Rashid, Afzalur

**Article**

Board independence and firm performance: Evidence from Bangladesh

*Future Business Journal*

**Provided in Cooperation with:**
Faculty of Commerce and Business Administration, Future University


This Version is available at: http://hdl.handle.net/10419/187948

**Standard-Nutzungsbedingungen:**
Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden. Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen. Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

**Terms of use:**
Documents in EconStor may be saved and copied for your personal and scholarly purposes. You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public. If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.

https://creativecommons.org/licenses/by-nc-nd/4.0/
Abstract

This study examines whether board independence influences firms’ economic performance among listed firms in Bangladesh. By using data from 135 listed firms on Dhaka Stock Exchange and by using accounting and market performance measures, this study uses simultaneous equation approach to control the potential endogeneity problem. This study finds that, board independence and firm economic performance does not positively influence each other. This study also finds that, board size has significant positive influence on both board independence and firm performance. These findings raise the questions of whether ‘one size fits all’ type corporate governance practices can be exercised around the world. Bangladesh has imitated the requirement of having outside directors sit on corporate boards to make corporate boards independent and accountable, ignoring the underlying institutional differences. While board independence is an important attribute of corporate board practices in many developed countries, board independence still may be an illusion in Bangladesh.

Keywords: Agency theory; Bangladesh; Board independence; CEO; Power; Stewardship theory

1. Introduction

Corporate boards are the primary and dominant internal corporate governance mechanism and play a key role in monitoring management and aligning the interests of shareholders with management (Brennan, 2006; Rose, 2005). Boards are responsible for care and diligence, including ensuring that financial controls are effective. Boards may give management strategic guidelines and may even act to review and ratify management proposals (Jonsson, 2005). Boards also spot problems early and can exercise a whistle-blower function (Salmon, 1993). However, there is a
considerable debate in the literature concerning the extent to which corporate boards are able to monitor management (see Mizruchi, 2004, p 614; Braun & Sharma, 2007).

A corporate board's ability to monitor management has attracted attention following the collapse of the Maxwell Publishing Group, BCCI and Poly Peck in the United Kingdom. Also influential in reviving this question was the wave of mega corporate collapses that broke out in early 2000s, including those of Enron, WorldCom and HIH insurance (see Mizruchi, 2004, p 614; Braun & Sharma, 2007). It is alleged that the boards' abilities to monitor management within these corporations was due to insufficient monitoring stemming from the consolidation of power by the management and its general hold over board members, preventing them from providing independent advice (Rose, 2005). Thus, boardroom reform attracted significant attention, particularly the idea of board independence (representation by outside independent directors). A number of global corporate governance codes of best practices, such as the Cadbury Committee Report of 1992, the Higgs Report of 2003 and the Smith Report of the same year in the United Kingdom; the 2000 NACD Blue Ribbon Commission Report and the 2002 Sarbanes-Oxley Act in the United States; the Toronto Stock Exchange Corporate Governance Guidelines of 1994 in Canada; and Australia's 1995 Bosch Report, the Australian Stock Exchange's (ASX) Principles of Good Corporate Governance and Best Practice Recommendations and CLERP 9, advocated for boardroom reform in favour of independent board members. The Higgs Committee Recommendations, along with many other codes of best practices around the world, attracted significant international attention.

This study aims to examine whether board independence influences firm performance for listed firms in Bangladesh. By estimating a simultaneous equation model and using three-stage least square (3-SLS), this study controls for endogeneity, as any cross-sectional regression of performance on board independence will be biased because changes in board independence may result from the endogeneity problem in past performance (Hermalin & Weisbach, 2003). This study contributes to the literature and increases knowledge on corporate board practices in the context of an emerging market. The remainder of the paper is organised as follows: section two presents the literature review; section three presents board independence in the context of Bangladesh; section four presents this study's theoretical positioning; section five presents the hypothesis; section six presents the research method; section seven presents the empirical results; and the section eight presents the discussion and conclusions, section nine presents the implications and final presents the limitations of the paper.

2. Literature review

The idea of board independence mainly arises from the Anglo-American context, where there is a dispersal of ownership. Outsider-dominated boards (boards with more outside than inside directors as members) have been very popular in the United States since the 1960s (Kesner, Victor & Lamont, 1986) and therefore the outsider board reform agenda fell in line with orthodox Anglo-American corporate governance practices. Until very recently, however, there has been a broad debate in the literature as to whether board independence adds any value to firms, with no definitive conclusion reached thus far. Some empirical evidence has documented that, board independence is associated with superior performance in the United States (see Pearce & Zahra, 1991; Zahra & Pearce, 1989) as well as in the United Kingdom (Ezzamel & Watson, 1993), New Zealand (see Hossain, Prevost & Roa, 2001) and Korea (see Choi, Park & Yoo, 2007; Joh & Jung, 2012). However, many past studies have also documented a negative relationship between board independence and firm performance in Anglo-American countries, for example in Australia (see Grace, Ireland & Dunstan, 1995) and the United States (Baysinger & Butler, 1985; Bhagat & Black, 2002; Chaganti, Mahajan & Sharma, 1985; Hermalin & Weisbach, 2003; Rechner & Dalton, 1986; Yermack, 1996). Past studies have also documented a negative relationship between board independence and firm performance in an emerging market, for example in Bangladesh (see Rashid, De Zoysa, Lodh & Rudkin, 2010; Rashid, De Zoysa, Lodh & Rudkin, 2012). Due to the conflicting results on board independence and firm performance, Dalton and Daily (1999) view these results as “vexing”, “contradictory”, “mixed” and “inconsistent”. Summarising these findings, suggest that “there is no predicate, either in logic or in experience, to suggest that a majority of independent directors on a board will guarantee good corporate governance or better financial returns for shareholders” (p. 35). Likewise, have declared that there is “no relation between director independence and performance, whether measured by accounting or stock return measures” (p. 1814). The mixed evidence on board independence and firm performance may be attributed to limited methodological procedures or a lack of methodological rigor as well as model misspecifications in the
sense of the omission of variables that affect firm performance (Bathala & Rao, 1995), differences in institutional factors and managerial behaviours in the market (Fan, Wei & Xu, 2011). This study aims to overcome this shortcoming by revisiting board independence in the context of an emerging market.

