Corporate governance in developing countries: a case study of Bangladesh

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Wollongong University

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Corporate Governance in Developing Countries: A Case Study of Bangladesh

This thesis is submitted in the fulfillments for the award of degree

Doctor of Philosophy

From

University of Wollongong

By

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Certification

I, Md. Afzalur Rashid declare that this thesis, submitted in fulfillment of the requirement for the award of Doctor of Philosophy, in the Faculty of Commerce (School of Accounting and Finance), University of Wollongong, is wholly my own work, unless otherwise referenced or acknowledged. This document has not been submitted for fulfillment of the any other award or qualification at any other academic institution.

Md. Afzalur Rashid
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List of Abbreviations

ADB    Asian Development Bank
AGM    Annual General Meeting
AIMS   Asset and Investment Services of Bangladesh
AMEX   American Stock Exchange
BAS    Bangladesh Accounting Standards
BB     Bangladesh Bank
BEI    Bangladesh Enterprise Institute
BIAM   Bangladesh Institute of Administration and Management
BIMSTEC Bay of Bengal Initiative for MultiSectoral Technical and Economic Cooperation
BOI    Board of Investment
BSB    Bangladesh Shilpa (Industrial) Bank
CCGFS  Centre for Corporate Governance and Finance Studies
CDBL   Central Depository Bangladesh Limited
CDS    Central Depository System
CIRAP  Center for Integrated Rural Development for Asia and Pacific
CMDP   Capital Market Development Program
CRAB   Credit Rating Agency of Bangladesh Ltd.
CSE    Chittagong Stock Exchange
D-8    D-8 Organization for Economic Cooperation
DFI    Development Finance Institutions
DSE    Dhaka Stock Exchange
DVP    Delivery Versus Payment
FDI    Foreign Direct Investment
EPS    Earnings Per Share
FCB    Foreign Commercial Banks
FRC    Financial Reporting Council
IASB   International Accounting Standards Board
ICB    Investment Corporation of Bangladesh
ICAB   Institute of Chartered Accountants of Bangladesh
ICMAB  Institute of Cost and Management Accountants of Bangladesh
IOSCO  International Organization of Securities Commissions
IFRS   International Financial Reporting Standards
Abstract

Following the large number of corporate collapses around the world and their profound impact on investors, most research on corporate governance has focused on the mature market situations of developed countries, such as the United States, the United Kingdom, Germany and Japan, investigating whether a control mechanism promotes accountability. Remarkably, there is a dearth of studies on corporate governance in developing countries, such as Bangladesh.

Although, there is no serious corporate scandal in Bangladesh to undermine investors’ confidence, corporate governance issues have still been prevalent in Bangladesh for few reasons. For example, the existing corporate governance best practices are not comprehensive and adequate. There is no legislative guidelines for controlling share ownership, no legislative guidelines for the directors’ duties even no legislative guidelines for the appointment of independent directors. Therefore, the company directors are sometimes found to be involved in malpractice and the firm level poor corporate governance practices was identified. This study aims at examining the relationship between various corporate governance mechanisms (such as, ownership structure, board practices, compensation and capital structure) and firm performance. While doing so, this study explains the alternative corporate governance models around the world and attempts to frame a theoretical model of corporate governance in Bangladesh. It is revealed that, similar to corporations in Germany, Japan and East Asia, the corporate control mechanisms in Bangladesh are mostly insider oriented; such as ownership structure and in general, the board of directors. Some of the important external control mechanisms, such as market for corporate control or takeovers are largely absent in Bangladesh corporate sector. Due to the absence of a liquid capital market some other dominant control mechanisms, such as compensation in the form of
stock options, debt covenant and effects of dividend policy in corporate monitoring are also absent in Bangladesh corporate sector. However, similar to corporate boards in Anglo-American countries, there is the representation of the outside independent directors on the corporate boards in Bangladesh.

Pursuant to the control mechanisms identified in this study, it is further investigated whether these control mechanisms influence the firm performance (promotes accountability) in Bangladesh. More specifically, by using 2-Stage Least Square (2SLS) regression analysis, this study investigated whether different control mechanisms, such as ownership structure, board practices, executive compensation and capital structure influence the firm economic performance in Bangladesh.

The empirical findings suggest that firms with majority ownership by insiders are over performing than any other ownership group. A significant positive relationship is found between the blockholding by directors and/or managers and firm performance. However, no significant relationship is found between the institutional ownership and firm performance and outsider ownership and firm performance. It is further revealed that the firm performance enhances within a certain level of insider ownership, implying that a certain level of insider ownership is good for the overall health of the company. These findings suggest that the effective owners’ involvement in the firms may reduce the agency conflict and may enhance firm performance. The empirical findings of the relationship between board composition and firm performance suggests that the board composition in the form of proportion of outside independent directors can not influence the firm performance. The empirical finding of the relationship between CEO duality and firm performance suggests that the CEO duality does not influence the firm performance. The empirical findings of the relationship between the ownership structure, firm size and executive pay suggest that there is a significant
positive relationship between ownership structure and executive pay; executive pay and firm size. However, there is no conclusive evidence of pay-performance sensitivity. The significant relationship between executive pay and firm performance is found only under the Tobin’s Q performance measure. The weak association between pay and performance suggests that executive compensation as a governance mechanism may not be suitable in the context of Bangladesh. This is probably due to the absence of a liquid capital market in Bangladesh. The empirical findings of the relationships between the capital structure and agency cost, and capital structure and firm performance suggest that capital structure can not reduce the agency cost. However, capital structure can influence the firm performance only under the market based performance measures. It implies that the lenders have very little role in firm governance in Bangladesh.

