hope that this research paper will provide an insight to policy makers of Bangladeshi regulators and other like-structured developing market economies seeking to protect minority shareholder’s right and to ensure effective corporate governance practices in capital structure decisions. This paper is not certainly without limitations. In particular, the number of sample firms and observations is low due to the small number of listed companies and unavailability of public data in Bangladesh and, therefore, the results may not be representative of other countries. An extension of this paper would consider firms from other developing countries and add more observations to strengthen the findings.

REFERENCES

55. Jensen, M. C., & Meckling, W. 1976. Theory of the firm: managerial behaviour, agency costs and