3. Board independence in the context of Bangladesh

Studying board independence in the context of Bangladesh is interesting for several reasons. First, listed firms in Bangladesh are featured by concentration of ownership; although these owners play an enormous role in disciplining the firm, board independence is difficult to achieve and the board has very little to do with monitoring management. Second, the idea of board independence is quite unfamiliar in emerging economies. This idea has arisen mainly from Anglo-American context, as the corporate boards in these countries are one-tier or management boards in which both the executive and non-executive directors work together in one organisational layer. Managers and directors act as agents for the shareholders and there is a predominant norm of shareholder wealth maximisation (maximising returns for shareholders). In this traditional setting of the agency problem, shareholders’ influence on management is weak at best due to the large number of dispersed shareholders, leading to a high degree of information asymmetry between shareholders and management. Because firm managers in these countries have invested undiversified human capital in a single firm, they anticipate a certain amount of opportunistic behaviour. Board independence may act as a balancing force between the board and management (Hillman & Dalziel, 2003; Kula, 2005; Zahra and Pearce II, 1989). Unlike the corporate boards in many continental European countries, such as Germany, Finland and the Netherlands (but not in France, Spain, or the United Kingdom), corporate boards in Bangladesh are one-tier board or management boards due to the country's common law tradition (as opposed to civil law) (Rashid, 2013). There is no supervisory board, and both the executive and the non-executive directors work together in one organisational layer, which is most common in Anglo-American countries like the United States, the United Kingdom, Canada, Australia, and New Zealand. Therefore, there are some incidences of CEO duality in many listed companies in Bangladesh. Though there are similarities of corporate board practices in Bangladesh with that of Anglo-American countries (such as one-tier board, CEO duality and common law tradition), there is a huge family control on the listed firms in Bangladesh. Similar to other emerging economies, representatives of the family owners hold positions on both the company board and in management as opposed to professional managers in Anglo-American countries, leading to poor monitoring and control, as well as to incidences of CEO duality in many listed firms in Bangladesh. Such family control is sometimes harmful to the firm. Uddin and Choudhury (2008) noted that, the families and their kin sometimes effectively weaken the rational measures, such as rules and regulations for accountability and it is questioned if the Western dominated corporate governance system may work well in an emerging market.

Despite these institutional differences, in early 2006 the Securities and Exchange Commission Bangladesh (SECB), a regulatory body, announced the Corporate Governance Notification (CGN), also known as the Corporate Governance Code of Best Practices. Among many other requirements, it requires listed firms to have Anglo-American-style independent directors on their boards in a ratio of 1:10 or at least one independent member on boards with less than 10 members. CGN also imitated many other international (Anglo-American) corporate governance practices, and non-compliance requires an explanation. Following this, there is great uncertainty as to whether these reform efforts will bring firms any beneficial outcomes (see Rashid et al., 2010, 2012). It is to be noted that, the idea of outside directors work well in the Anglo-American countries as the jurisdictions of these countries rely heavily on laws and transparency (information disclosure) to enforce shareholders’ rights (Asian Development Bank, 2000). In contrast to Anglo-American countries, key institutional forces have little capacity to exert pressures on firm management to discipline the firms (Rashid, 2011). Rashid (2011) maintain that, due to poor enforcement of law, shareholders right is very poor in Bangladesh; many companies take up to seven years to present audited financial statements before the AGM of shareholders and many companies take more than seven years just to release the audited financial statements to outsiders.

---

1France has a mixture of a unitary and two-tier board system (see Charreaux & Wirtz, 2007).
2Bangladesh was a former British colony and inherited the common legal systems based on English common law (as opposed to civil law). The two-tier board is common in civil law countries (Rose, 2005).
4. Theoretical background

A theoretical lens is required to understand the principal-agent relationship (corporate governance and its problems). There are two opposing theoretical underpinnings used to explain this problem and its subsequent impact on firm performance: agency theory (see Fama, 1980; Fama & Jensen, 1983; Jensen & Meckling, 1976) and stewardship theory (see Davis, Schoorman & Donaldson, 1997; Donaldson, 1990a, 1990b; Donaldson & Davis, 1991). Agency theorists argue that there is an inevitable conflict between parties, such as principals and agents. Agency theory assumes that an individual is self-interested and opportunistic, rather than altruistic. Consistent with this view, agency theorists suggest that agency problems will be more prevalent when the board is dominated by insiders (see Bathala & Rao, 1995; Nicholson & Kiel, 2007; Zahra and Pearce II, 1989; ). Insider-dominated boards may consolidate power and authority, which can weaken or reduce the board’s overall monitoring effectiveness (Solomon, 2007). Powerful insiders may be driven by self-interest and unless otherwise restricted will undertake self-serving activities that could be detrimental to the economic welfare of the principals (Deegan, 2006). Agency theorists argue that a board with large number of outside directors is independent and may independently monitor and advise managers who can promote the shareholders’ interests (Brickley & Zimmerman, 2010). The separation of roles may enable boards to perform their oversight functions more effectively because such boards are considered to be independent (Finkelstein & Mooney, 2003). Therefore, agency theory suggests a positive relationship between board independence and firm performance (Boyd, 1995).

In sharp contrast, stewardship theory holds an optimistic view of human (managerial) behaviour, arguing that agents are not necessarily motivated by individual goals and that rather they are inherently trustworthy and not prone to misappropriate corporate resources and motivated to work in the interest of their principals (Barney, 1990; Davis et al., 1997; Donaldson, 1990a, 1990b; Donaldson & Davis, 1991; ). Consistent with this view, stewardship theorists suggests the consolidation of power by insiders. This theory suggests that the optimal stewardship role can only be exercised when the board has the ultimate power and authority (Donaldson & Davis, 1991; Ong & Lee, 2000). Therefore, stewardship theory suggests that outside independent directors are unnecessary because agents are the best stewards for their corporations and are not motivated by individual goals (Davis et al., 1997; Luan & Tang, 2007). However, this researcher also believes that individual is self-interested and opportunistic, rather than altruistic and there is a need for monitoring, e.g. by independent directors. This study examines whether board independence enhances firm performance. Pursuant to the objective of this study, its theoretical positioning of this study is based on agency theory.