Although this study supports the number of earlier studies, it could not provide the conclusive evidence on some important issues. The differences in the results from earlier studies suggest that corporate governance problem in Bangladesh may not be similar to that of other countries. The diversity of this study with the earlier studies implies that the ‘one size does not fit all’ or one set of governance arrangements may not be suitable for every country.

Based on both the theoretical discussions and empirical investigations, it is apparent that the corporate governance practices need to be improved in Bangladesh. Therefore, this study finally seeks to assist the regulatory body in framing and/or improving the corporate governance best practice/guidelines for Bangladeshi firms.

**Keywords:** Accounting Standards, Agency Cost, Audit, Bangladesh, Bankruptcy, Board, CEO, Corporate Collapse, Conflict, Control, Corporate Governance, Corruption, Emerging Economy, Ownership Structure, Capital Structure, Performance, Scandal.
Acknowledgment

I am very grateful to the almighty Allah, who must have given me the opportunity in doing such a work. Teaching is worth nothing without research. Research enables academics to enrich their knowledge from the existing literature and to develop new areas to fill the gaps in literature. Teaching becomes effective if the outcomes of the academic research can be incorporated into the teaching. Keeping in mind all of these I was primarily motivated to enroll into the Ph.D. Program. In this day I remember my former teacher, Professor A. Z. M. Anisur Rahman who inspired me for the first time to start the Ph. D. program when I came to the academic arena through his guidance in 1996.

I am also grateful to a number of academics, colleagues and friends who extended various support in various ways while I was doing this work. Before starting my work at Wollongong, I did not have any research experience and it is my initial supervisor, Associate Professor Hema Wijewardena, who gave me many ideas in doing my research work. I recognize his expertise in supervising research students. He also motivated me to present my progress at School Seminars and in different international conferences. He also reviewed my work with patience. I am very grateful to him. After Hema’s retirement from the University of Wollongong, I was in the boat without a paddle (no governance). To fill this gap Dr Anura De Zoysa kindly came forward and Dr Kathy Rudkin joined this team later. It is Anura and Kathy, who provided continuous support and ultimately guided me in producing this thesis. They reviewed my work with patience after Hema’s retirement.

I acknowledge the support of my former teacher, Dr. Monir Zaman Mir, (former Lecturer, School of Accounting and Finance, University of Wollongong; currently the Associate Professor of the University of Canberra) who encouraged me to
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Md. Afzalur Rashid
Dedicated to

My father who has long deserved me to become a doctorate
and my mother, my wife and my only beloved daughter
Chapter 1  

"The journey of a thousand miles even starts from a single step."

Confucius (551BC – 479BC)

1.1 Introduction

The concept of a company developed in the mid-nineteenth century\(^1\) was merely considered as an entity to earn profit (make money). However, in the twentieth century a company is seen as part of the business community as well as the local community and broader society. Companies operations help the community by distributing goods and services, creating jobs and enhancing social activities and values (Solomon and Martin, 2004). Due to globalization, technological innovation and large scale business operations in twentieth century the world saw a massive development of corporate entities. The corporate form attracted funds from beyond regional boundaries. However, due to the large scales of business operations, the problem of separation of ownership and control became acute as company operations became more complex. Company laws were found not to be adequate in guiding company operations. Boards were found to be either unaware or willfully indisposed to address the complexity of business procedures, which is exemplified by collapse of Enron, WorldCom and HIH Insurance. The scandal in the French bank ‘Societe Generale’ pointed to the drawback of technological innovation. The Asian Financial Crisis 1997 (as discussed in part 1.6) demonstrated that good governance is equally important to attract foreign capital. The 'Global Financial Crisis 2008' as a result of the sub-prime mortgage crisis leading to a large number of private and public bankruptcies necessitates the good corporate governance. Corporate failures harmed many individual investors and society as a whole. Therefore the company operations attracted significant attention to the individuals, investors, local communities, and even governments. Although in the

\(^1\) The Joint Stock Companies existed even before that. For example, the Dutch East India Company was established in 1602 and the Virginia Company was chartered to establish by James I in 1606. There is an ideological difference between these companies and those formed under the company concept developed in the mid-nineteenth century. The Dutch East India Company was established to carry out colonial activities in Asia and the Virginia Company was chartered to establish settlements activities on the coast of North America. The company concept developed in the mid-nineteenth century as a form of business ownership for greater capital potentiality or due to capitalist ideology.
twentieth century there was a massive development of corporate form, the twenty first
century will be the century of governance. In the words of Tricker (2000, p xiii),

The twenty first century promises to be the century of governance, as the
focus swings to the legitimacy and the effectiveness of the wielding of
power over corporate entities worldwide.

As part of the above governance commitment reactionary structural changes
(governance reforms) have been instigated in many developed countries, such as the
introduction of Cadbury Committee Report 1992 in the United Kingdom and Sarbanes-
Oxley Legislation 2002 in the United States. However, such reactions in less developed
and emerging economies are almost absent (Tsamenyi and Uddin, 2008).

An important question always rises to what extent the corporate governance
problems of developing countries are similar to that of developed countries; to what
extent the developing countries are able to handle the governance problems those are
experienced in developed countries.

Bangladesh is a developing country in Asia. Among many other problems, the
corporate governance problem is not very isolated. This study on corporate governance
is conducted in less developed and emerging economies context by considering
Bangladesh as a case study. This study seeks to improve the corporate governance
practices in Bangladesh which may help enhance the firms’ legitimacy and
performance; balancing the society’s interest at large. It would be very helpful in
understanding the term corporate governance, which is explained in the next paragraph.