5. Hypothesis

The rationale behind favouring board independence in the form of representation by outside directors is that outside directors can make a positive contribution to the board’s monitoring responsibilities (Park & Shin, 2004) and thereby add value to the firm (see Finkelstein & Hambrick, 1996; Kesner et al., 1986; Zahra and Pearce II, 1989; ). Smaller boards with higher proportions of outside directors tend to make decisions about acquisitions, executive compensation and CEO replacement (Hermalin & Weisbach, 2003). In the absence of outside directors, the insider-dominated board can gain enormous power that it may abuse; additionally, without the expertise of outside directors, they may be ineffective (Dalton & Daily, 1999).

Agency theorists argue that the primary function of the board is to monitor the actions of “agents” (managers) to protect the interest of “principals” (owners) (see Eisenhardt, 1989; Hillman & Dalziel, 2003). Under agency theory, board independence will balance power between insiders and outsiders. In the absence of outside directors, the insider-dominated board can gather and abuse enormous power; on the other hand, without the expertise of the outside directors, the board may not be effective (Dalton & Daily, 1999). Consistent with this rationale, it is argued that board independence will enhance firm performance.

It is, however, to be noted that, there exist some institutional and behavioural differences between firms in emerging markets and those in developed markets (Fan et al., 2011). Due to diffuse share ownership, firms in developed market appoint professional managers; many of them do not have ownership stakes within the firm; whereas in many emerging economies representatives of the family owners choose themselves or close relatives and/or friends to appoint on the board and management. Anderson and Reeb (2004) argue that, families often seek to minimize the presence of independent directors as they have powerful incentive to consume the firm’s resource as they
bear a fraction of the total cost. Though many firms choose to appoint independent directors on the board, these directors may not be truly independent. It is not very unusual that many of them are the friends, or friends of friends, of the controlling family and/or inside directors. Thus, board independence is difficult to achieve in some emerging economies and the board has very little to do with monitoring management. Thus, board independence may not necessarily add any value to the firm in emerging markets and a negative relationship is expected between board independence and firm performance.

It should also be noted that, because board independence may not influence firm performance in emerging markets, good performing firms will not tend to attract more independent board members though poorly performing companies may tend to increase their number of independent board members in an effort to improve performance (Bhagat & Black, 2002). This leads to the following hypothesis:

**Hypothesis 1.** Board independence and firm performance are negatively associated with one another.

### 6. Research method

#### 6.1. Sample selection

There were 281 listed companies on the Dhaka Stock Exchange as of 31 December 2011. Of those listed 281 companies, 97 companies are financial companies (banking, insurance and other financial institutions) and 184 are non-financial companies. Based on the availability of company annual reports, this study considers 135 non-financial firms listed on the Dhaka Stock Exchange for the period from 2006–2011, which represents 48.04% of the total listed companies as of 31 December 2011. These firms also represent 73.37% of total listed non-financial firms. All the firms in the samples could not be observed for all the years as gradually some firms were delisted from the stock exchange. The final sample consists of 857 observations (135 firms in 2006, 134 firms in 2007, 130 firms in 2008, 122 firms in 2009, 121 firms in 2010, 112 firms in 2011 and 103 firms in 2012). The sample consists of a variety of industries (Table 1). Data prior to 2006 were not considered because the regulation requiring independent directors on corporate boards was announced early in that year.

Companies’ accounting information, such as EBIT, assets and liabilities, was obtained from audited financial reports. Digitised hard and soft copies of companies’ annual reports were collected from the library of the Dhaka Stock Exchange and selected other sources. A total of seven field trips were taken between the years 2006 and 2013 to collect these data. The data for selected companies were manually posted between 2006 and 2013. Information on CEO duality, board independence and board size was obtained from the respective companies’ directors’ reports. The market value of the year-end share price was collected from the website of the Dhaka Stock Exchange (www.dsebd.org) as well as from

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of firms in the sample</th>
<th>Observed firm years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food and allied</td>
<td>24</td>
<td>150</td>
</tr>
<tr>
<td>Ceramic</td>
<td>3</td>
<td>21</td>
</tr>
<tr>
<td>Textile</td>
<td>33</td>
<td>197</td>
</tr>
<tr>
<td>Paper and printing</td>
<td>5</td>
<td>27</td>
</tr>
<tr>
<td>Pharmaceuticals and chemicals</td>
<td>19</td>
<td>130</td>
</tr>
<tr>
<td>Engineering</td>
<td>19</td>
<td>128</td>
</tr>
<tr>
<td>Fuel and power</td>
<td>2</td>
<td>14</td>
</tr>
<tr>
<td>Tannery industries</td>
<td>6</td>
<td>39</td>
</tr>
<tr>
<td>Cement</td>
<td>7</td>
<td>45</td>
</tr>
<tr>
<td>Jute</td>
<td>3</td>
<td>21</td>
</tr>
<tr>
<td>IT sector</td>
<td>4</td>
<td>24</td>
</tr>
<tr>
<td>Services and real estate</td>
<td>4</td>
<td>21</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>6</td>
<td>40</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>135</strong></td>
<td><strong>857</strong></td>
</tr>
</tbody>
</table>
its 'Monthly Review'. The monthly market price of shares was collected from the DataStream database. The ownership data were obtained from notes on each company's Corporate Governance Compliance Report and the Dhaka Stock Exchange's 'Monthly Review'.