1.2 Corporate Governance

Corporate governance encompasses the relationship and interaction among
different interested parties in a corporation, such as a company’s management, board of
directors, shareholders and other stakeholders. The term corporate governance came
from the Latin word “gubernare” which means ‘to steer’ (Farrar, 2005; Solomon,
2007). The French word “gouvernance” means to ‘to control’. This term was used for
the first time in 1962 by Richard Eells, an academic of Colombia Business School in
governance’ carries different meanings in different literatures and academics see
corporate governance from different points of view. For example, corporate governance
is defined as “a set of mechanisms” (La Porta et al, 2000, p 4), “both institutional and market based” (Denis and McConnell, 2003, p 2), to fill “any holes left in incomplete contract, but remains irrelevant for complete contracts” (Boot and Macey, 2004, p 361), “arises as a response to the agency problems that arise from the separation of ownership and control in a corporation” (Boubakri et al, 2005, p 370). Another view is corporate governance “deals with the ways in which suppliers of finance to corporations assure themselves of getting a return on their investment” (Shleifer and Vishny, 1997, p 737). Most of these views are the ‘agency theory’ view of ‘corporate governance’.

The United Kingdom Cadbury Report (Cadbury, 1992, p 15) defined corporate governance as “the system by which companies are directed and controlled”. Sir Cadbury also proposed a broader understanding of the concept, emphasizing the balance between economic and social goals, individuals and communal goals when he stated,

Corporate governance is concerned with holding the balance between economic and social goals and between individual and communal goals. The corporate governance framework is there to encourage the efficient use of resources and equally to require accountability for the stewardship of those resources. The aim is to align as nearly as possible the interests of individuals, corporations and society. (Sir Adrian Cadbury, cited in World Bank, 1999, p vi).

Blair (1995, p 3) also defined corporate governance in broader context covering the legal, cultural and institutional arrangements stating,

…..the whole set of legal, cultural, and institutional arrangements that determine what publicly traded corporations do, who controls them, how that control is exercised.

An alternate and narrower understanding emerging from financial market approaches to define corporate governance is found in the finance literature. This is typified by the definition of corporate governance given by the Asian Development Bank (2000, p 5), which describes corporate governance as “(i) a set of rules, that define the relationship between shareholders, managers, creditors, the government and stakeholders, (ii) a set of mechanisms that help directly or indirectly to enforce these rules”.

3
The Organization for Economic Cooperation and Development (2004, cited in OECD, 2005, p 3) probably provided the most comprehensive and complete definition of corporate governance, stating,

Corporate governance is the system by which business corporations are directed and controlled. Indeed, the corporate governance structure specifies the distribution of rights and responsibilities among different participants in the company, such as the board, managers, shareholders and other stakeholders, and spells out the rules and procedures for making decisions on corporate affairs. By doing this, it also provides the structure through which the company objectives are set and the means of attaining those objectives and monitoring performance.

From the above definitions it appears that corporate governance emerged from the corporate form and its origin in capitalist ideology. The separation of ownership from control creates a need for a balance between economic and social goals, and between individual and communal goals. The fundamental objective of corporate governance is to manage the corporation in such a way that will ensure better performance, and align the interest of shareholders to other stakeholders and society.

1.3 Why Good Corporate Governance?

Due to large a number of recent corporate collapses (which is discussed in part 1.5) good corporate governance has emerged as a global issue. However, there is no single universal model of good corporate governance (ASX, 2003; OECD, 2004a, p 13). McKinsey and Company (2002), suggest that “good” governance include the following characteristics; (i) a transparent ownership, (ii) an accountable board, (iii) a majority of outside independent directors with no ties to management; (iv) the use of internationally recognized accounting standards for both annual and quarterly reporting etc. It can be argued that good corporate governance may effectively safeguard the interests of the shareholders and other stakeholders by providing proper mechanisms or adequate incentives to the management.

Dayton (1984, p 34), argues “if the management is the face of the coin, good governance is its other side”. Good governance can “increase the creation of wealth by improving the performance of honestly managed and financially sound companies” (Bosch, 2002, p 271). It may enable the firm to be sustained in the globally competitive
business environment and to achieve its corporate objectives. Good corporate governance is also “essential in safeguarding a company’s assets, maintaining and enhancing investors’ confidence and reducing the potential risk associated with fraud” (Burton et al, 2004, p 353). It enables firms to access capital markets on better terms, which is valuable for firms intending to raise funds (Doidge et al, 2007). “…..companies with better corporate governance guarantee, the payback to the shareholder and limit the risk of the investment” (Aluchna, 2009, p 187). The Organization for Economic Cooperation and Development (1999, p 7), stated why good corporate governance is an important global issue:

A good corporate governance regime helps to assure that corporations use their capital efficiently. Good corporate governance helps to ensure that corporations take into account the interest of the wide range of constituencies, as well as the communities within which they operate, and that their boards are accountable to the company and the shareholders. This in turn helps to assure that corporations operate for the benefit of the society as a whole. It helps to maintain the confidence of investors—both foreign and domestic and to attract more ‘patient’, long term capital.

1.4 Historical Background

Corporate governance practice is relatively old (Tricker, 2000). It has existed since the birth of the limited liability corporation and it dramatically evolved from the mid-nineteenth century following the introduction of Companies Acts of 1855 and 1862 in England (Vinten, 1998; Tricker, 1994b; Tricker, 2000).