6.2. Regression Model Specifications

Prior literature on board independence suggests that changes in board independence may be the result of past performance (Hermalin & Weisbach, 2003). Prior literature also suggests that more profitable firms may take outside directors for political or other reasons (Prevost, Rao & Hossain, 2002) and poorly performing companies may take outside directors in an effort to improve performance (Bhagat & Black, 2002). Thus, any cross-sectional regression of the performance of board independence will be biased due to the endogeneity problem (Hermalin & Weisbach, 2003). It has been suggested that the most appropriate methodology to control for the possible endogenous relationship between board independence and firm performance is a simultaneous equation approach (Prevost et al., 2002). Following Prevost et al. (2002), a two-equation model with outside board representation and firm performance as dependent variables is employed to determine the causal relationship between firm performance and board independence simultaneously. The simultaneous equations are estimated by using three-stage least square (3-SLS). Several independent variables are common to both equations, including board size, frequency of board meeting, CEO duality, CEO Power, insider ownership, debt ratio, firm age, firm size, firm growth and firm risk. In the firm performance equation, variables such as the CEO gender, institutional ownership and liquidity are included, while the board independence equation variable such as CEO tenure is included. The simultaneous equations are also controlled for industry and time effects by adding 'industry dummies' based on the Dhaka Stock Exchange industrial classification (DIC) codes for the sector to which each firm belongs and by adding 'TIME Dummies' for the year when each observation is made. The system estimated is shown below:

\[
Y_{it} = \alpha + \beta_1 BDIND_{it} + \beta_2 BDSIZE_{it} + \beta_3 FREQUENCY_{it} + \beta_4 CEOD_{it} + \beta_5 CEOPOWER_{it} + \beta_6 CEOGENDER_{it} + \beta_7 DIROWN_{it} + \beta_8 INSTOWN_{it} + \beta_9 DR_{it} + \beta_{10} LIQ_{it} + \beta_{11} AGE_{it} + \beta_{12} SIZE_{it} + \beta_{13} GROWTH_{it} + \beta_{14} RISK_{it} + \gamma INDUSTRY + \Omega TIME + \varepsilon_{it} \tag{1}
\]

Table 2

<table>
<thead>
<tr>
<th>Variable definition and measurement.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. ( Y_{it} )</td>
</tr>
<tr>
<td>2. BDIND_{it}</td>
</tr>
<tr>
<td>3. BDSIZE_{it}</td>
</tr>
<tr>
<td>4. FREQUENCY_{it}</td>
</tr>
<tr>
<td>5. CEOD_{it}</td>
</tr>
<tr>
<td>6. CEOPOWER_{it}</td>
</tr>
<tr>
<td>7. CEOGENDER_{it}</td>
</tr>
<tr>
<td>8. CEOTENURE_{it}</td>
</tr>
<tr>
<td>9. DIROWN_{it}</td>
</tr>
<tr>
<td>10. INSTOWN_{it}</td>
</tr>
<tr>
<td>11. DR_{it}</td>
</tr>
<tr>
<td>12. LIQ_{it}</td>
</tr>
<tr>
<td>13. AGE_{it}</td>
</tr>
<tr>
<td>14. SIZE_{it}</td>
</tr>
<tr>
<td>15. GROWTH_{it}</td>
</tr>
<tr>
<td>16. RISK_{it}</td>
</tr>
</tbody>
</table>
Furthermore, CEO power has great influence on firm performance. Therefore, a variable CEO duality is considered that may have a potential impact on independent directors as these directors rely on information from the CEO and may, ultimately, affect the presence of CEO duality weakens the board’s monitoring role; it also reduces the decision making ability of the board to make good decisions to establish strong contracts with other external parties and help the company in dealing with its environment (Brennan, 2006), these directors have limited ability to perform their tasks in emerging markets and the sign board independence will be negative in the firm performance equation.

In the performance equation, a number of explanatory variables that may influence firm performance are considered, namely, board size, frequency of board meetings, CEO duality, CEO Power, CEO Gender, director ownership, institutional ownership, debt ratio, liquidity, firm age, firm size, firm growth and firm risk. There is no consensus in the literature on what board size yields the optimal monitoring ability (Raheja, 2005). Some scholars argue that a firm may derive greater benefits from a larger board (see, for example, Coles, Daniel & Naveen, 2008; Kiel & Nicholson, 2003; Zahra and Pearce II, 1989); others argue that a smaller board is more effective because it is easy to coordinate and achieve cohesion (Chaganti et al., 1985; Eisenberg, Sundgren & Wells, 1998; Hermalin & Weisbach, 2003; Hossain et al. 2001; Kiel & Nicholson, 2003; Mallin, 2005). Yet others argue that there is no magical or ideal board size (Conger & Lawler, 2001). From a resource dependency perspective, it is argued that a larger board brings greater opportunities for more links to other organisations and thus access to external resources, such as legitimacy, advice, and counsel (Hillman & Dalziel, 2003; Kiel & Nicholson, 2003; Kula, 2005; Pfeffer & Salancik, 1978; Zahra and Pearce II, 1989). From an agency theory perspective, a larger board is better able to monitor management simply because more people will be reviewing the management’s actions (Kiel & Nicholson, 2003). However, there are some obvious problems arising from a large board. For one, a larger board is less manageable (Eisenberg et al., 1998). Other major drawbacks of larger boards include a lack of coordination and communication, slow decision making (Lipton & Lorsch, 1992) and a lack of unanimity, all of which affect the board's effectiveness and efficiency (Lipton & Lorsch, 1992; Rao, Tilt & Lester, 2012).