There was concern about managing large corporations from scholars such as Smith (1776), Berle and Means (1932) and Jensen and Meckling (1976), although they did not formally use the term ‘corporate governance’ which was scarcely used in the academic arena at that time. Adam Smith (Smith, 1776, revised edition 1976) in his “An Inquiry into the Nature and Causes of the Wealth of Nations” expressed the concern about the joint stock companies, stating,

The directors of such companies, however, being the managers rather of other people’s money than of their own, it cannot well be expected that they should watch over it with the same anxious vigilance with which the
partners in a private copartnery frequently watch over their own. Like the stewards of a rich man, they are apt to consider attention to small matters as not their master's honor, and very easily give themselves a dispensation from having it. Negligence and profusion, therefore, must always prevail, more or less, in the management of the affairs of such a company (Smith, 1776, p 741).

In his theory of the invisible hand, Smith (1776, revised edition 1976) also believed that joint stock companies could never prosper because managers have no incentives to care for the interests of widely dispersed shareholders, as he stated,

Every individual, neither intends to promote the public interest, nor knows how much he is promoting it. ............ He intends only his own gain, and he is in this, as in many other cases, led by an invisible hand to promote an end which was no part of his intention (p 456).

Tricker (2000) and Denis (2001) reviewed recent research in corporate governance. Without undermining the work of Smith (1776) and Berle and Means (1932), they argued that, research into corporate governance expanded in the 1980s following the work of Jensen and Meckling (1976), Mintzberg (1984) and Baysinger and Butler (1985). The research on corporate governance throughout the 1970s and 1980s mainly focused on U. S. corporations, and it was only by the early 1990s, that the research on corporate governance concentrated on the other countries (Denis and McConnell, 2003). The research on corporate governance entered into a new phase in the mid 1990s, with the work of Rafael La Porta, Florenzio Lopez-de Silanes, Andrei Shleifer and Robert Vishny-the so called ‘gang of four’ (Walker and Fox, 2002). It has moved from the academic realm into the institutional debate, and various measures were taken by governments and government agencies around the world (Berglöf and von-Thadden, 1999; Alves and Mendes, 2004).

1.5 Corporate Governance Issues in Developed Economies

Although “the failure of communism has reinforced the hegemony of market ideology” (Turnbull, 1997, p 186), the collapses of the bright stars, such as Enron, WorldCom, Parmalat, and HIH Insurance from the corporate sky due to the greedy CEOs and accountants proved that there is a black hole in capitalism. The recent series of collapse and scandals in many corporations in developed economies, such as Ansett
Airlines, Harris Scarfe, HIH Insurance\(^2\) and One Tel in Australia; Global Crossing in Bermuda; Cinar, Nortel and Hollinger in Canada; Aremissoft in Cyprus; Navigation Mixte Suez and Vivendi in France; Berliner Bank, Bremer Vulkan, Holtzman, Mannesmann and Metallgesellschaft in Germany; Ferruzzi and Parmalat in Italy; Sumitomo and Tokyo Electric Power in Japan; Lernout and Hauspie in Korea; Xerox in Mexico; Ahold in the Netherlands; Gazprom in Russia; Air New Zealand in New Zealand\(^3\); Banesto and Seat in Spain; Swissair in Switzerland; Maxwell, BCCI and Polly Peck International in the United Kingdom and Enron (it is the second largest bankruptcy in the U. S. corporate history), Penn Central Railroad, Q West, Tyco International and WorldCom (it is the largest bankruptcy ever) in the United States triggered the corporate governance debate in the developed economies. In response to the corporate collapses and scandals around the world, government and governmental organizations in many countries around the world developed the corporate governance ‘code of best practices’ which is discussed in part 1.7.

1.6 Corporate Governance Issues in Emerging Economies

The corporate governance debate was triggered in emerging economies following the collapse of the East Asian Financial Market with the sudden exit of foreign capital investment in 1997. The East Asian Financial Crisis, (which was described by World Bank as ‘East Asian Miracle’) was initialized when Japan declared its intention to raise interest rates to defend the yen. The crisis emerged following the Thai Government’s declaration of a devaluation of their currency, to correct their balance of payment problem on 2\(^{nd}\) July 1997 (Richardson, 1998).

The crisis began with a mild panic or loss of confidence by the domestic and international investors that had no real foundation and was made serious only by the International Monetary Fund (IMF) pressure to increase interest rates and to close down banks (Radelet and Sachs, 1998a; 1998b; Marshall, 1998; Wade and Veneroso, 1998; Chang and Velasco, 1999). It led to the fall in capital inflow, a sudden shift in the

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\(^2\) HIH Insurance was the second largest general insurance company in Australia. Westfield (2003) argues that HIH is the biggest corporate collapse in Australia. The collapse of HIH was much debated in Australia.

\(^3\) This is not the collapse, however, it became New Zealand’s largest corporate loss ever and by the end of the financial year 2001 it had an accumulated loss amounted to NZ $ 1.4 billion (Lockhart and Taitoko, 2004, p 3)
market expectation and confidence, and market collapsed with a sudden exit of foreign investment.

The adequacy of corporate governance was questioned following the collapse of the East Asian Financial Market in 1997, including the accountability and transparency of the financial system that led to the Asian financial crisis (Radelet and Sachs, 1998b; Lanyi and Lee, 1999; International Monetary Fund, 2000; Wong, 2000; Johnson et al, 2000; Machold and Vasudevan, 2004; Nam and Nam, 2004; Tsamenyi and Uddin, 2008). The Asian Development Bank (2000) in a study on the affected countries specifically identified a number of corporate governance issues leading to the crisis, such as highly concentrated ownership structure, poor monitoring by the board of directors, non-regulation in the securities market, corporate financing, transparency and disclosure etc. stating,

............poor corporate governance was one of the major contributors to the building-up of vulnerabilities in the affected countries that finally led to the Asian Financial Crisis in 1997 (Asian Development Bank, 2000, p 2).

Claessens et al (2000) discussed the issue of 'corporate governance' and demonstrated that East Asian corporate performance began to deteriorate even before the outbreak of the crisis. This was due to high corporate debt-equity ratios and that excessive reliance on external debt financing, steep exchange rate depreciation and significant interest rate hikes which suddenly inflated external debt, measured in local currencies, and increased both domestic and foreign debt servicing obligations of corporations.

1.7 Corporate Governance Code of Best Practices

Corporate governance practices are needed as long as there was a governance failure. The governance failure in the early 1700s of a secondary banking crisis and the South Sea Bubble4, revolutionized business laws and practices such as, the Bubble Act 1720 in England (Kondap, 2004, p 21). The Bubble Act 1720 prevented the companies from acting as a body corporate and from raising money by selling shares, without the legal authority of an Act of Parliament or by Royal Charter (Solomon, 2007).

In response to the large number of corporate collapses and scandals around the world, reactionary structural changes (governance reforms) have been instigated to

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4 The South Sea Company was established in 1710 and collapsed on 1st October 1720.
prevent such events happening again to protect the interest of investors. For example, the U. K. Cadbury Committee Report, 1992 was developed and published in response to the collapses of Maxwell Publishing Group, BCCI and Poly Peck (OECD, 2004b; Jonsson, 2005). It was the first report on corporate governance best practices published by the London Stock Exchange, which created much debate around the world. The second such influential report was the OECD Principles of Corporate Governance, 1999 (revised in 2004), which has “gained worldwide recognition as an international benchmark for sound corporate governance” (Jesover and Krikpatrick, 2005, p 127). The table 1 shows the corporate governance codes/reports published in different countries around the world, which is partly adapted from Tricker (2000), OECD (2004b), Becht et al (2005), Solomon (2007) and Zattoni and Cuomo (2008).

Table 1: Corporate governance codes/reports around the world

<table>
<thead>
<tr>
<th>Country</th>
<th>Code/ Report</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>Austrian Code of Corporate Governance 2002.</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>Corporate Governance Notification 2006.</td>
</tr>
<tr>
<td>Belgium</td>
<td>Cardon Report 1998, Belgian corporate governance code 2004</td>
</tr>
<tr>
<td>Brazil</td>
<td>Code of Best Practice of Corporate Governance 2004.</td>
</tr>
<tr>
<td>Cyprus</td>
<td>Corporate Governance Code 2002.</td>
</tr>
<tr>
<td>Country</td>
<td>Reference</td>
</tr>
<tr>
<td>--------------</td>
<td>---------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Greece</td>
<td>Mertzains Report 1999, Federation Greek Industries Principles 2001,</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>Hong Kong Code of Corporate Governance 2004.</td>
</tr>
<tr>
<td>Hungary</td>
<td>Corporate Governance Recommendations 2002.</td>
</tr>
<tr>
<td>India</td>
<td>Report of the Kumar Mangalam Birla Committee on corporate governance 2000.</td>
</tr>
<tr>
<td>Italy</td>
<td>Corporate Governance Code 2002 (revised).</td>
</tr>
<tr>
<td>Japan</td>
<td>Principles of Corporate Governance for Listed Companies 2004.</td>
</tr>
<tr>
<td>Korea</td>
<td>Code of Best Practice for Corporate Governance 2003 (revised).</td>
</tr>
<tr>
<td>Mexico</td>
<td>Codigo de mejores practicas corporativas 1999</td>
</tr>
<tr>
<td>New Zealand</td>
<td>Corporate governance in New Zealand: principles and guidelines 2004</td>
</tr>
<tr>
<td>Pakistan</td>
<td>Code of Corporate Governance (revised) 2002</td>
</tr>
<tr>
<td>Peru</td>
<td>Principios de buen gobierno para las sociedades 2002.</td>
</tr>
<tr>
<td>Poland</td>
<td>Best practice in Public Companies 2004, The CG Code for Polish Listed Companies.</td>
</tr>
<tr>
<td>Portugal</td>
<td>Recommendations on Corporate Governance 2003.</td>
</tr>
<tr>
<td>Slovakia</td>
<td>Corporate Governance Code 2002.</td>
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<tr>
<td>Slovenia</td>
<td>Corporate Governance Code 2005.</td>
</tr>
<tr>
<td>South Africa</td>
<td>King Committee Report for South Africa 2002.</td>
</tr>
</tbody>
</table>
---|---
Taiwan | Taiwan Corporate Governance Best-Practice Principles 2002.
Turkey | Corporate Governance Principles 2003.

However, most of the above codes/reports developed around the world are in the developed market context. It can be argued that the codes developed in the developed countries context are not in direct use of Bangladesh. The present study seeks to assist the regulatory body in framing and/or improving the corporate governance best practice/guidelines for Bangladeshi firms.

### 1.8 Motivation of This Study

Corporate governance research that emerged throughout the 1970s and 1980s largely focused the Anglo-American ‘rule-based’ model of corporate governance (which is most commonly found in the United States, the United Kingdom, Canada, Australia and New Zealand), known as ‘International Corporate Governance’ (Denis and McConnell, 2003). Most of this research concentrated on the mature market situations in the western developed countries investigating whether a control mechanism promotes accountability. Even the ‘first generation international corporate governance research’, was mainly devoted to investigating whether a suitable control mechanism promotes accountability in the developed market context (Denis McConnell, 2003). The dominant attributes of Anglo-American system are the prevailing legal and regulatory environment and it's ‘arm's length’ financing arrangements (Prowse, 1996).