While it is argued that busy directors will add value to the firm, Vafeas (1999) argues that there are costs associated with board meetings, such as travel expenses and meeting attendance fees. He maintains that "if a firm is reasonably efficient in setting the frequency of its board meetings, depending on its environment, it will attain economies in agency costs" (p. 118). Thus, a variable ‘frequency of board meeting’ is considered. The CEO has a great influence on board structure and monitoring because the monitoring ability of the board depends on the distribution of power between the Chairperson of the board and the CEO (Pearce II and Zahra, 1991; Finkelstein & Hambrick, 1996). The presence of CEO duality weakens the board's monitoring role; it also reduces the decision making ability of the independent directors as these directors rely on information from the CEO and may, ultimately, affect firm performance. Therefore, a variable CEO duality is considered that may have a potential impact on firm performance. Furthermore, CEO power has great influence on firm economic performance (Adams, Almeida & Ferreira, 2005). When CEOs have a consolidation of power, they may abuse such power for their own benefit and that may be detrimental to firm performance. It is argued that, the level of diversity on a board affects members' decisions and activities (Adams & Ferreira, 2009) and one highly debated attribute of board diversity is gender (Rao et al., 2012). It is argued that gender diversity on the board creates a good atmosphere in the boardroom (Huse & Solberg, 2006) that may add value to firm. The firm performance may also be influenced by insider ownership. Insider ownership plays a significant role in disciplining the firm, and monitoring by external board members is less critical for firms with more insider ownership (Prevost et al. 2002). Thus, a variable director ownership is considered as a proxy for insider ownership. Similarly, institutional investors can control the decisions and actions taken by the CEO and limit the CEO’s power when CEO and board chair positions are combined (Kholeif, 2008). Following this argument and

\[
BDIND_{it} = \alpha + \beta_1 Y_{it} + \beta_2 BDSIZE_{it} + \beta_3 FREQUENCY_{it} + \beta_4 CEOPOWER_{it} + \beta_5 CEOPOWER_{it} + \beta_6 CEOPOWER_{it} + \beta_7 CEOPOWER_{it} + \beta_8 CEOPOWER_{it} + \beta_9 CEOPOWER_{it} + \beta_{10} SIZE_{it} + \beta_{11} GROWTH_{it} + \beta_{12} RISK_{it} + \gamma INDUSTRY + \Omega TIME + \varepsilon_{2it}
\]
consistent with Elsayed (2007), Kholeif (2008), Kula (2005), and Pi and Timme (1993), this study considers institutional ownership as a control variable. It is argued that the choice of debt has a role in disciplining the firm (e.g., Jensen & Meckling, 1976; Rashid & Hoque, 2011). Therefore, the debt ratio is considered as a disciplining effect on firm performance. Liquidity can also influence firm performance. Although excess liquidity may reflect superior skills (Majumdar & Chhibber, 1999, p 296), it may also negatively influence firm performance as excess liquidity may lead to firms assets being tied up in non-revenue generating ventures. Firm performance may also be influenced by firm age; older firms are likely to be more efficient than younger firms (Ang, Cole & Lin, 2000). Firm size is an important variable that may influence firm performance. Large firms have more capacity to generate internal funds (Short & Keasey, 1999); large firms have a greater variety of capabilities (Majumdar & Chhibber, 1999); large firms may also have problems of coordination, which may negatively influence its performance (Williamson, 1967). Firm performance may be influenced by its growth opportunities as growing firms will be able to perform better continuously. Following Short and Keasey (1999), this study considered a control variable growth. Firm size is a potentially important determinant of the level of firm performance. Risky firms will have their stock price volatility leading to lower stock market performance. The potential risk may also adversely affect its accounting profit.

6.2.2. Board independence equation

In the board independence equation, the dependent endogenous variable is the board independence. In the board independence equation, a number of explanatory variables are also considered that may influence board independence, namely, firm economic performance, board size, frequency of board meeting, CEO-duality, CEO power, CEO tenure, director ownership, debt ratio, firm age, firm size, firm growth and firm risk. Although more profitable firms may attract more outside directors, outside directors may be less willing to take a position in a less profitable firm. Thus, the sign firm performance will be negative in the board independence equation. Furthermore, board size may affect the extent of boards’ monitoring abilities (Kula, 2005). A smaller board is more manageable and plays a controlling function, whereas a larger board is non-manageable, may have greater agency problems and may be unable to act effectively, leaving management relatively free (Chaganti et al., 1985; Hermalin & Weisbach, 2003). Monitoring ability of the board (board independence) may be influenced by the advising tendency of the board which can be proxied by frequency of board meeting. Chen (2008) empirically shows that higher advising intensity is associated with lower monitoring quality and higher agency costs. Thus, board meetings are directly related to the advising functions provided by the board. The CEO has a great influence on board structure and monitoring because the board's monitoring ability depends on the distribution of power between the Chairperson of the board and the CEO (Finkelstein & Hambrick, 1996; Pearce II and Zahra, 1991). It is further argued that outside director candidates who are known by the CEO or other inside directors are more likely to be aligned with top management rather than shareholders, as the CEO and top management have great influence over who sits on the board (Patton & Baker, 1987). Thus, CEO duality may lead to conflicts of interest with other directors and severely undermine board independence. Therefore, a control variable, CEO duality is considered. Board independence may also be influenced by CEO power. When CEOs has a consolidation of power, it reduces the board monitoring effectiveness of the board as the CEO will influence who sits on the board. When the CEO has consolidated power, s/he may be driven by his personal goal and be less interested in board independence. CEO tenure is another variable that may influence board independence. Long-tenured CEOs increasingly narrow their focus and become less open minded; firms led by long-tenured CEOs may continue to follow existing directions (Hambrick & Fukutomi, 1991; Weng & Lin, forthcoming). The likelihood of changes gradually decreases the longer a CEO remains in his or her current position (Hambrick & Fukutomi, 1991; Miller & Shamsie, 2001; Weng & Lin, 2014). Furthermore, the longer the CEO remains in that role; s/he gradually gains firm specific knowledge and successfully resolves monitoring demands. Thus, long tenured CEOs are expected to adopt board independence to a lesser degree. The effectiveness of outside directors can be influenced by the shareholders’ influence on board members. Depending on the ownership structure, shareholders may have differing degrees of influence in different countries (Cho & Kim, 2007). Furthermore, insider owners play a large part in deciding who will sit on the board.

It can be argued that the choice of debt has some impact on directors’ independence. Some independent directors engage in valuable networking with banks and financial institutions; alternatively, fund providers may have a part in nominating outside directors. Furthermore, once the firm relies on more debt, lenders’ demands for monitoring increase in favour of more outside directors (Leftwich, Watts & Zimmerman, 1981). Thus, the debt ratio is considered as an effect on board independence. Board independence is also influenced by firm age; older firms are likely to be
more efficient than younger firms (Ang et al., 2000). Thus, there will be less need for oversight monitoring by outside directors. Firm size indicates the degree of complexity in its operations. Because adopting outside directors is potentially costly, a firm will adopt outside directors in accordance with its cost and benefit. Large firms will have economies of scale and will be better able to adopt the directors. Firm growth is another variable that may influence board independence. Outside directors will try to retain their human capital and will be less attracted by low growing firms. Firm risk is also a potentially important determinant of board independence. A risky firm will tend to adopt more outside directors to reduce as part of its risk management procedure. A firm may try to appoint outside directors who have proven track record of advising to reduce financial and other risks.

7. Empirical results

7.1. Descriptive statistics

Descriptive statistics of the variables are presented in Table 3. The descriptive statistics include the mean, median, standard deviation, minimum and maximum and reveal that the average firm performance in terms of ROA is 7.6%; the average firm performance in terms of Tobin’s Q is 180.6%.

On an average 12.6% of board members are independent directors, a range of zero (no independence) to sixty percent of total directors. This number is fairly low by Anglo-American standards. Sixty-one percent of non-executive directors in the listed firms on Irish Stock Exchange are outsiders (see Brennan & McDermott, 2004); similarly, 36 percent of board members are outside directors in large American corporations (see Daily & Dalton, 1997) and 54% in large American industrial corporations (see Yermack, 1996). This number is also much lower than the number prescribed in some of the codes of best practices from developed economies. For example, the United Kingdom’s Cadbury Report of 1992 suggests that there should be a minimum of three non-executive (outside) directors on the board, and the Higgs Report of 2003 (Higgs, 2003), also from the UK, suggests that at least half of the board members (excluding the board chair) be the non-executive directors.

The average broad size is 6.626 members, ranging from 3 directors to 18 directors. This number is also fairly low compared to Anglo-American standards. Boards had an average of 12.25 directors in Yermack (1996) and 10.4 directors in Coles et al. (2008)’s study, both in the context of the United States. The Higgs Report suggests that boards should be smaller and of a sufficient size to contain the necessary balance of boardroom skills and experience. The figure for Bangladesh is closer to the average number of directors in some northern European countries such as Finland and Norway, where the average number of board members is 7.8 and 8, respectively (Heidrick & Struggles, 2011); however, it is lower than the average number of directors in countries such as Austria, Belgium, Denmark.
France, Germany, Italy, Netherlands, Portugal, Spain, Sweden, Switzerland and United Kingdom, where the number of directors ranges between 9 and 17 (Heidrick & Struggles, 2011).

The average board meeting frequency is 6.873, ranging from 0 to 32 times. This is fairly close to Anglo-American standards; for example, Vafeas’s (1999) study of American corporations shows an average of seven yearly board meetings. On average there is a 26.3% incidence of CEO duality, which is much lower than in the Anglo-American context. There is a 54.1% incidence of CEO duality in Fortune 1000 firms, and it ranges as high as 75% in the larger industries (Rechner & Dalton, 1989). Daily and Dalton (1993) find an average of 79.3%, and Brickley, Coles, and Jarrell (1997) and Rechner and Dalton (1991) and find instances of 78.7 and 80.94%, respectively, in the United States. Donaldson and Davis (1991) find an instance of 76% in the context of Australia. The average CEO power is 32.7%. The average CEO gender is 93% implying that 93% CEOs are male. The average CEO tenure is 9.07 years. The average director ownership stake is 39.30%. This suggests that there is a relative domination of ownership by the directors who are in fact family owners. The average institutional ownership stake is 19.3%, which is much lower than that of Anglo-American standards. For example, in the United Kingdom, 60.00% of the shares in the listed companies are owned by local institutions and a further 20.00% are owned by overseas institutions (Farrar, 2005, p 339; Hampel Report, 1998); in the United States, the figure for local institutions is 50.00% (Farrar, 2005, p 339), and in Australia, it is 36.90% (Farrar, 2005, p 339).

7.2. The endogeneity issue

It can be argued that the mixed results of prior research, with multivariate analysis, may be attributable to the fact that the effect of board independence is likely to simultaneously affect economic performance. The appropriateness of using an OLS regression analysis to estimate this system of equations is examined by employing a Hausman (1978)