It is questioned to what extent the international corporate governance practices which were mainly developed in the West are relevant to emerging economies, such as Bangladesh, that lack advanced markets, second-order institutions such as experienced investment bankers, lawyers and accountants to monitor markets, and an effective judicial system that is given discretion and legitimacy to apply fiduciary duties
(Paredes, 2005; Chuanrommanee and Swierczek, 2007). In other words, neither the codes nor the research in the developed market context is of direct use in the context of less developed and emerging economies, such as Bangladesh. All of these primarily motivated me to conduct this study.

1.9 Statement of the Problem

There is no serious corporate scandal in Bangladesh to undermine investors' confidence and the wave of Asian financial crisis did not affect the Bangladesh economy including the capital market and money market. This was due to the absence of foreign debt in Bangladesh corporate sector. However, corporate governance issues have been still prevalent in Bangladesh for a few reasons. For example, the existing corporate governance best practices are not comprehensive and adequate. There is no legislative guideline for controlling share ownership, no legislative guidelines for the directors' duties. Therefore, the company directors are sometimes found to be involved in malpractice, which is exemplified by the collapse of State Owned Enterprise Adamjee Jute Mills Ltd, the largest jute mills in the world, because of mismanagement and corruption (discussed in part 2.4), the inefficiencies and underperformance of privatized textile and jute mills (Bhaskar and Khan, 1995; Uddin and Hopper, 2003) in Bangladesh and the stock market collapse in 1996, which caused a material loss of thousands of small and first time investors, where the absence of firm level corporate governance was identified (discussed in part 2.5.5). It can be inferred from these events that the operation of good corporate governance is essential to the financial health of Bangladeshi companies.

1.10 The Research Questions

In addition to providing the unique insights of corporate governance in Bangladesh, this study empirically examines whether the various corporate governance mechanisms influence the firms’ economic performance. Based on the institutional settings in Bangladesh (described in Chapter 2); theoretical framework (described in Chapter 3), the following research questions are developed in this thesis. These are further developed into the testable hypothesis in Chapter 5.
1.1 Objectives of this Study

The objective of this thesis is to examine if the existing corporate governance mechanisms influence the firm economic performance in Bangladesh and to provide a policy guideline for reform. The specific objectives of this study are,

1. To provide an insight of corporate governance in Bangladesh. While doing so, this thesis describes the evolution of corporate governance in Bangladesh, highlighting the various internal factors, such as the historical background of laws and legal institutions, socio-cultural aspects, and the economic and political environments that constitute the current corporate governance regime in Bangladesh.

2. To identify the several institutional weaknesses and the key issues and challenges evident at firm level corporate governance.

3. To find a theoretical model in explaining the corporate governance and problems in Bangladesh.

4. To empirically examine if the specific governance mechanisms (such as, ownership structure, adequate supervisory arrangement, such as monitoring by the board, executive compensation and capital structure) influence the firm economic performance.
5. Further, following the Asian Financial Crisis 1997 and other recent corporate collapses corporate governance reform has become an important global policy agenda (Tsamenyi and Uddin, 2008). However, such reform in the context of Bangladesh is found to be inadequate. Therefore, based on both the theoretical discussions and empirical investigations, this study finally seeks to assist the regulatory body in framing and/or improving the corporate governance best practice/guidelines for Bangladeshi firms.

1.12 Significance of this Study

Although there are a few studies on corporate financial reporting in the context of Bangladesh, such as Ahmed (2004), Akhtaruddin (2005) and Karim et al (2006); to date there are very limited studies on corporate governance in Bangladesh apart from a few studies on corporate social responsibility. Belal (2001) conducted a study on corporate social disclosures. From 30 companies Annual Reports his study attempts to identify the extent of disclosures made by the firms. Belal (2008) conducted the similar study in the context of Bangladesh to examine whether the current practice of corporate social responsibility is motivated by a desire to discharge accountability to all relevant stakeholders or is mainly driven by corporate economic interests. Imam (2000a) also conducted the similar study based on 40 companies. However, none of these studies covered any aspects of corporate governance, such as ownership structure and/or board practices, compensation and capital structure. Rashid and Lodh (2008) in their study attempt to extend the earlier studies by examining whether ownership structure and board practices influence corporate social disclosures practices, but that study does not cover the wider aspect of corporate governance in Bangladesh. There are two studies (Farooque et al, 2007a, b) so far seen on corporate ownership structure and firm performance in the context of Bangladesh. However, these studies are conducted within a limited scope investigating only ownership structure and firm performance. This study has some fundamental differences from earlier studies of corporate governance in Bangladesh. This study provides an insight as well as empirically examines if specific corporate governance arrangements influence the firm economic performance in Bangladesh. The policy guidelines of this study may help framing and/or enhancing corporate governance practice/guidelines, which may help in instigating the reactionary structural changes in the Bangladesh corporate sector, thereby to ensure the efficiency.
and to promote accountability; to prevent the problems which have been experienced by other countries rather than to solve them after the event. This study also contributes to the ongoing research in accounting and/or finance literature in emerging economies and contributes to reducing the dearth of literature on corporate governance in Bangladesh. These are discussed in details below.

1.12.1 Corporate Governance in Emerging Economies

Although the Asian crisis triggered the importance of corporate governance in emerging economies, the study of corporate governance on emerging markets is limited to date. According to Kaplan (1994b), most of the corporate governance attention is focused on the United States, the United Kingdom and those of its strongest industrial competitors—Germany and Japan. Corporate governance in emerging economies has not been studied as intensively as in the developed markets (Shleifer and Vishny, 1997; Köke and Renneboog, 2002; Gibson, 2003; Denis and McConnel, 2003). There is a plethora of studies on corporate governance in developed countries such as the United States, the United Kingdom, Germany, Japan, Italy and Sweden, such studies in emerging economies are extremely sparse, where enforcement of law is poor and the investor’s protection is very low (discussed in part 2.6.6). This study may reduce the dearth of studies on corporate governance in less developed and emerging economies.