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>ROA</th>
<th>BDIND</th>
<th>Tobin's Q</th>
<th>BDIND</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>-0.240 (-1.450)</td>
<td>0.052 (0.650)</td>
<td>1.877 (2.120)*</td>
<td>0.072 (1.730)*</td>
</tr>
<tr>
<td>BDIND</td>
<td>-0.656 (-0.500)</td>
<td>-0.113 (-0.420)</td>
<td>-10.899 (-1.540)*</td>
<td></td>
</tr>
<tr>
<td>ROA</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tobin's Q</td>
<td></td>
<td></td>
<td></td>
<td>-0.034 (-1.020)</td>
</tr>
<tr>
<td>BDSIZE</td>
<td>0.083 (1.590)*</td>
<td>0.037 (1.440)*</td>
<td>1.091 (3.730)***</td>
<td>0.057 (1.890)</td>
</tr>
<tr>
<td>FREQUENCY</td>
<td>0.004 (1.380)</td>
<td>0.001 (0.900)</td>
<td>0.023 (1.610)</td>
<td>0.001 (0.990)</td>
</tr>
<tr>
<td>CEOD</td>
<td>-0.041 (-1.140)</td>
<td>0.000 (0.040)</td>
<td>-0.224 (-1.120)</td>
<td>-0.007 (-0.480)</td>
</tr>
<tr>
<td>CEO Power</td>
<td>-0.025 (-0.340)</td>
<td>-0.001 (-0.040)</td>
<td>-0.529 (-1.310)</td>
<td>-0.016 (-0.560)</td>
</tr>
<tr>
<td>CEO Gender</td>
<td>0.025 (0.540)</td>
<td>-0.044 (-0.180)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CEO Tenure</td>
<td>0.010 (2.170)</td>
<td></td>
<td></td>
<td>0.006 (1.030)</td>
</tr>
<tr>
<td>DIROWN</td>
<td>0.123 (1.480)</td>
<td>0.009 (0.290)</td>
<td>0.640 (1.420)</td>
<td>0.005 (0.260)</td>
</tr>
<tr>
<td>INSTOWN</td>
<td>-0.005 (-0.070)</td>
<td></td>
<td>0.275 (0.860)</td>
<td></td>
</tr>
<tr>
<td>DR</td>
<td>0.047 (1.690)</td>
<td>-0.001 (-0.100)</td>
<td>0.713 (4.660)***</td>
<td>0.018 (0.740)</td>
</tr>
<tr>
<td>LIQ</td>
<td>0.003 (0.580)</td>
<td></td>
<td>-0.012 (-0.650)</td>
<td></td>
</tr>
<tr>
<td>AGE</td>
<td>0.040 (1.100)</td>
<td>-0.014 (-1.060)</td>
<td>-0.134 (-0.670)</td>
<td>-0.010 (-0.740)</td>
</tr>
<tr>
<td>SIZE</td>
<td>0.009 (0.950)</td>
<td>0.001 (0.200)</td>
<td>-0.022 (-0.440)</td>
<td>-0.004 (-0.870)</td>
</tr>
<tr>
<td>GROWTH</td>
<td>0.004 (0.650)</td>
<td>0.000 (0.180)</td>
<td>0.033 (0.990)</td>
<td>0.001 (0.590)</td>
</tr>
<tr>
<td>RISK</td>
<td>0.004 (0.380)</td>
<td>0.005 (2.130)</td>
<td>0.175 (3.410)***</td>
<td>0.011 (1.650)</td>
</tr>
<tr>
<td>System Weighted Mean Square Error</td>
<td>1.299</td>
<td></td>
<td>2.723</td>
<td></td>
</tr>
<tr>
<td>Degrees of Freedom</td>
<td>1308</td>
<td></td>
<td>1304</td>
<td></td>
</tr>
<tr>
<td>System Weighted R-Square</td>
<td>0.112</td>
<td></td>
<td>0.234</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>857</td>
<td>857</td>
<td>857</td>
<td>857</td>
</tr>
</tbody>
</table>

This table presents the summary results of the relationship between board independence and firm performance under different performance measures.

The t-statistics are presented in parentheses. **p < 0.05; *p < 0.10; ***p < 0.01.
test, which is used because when endogeneity is present, the Ordinary Least Square (OLS) estimate is inconsistent and instrumental variable techniques are used to address endogeneity. As suggested in Gujarati (2003) and following Rashid (2013), the F-test for the predicted value of board independence was found to be significant with respect to ROA performance measure. Thus, the null hypothesis of no endogeneity with respect to ROA is rejected ($F = 4.82, p = 0.0285$). This finding indicates that the OLS estimates are potentially biased and inconsistent.

7.3. Regression analysis (Three-stage least squares)

The regression coefficients of the relationship between board independence and firm performance using 3-SLS are presented in Table 4. The regression coefficients show that the signs of the coefficients of board independence are as expected: there is a negative relationship between board independence and firm performance under both the performance measures (though not significant under ROA performance measure). Thus, it can be concluded that board independence does not influence firm performance in the context of Bangladesh.

It is noted that the signs for board size are in the expected directions and significant under both the performance measures. It is also in the expected directions and significant in board independence equation. The frequency of board meetings’ does not influence firm performance under any of the performance measure. Thus, board meetings are waste of time, which is consistent with the findings of Vafeas (1999). CEO duality, CEO Power and CEO Gender have no favourable impact on firm performance, implying that excessive CEO domination may be harmful to the firm. Both the insider (director) ownership and outsider (institutional) ownership have no significant influence on firm performance. The sign of the debt ratio is in the expected direction only under the market performance measure. This finding implies that financiers have little role in influencing firm performance. This is not surprising as companies in Bangladesh, which can easily find bank financing, can bypass their covenant claims and simply keep an arm’s-length relationship with banks (Rashid, 2011; Rashid & Hoque, 2011). The signs of the coefficient liquidity, firm age, firm growth and firm risk are in the expected directions under ROA performance measure, however, none of these are significant. The sign of the risk is positive and significant under Tobin’s Q performance measure implying that risk is a potential factor that may influence firm performance.

8. Discussion and conclusion

This study examines whether board independence and firm performance influence each other in Bangladesh. The finding of this study is that, board independence and firm performance does not positively influence each other. Although it is widely believed that outside directors will promote shareholders' interests due to their legally vested responsibility and although board independence is recommended in many international corporate governance codes of best practices, this is not the case in Bangladesh. This finding is not surprising, however, as these directors failed to add value even in some developed economies (see Baysinger & Butler, 1985; Dalton & Daily, 1999; Hermalín & Weisbach, 1991; Grace et al., 1995; Rechn & Dalton, 1986). There are many reasons behind these findings. First, it is argued that insiders are the most effective directors because they have more information about the firm than outsiders and thus outside directors must rely on them to make decisions (Finkelstein & Hambrick, 1996, p 225). As stated by Nicholson and Kiel (2007, p 588): “inside directors live in the company they govern, they better understand the business than outside directors and so can make better decisions”. Outside directors are also limited in their abilities to issue commands and instructions because they do not ordinarily have the formal authority to do so (McNulty & Pettigrew, 1996). Second, new outside board members who are proposed by inside board members may also have relationships with them. Finally, many outside directors may not be competent to perform their assigned tasks as many of them are part-timers and lack inside information about the firm (Brennan, 2006). This type of information asymmetry may reduce the control role of the firm’s outside directors. Outside directors often serve on more boards as they grow older due to the lack of service age limits (Core, Holthausen & Larcker, 1999), which may also influence their monitoring ability. More than 50% of the WorldCom board was composed of non-executive directors; however, the board could not prevent WorldCom's bankruptcy (Kaplan & Kiron, 2004).
9. Implications

These findings raise the questions of whether corporate governance practices can be transplanted or whether ‘one size fits all’ type corporate governance practices can be exercised around the world. It should be noted that Bangladesh has imitated the requirement of outside directors serving on corporate boards from Anglo-American countries to make its corporate boards independent and accountable, ignoring the underlying institutional differences. Similar to other developing countries, Bangladesh may have adopted the convergence of corporate governance practices due to pressures arising from globalisation and local socio-politico-institutional environments (Jamali, Safieddine & Rabbath, 2008); however, the regulatory requirement to have outside independent directors serving on corporate boards in Bangladesh does not converge with the qualifications and expertise of these directors and the conditions that make them independent in other developed countries. According to the 2003 Higgs Report, “a non-executive director is considered to be independent when the board determines that the director is independent in character and judgment and there are no relationships or circumstances which could affect, or appear to affect, the directors’ judgment”. The United Kingdom’s 1992 Cadbury Report recommends that board include high calibre directors, and the 2003 Tyson Report recommends the appointment of non-executive directors with diverse backgrounds, skills and experiences to enhance board effectiveness and improve the board’s relationship with stakeholders. The Cadbury Report also suggests that independent directors should not be former company executives, and the Higgs Report concurs in stating that a non-executive director is not independent if s/he is a former employee or had any other material connection with the company within the previous five years. Bangladesh is no exception to this. A number of independent directors who were appointed following the Corporate Governance Notification were former company executives who managed to gain a position on the board after stepping down or retiring (Rashid, 2011). Thus, independent directors on Bangladeshi corporate boards may not actually be independent, possibly leading to a compromised control function on the part of the board. A reasonable caution must be exercised before appointing an independent director into the board and regulators must oversee such appointment of outside independent directors.

Theoretical implication of this study is that, this study supports agency theory. Agency theorists suggest that due to the separation of ownership and control, board effectiveness plays a critical role in protecting shareholders (Braun & Sharma, 2007). It is debatable whether there is a real separation of ownership and control in Bangladesh, however, and the dominance of family control leads to questions of whether boards are able to provide any independent advice. Sobhan and Werner (2003) noted that directors who would fit the definition of ‘independent’ in Bangladesh are often current or former government officials or bureaucrats who are appointed to help companies obtain licenses or as payback for previous favours. When boards need an independent opinion they rely on hired outside consultants or advisors. The implication for practitioners is that regulators need to consider the qualifications, expertise and legitimacy of outside independent directors.

10. Limitations

This study has several possible limitations. First, the performance measures used in this study may be problematic because accounting standards and their enforcement are very poor in developing countries. Thus, annual reports may not be a true representation of a company’s state of affairs and performance. Moreover, it is argued that accounting profits are subject to manipulation (see Healy, 1985; Chakravarthy, 1986; Capon, Farley & Hoenig, 1996, p 89). Similarly, the market performance measure (Tobin’s Q) used in this study may be problematic. To apply the stock market performance of the firm, its stock prices must reflect the firm’s true value (Lindenberg & Ross, 1981). Market based performance measures are also criticised because they may not be ‘efficient contracting parameters’ or be “driven by many factors beyond the control of firm executives” (Bacidore, Boquist, Milbourn & Thakor, 1997, p 11). Bangladesh is not exception to this. The Bangladeshi stock market underwent major turmoil in 1996 and 2011 that led to market collapse, even though the market was outperforming the markets of many developed economies before it collapsed (see Rashid, 2011). Secondly, the accounting data were collected from a large number of observations of different corporate entities while ignoring the underlying differences in organisations (Deegan, 2006). Finally, the extreme values of some observed variables, such as EBIT and the accumulated profits of a few firms for certain years, may severely impact the outcome of this study. Noting the study limitations outlined above, future studies that examine the relationship between board independence and agency cost or firm efficiency should be carried out.
Agency cost or firm efficiency can be measured as: (a) the expense ratio (ER) and (b) the asset utilisation ratio (AUR) or assets turnover ratio, also known as agency cost (see Ang et al., 2000; Rashid & Hoque, 2011; Rashid, 2013; Singh and Davidson, 2003).

Acknowledgements

The authors would like to confirm that there is no conflict of interest including any financial, personal or other relationships with other people or organisations within three years of beginning the submitted work that could inappropriately influence, or be perceived to influence, their work.

References


Solomon, J. (2007). Corporate governance and accountability (Second ed.). Chichester: John Wiley and Sons Ltd.


**Afzalur Rashid, PhD, CPA** is a Senior Lecturer in Accounting at the University of Southern Queensland, Australia. The major areas of his research interest are in Corporate Governance, Corporate Social Responsibility Reporting, Corporate Intellectual Capital Reporting and Earnings Management. He presented papers at several international conferences in Australia and New Zealand, Canada, Malaysia, the United Kingdom and the United States of America. He also has his articles published in different international refereed journals: *Academy of Taiwan Business Management Review; Australasian Accounting Finance and Business Journal; Corporate Board, Roles, Duties and Composition; Corporate Ownership and Control; International Journal of Learning and Intellectual Capital; International Journal of Management; International Research Journal of Finance and Economics; Journal of Applied Business and Economics; Journal of Business Ethics, Journal of Management and Governance; Research in Accounting in Emerging Economies and Social Responsibility Journal*. He is the editor-in-chief of Australian Academy of Accounting and Finance Review, Editor of Australasian Journal of Law, Ethics and Governance. He served as 'Corporate Governance Section' Editor of Journal of Business Ethics.