1.12.2 Corporate Governance Model in Bangladesh

The earlier studies on corporate governance (such as, Yammeesri, 2003 on Thailand and Lukviarman, 2004 on Indonesia) investigated whether the ownership structure may influence the firm performance. While these studies fit within the insider control systems (as described in part 2.8.1), these studies failed to ground an appropriate theory or explaining why the insider control system is applicable to those countries.

This study is also conducted within the insider control system. This study appropriately describes why insider control is applicable to Bangladesh corporate sector (in part 2.7.3). This study also attempts to frame a theoretical model of corporate governance in Bangladesh. While doing so, it examined the corporate governance practice of Bangladesh in the light of two dominate models of corporate governance, such as the ‘Anglo-American’ model and the ‘German-Japanese’ bank based model.
The comparison in this study reveals that many of the characteristics of the Bangladeshi context align with both the ‘Anglo-American’ model and ‘German-Japanese’ model. Therefore, this study describes the corporate control mechanisms in Bangladesh context as the hybrid of internal and external systems which can also be described as ‘emerging governance model’ of corporate governance (discussed in part 3.5.6). Such identification is helpful in investigating, whether a control mechanism may promote accountability in the Bangladesh corporate sector.

Further, in 2006 the Securities and Exchange Commission Bangladesh published the ‘Corporate Governance Notification 2006’ for the listed companies in Bangladesh (discussed in part 2.8.1 and provided in Appendix 3). This notification specifically gave some guidelines regarding the requirements of the ‘board of directors’ such as the ‘board size’, position of ‘independent’ or ‘non-shareholders directors’ in the board, definition of the CEO and Chairperson and thereby the guidelines for holding the post of CEO and the chairperson, requirement and constitution of the ‘audit committees’ etc. Although, the ‘Corporate Governance Notification 2006’ is the ever published most comprehensive guidelines for corporate governance in Bangladesh, it has a number of limitations. For example, there is no legislative guideline for controlling share ownership, no legislative guidelines for the directors’ duties even no legislative guidelines for the appointment of independent directors.

The corporate governance notification brought an opportunity to study whether these guidelines are appropriate to strengthen the corporate governance practice by Bangladeshi firm; however, no empirical study is conducted so far. It is observed that there is a lack of academic resources in less developed and emerging economies and the academics do not find a real motivation in doing such research; therefore there is a literature gap. Bangladesh is not exception to this. Therefore, this study is conducted to justify whether these guidelines will be appropriate to restore the corporate governance efficiency in Bangladeshi firms. This study in turn will enable,

(a) The regulatory body in framing and/or improving the corporate governance best practice/guidelines.

(b) The regulatory bodies, policy makers in enhancing the legitimacy of corporate governance in Bangladesh. It may also promote the efficiency, accountability and corporate governance best practices at firm level, which may attract more funds and may also ensure the long term firm
performance; may help prevent the problems which have been experienced by other countries rather than to try to solve them after the event.

1.12.3 Set of Governance Mechanism

A growing number of studies on corporate governance have been conducted on a single governance mechanism framework; the set of governance mechanism had not been adequately studied. In the words of Heinrich (2000),

……most research to date has been based on models which focus on a single governance instrument to the neglect of all others (p 1).

Further, Denis and McConnell (2003) argued that there are large bodies of evidence on individual corporate governance mechanism in the U. S. and there is much less published evidence addressing the interrelationships among them. While one mechanism may be effective in one specific context, it may not be effective in other situation or arrangements. For example the concentrated ownership may reduce the agency problems, but it makes the risk sharing problem. This study will examine the set or a bundle of governance mechanism, which may suggest the optimal governance mechanism.

1.12.4 Diversity of Outcomes in the Earlier Studies

Although there are growing numbers of studies on corporate governance research, the outcomes of the empirical evidences on these studies are diverse and non-conclusive, as Kakabadse et al (2001) remarked,

…….although there is a growing literature linking the corporate governance and firm’s performance however, there are equal diversity of results (p 24).

Such diversity is sometimes explained as endogeneity. Denis (2001) argues that endogeneity is an important factor, but not fatal in doing empirical corporate governance research. It may cause researchers to fail to find a relationship where on actually exists. Joh (2003) argues that a study focusing a specific country can avoid the endogeneity problem. A specific country study may allow incorporating the country specific laws. As the earlier studies could not provide the conclusive evidence on the
Corporate governance and firm performance, the further study is justified. This study may provide new evidence in understanding the corporate governance and problems at firm level. It also may reconcile the diversity of results in the earlier studies.

1.13 Contribution of this Thesis to the Literature

Following the large number of corporate collapses around the world, considerable research on corporate governance is conducted within the developed countries context, such as the United States, the United Kingdom, Australia, Germany and Japan. However, there is a dearth of studies on corporate governance in less developed and emerging economies context, in particular Bangladesh (Shleifer and Vishny, 1997; Rwegasira 2000; Gibson, 2003; Denis and McConnell, 2003; Machold and Vasudevan, 2004). Studies by Imam (2000a) on corporate social performance reporting; Belal (2001) and Rashid and Lodh (2008) on corporate social disclosure; Ahmed (2004), Akhtaruddin (2005) and Karim et al (2006) on corporate financial reporting; Farooque et al, (2007a, b) on corporate ownership structure and firm performance in the context of Bangladesh are not adequate. All of these studies are largely quantitative and none of these studies cover the insights of corporate governance in Bangladesh.

This study seeks to provide an insight of corporate governance in Bangladesh as well as by using the firm level data, to empirically examine whether the various corporate mechanisms influence the firm economic performance. This thesis is written at the time when there is an interest within the academic community on corporate governance in less developed and emerging economies.

This study makes some contribution to the academic literature in number of ways. Firstly, as stated earlier, this study contributes to the ongoing research in accounting and/or finance literature in emerging economies and contributes to reducing the dearth of literatures on corporate governance in Bangladesh. Secondly, It provides a new avenue of knowledge both for the academics and practitioners to gain more insights of corporate governance in an emerging economy, such as Bangladesh. Thirdly, it may bring a new evidence of corporate governance and firm performance in an emerging economy.
1.14 Structure of this Thesis

This thesis consists of seven chapters. Chapter 1 (this chapter) is the foundation chapter of the thesis. It provides the background to this study, the importance of good corporate governance, historical background; corporate governance issues both in developed and emerging economies. This chapter explains the motivation of this study, the research questions, the objectives and significance of this study and the contributions it makes to the academic literature. This chapter also outlines the structure of the thesis.

Chapter 2 provides an insight of corporate governance in Bangladesh. It begins with providing an overview of Bangladesh; gradually it outlines the evolution of corporate governance in Bangladesh. In particular that chapter covers the socialist experience, the post socialism, privatization, the institutional factors influencing the corporate governance practices in Bangladesh including the corporate legal and regulatory regime; overview of capital market, stock market collapses etc. That chapter covered the recent corporate governance reforms in Bangladesh. That chapter also covered the firm level challenges of corporate governance in Bangladesh, such as ownership structure, emergence of family ownership, board practices, management and CEO, creditor protection, financial reporting and audit, enforcement and punishment etc.

Chapter 3 is about the theoretical framework of this study. That chapter starts in explaining the background economic and finance theories on corporate governance and problems or in explaining the principal-agent relationship. Such theoretical lenses are required in explaining the outcome of the empirical study. That chapter also discusses the underlying problems of corporate governance under Berle and Means (1932) model. It is revealed that corporate governance problems around the world are not necessarily the same as the Berle and Means (1932) model of corporate governance. Focusing this issue was necessary to find a theoretical model in explaining the corporate governance and problems in Bangladesh. Therefore, the ‘Bangladesh Corporate Governance Model’ is developed in light of existing corporate governance models in literature. It is revealed that although many of the corporate governance characteristics of the Bangladeshi context align with German-Japanese "bank-based" or "relationship-based" model, Bangladesh corporate sector also has some characteristics of “Anglo-American” market based model of corporate governance. Therefore, this thesis describes the
Bangladesh corporate governance as the hybrid of internal and external control systems which can also be described as the ‘emerging governance model’ of corporate governance. Following the identification of the corporate governance models, the mechanisms of accountability are discussed throughout that chapter.

Chapter 4 reviews the earlier research on corporate governance. In doing so, that chapter provides the detail of the previous studies, such as the ownership structure, board of directors, compensation contract and capital structure. The review of such literature helps in identifying the lacks in earlier studies and establishes the justification of the current study, which also may be the basis of hypothesis development.

This thesis further empirically examines if the specific governance mechanism (such as, ownership structure, adequate supervisory arrangement, such as monitoring by the board, executive compensation and capital structure) influence the firm economic performance. Therefore, Chapter 5 outlines the research design, details of the data set, hypotheses and research methods and techniques or research methodologies. That chapter starts with explaining the research paradigm and it is identified that there is a relative dominance of functionalist paradigm in research. The research questions developed in Chapter 1 are formulated into the several testable hypotheses, such as ownership structure and firm performance hypothesis, board composition and leadership structure hypothesis, executive compensation and firm performance hypothesis and capital structure and firm performance hypothesis. That chapter also explains the study period, data set and step by step construction of samples. It also explains the sources of data and difficulties in collecting the data from a less developed and emerging economy. That chapter explains all of the variables related to this study. In other words that chapter explains the related variables that are used in developing the models for analysis. That chapter also specifies the models for statistical analysis and details of the analysis. While developing a model for statistical test, the justification of considering a variable is explained.

In Chapter 6, data are analyzed by using statistical tests. While doing so the assumptions of the statistical analysis including the assumptions for univariate and multivariate analysis are described; based on the existing governance arrangements, the effect of various ownership structures and firm performance are examined. Firstly, the directors/sponsors stock ownership and firm performances are examined under both the univariate and multivariate analysis. The linearity of the relationship between the directors/sponsors stock ownership and firm performance are also examined. It enabled
to identify the inflection points (the highest and lowest degree of ownership) that increase the firm performance. Similarly, this study examines the blockholding and firm performance, institutional ownership and firm performance, outside ownership and firm performance. Secondly, the analysis of board composition and performance are examined. Thirdly, the structural independence of the board and firm performance is examined. Fourthly, the executive pay and firm performance is examined. While doing so, the effects of executive pay and ownership structure and executive pay and firm size are presented. The effects of capital structure and agency cost and the capital structure and firm performance are also presented.

In Chapter 7 results and the findings are summarized and the concluding remarks are made. While doing so, firstly that chapter summarizes the entire study and made the conclusions. Secondly, a discussion on the implications of the results is made. Thirdly, a concluding remark and the policy recommendations are suggested. Finally, the limitations of this study are presented and the area of further research is suggested.

1.15 Chapter Summary and Conclusion

This chapter is the introduction chapter of this thesis. It begins with the general concepts of the corporate governance. This chapter defined corporate governance and explained the importance of good corporate governance around the globe. It explains the historical background particularly discusses the background of the corporate governance, why and how corporate governance debate was emerged around the world including the emerging economies. This chapter explains the motivation of this study, the research questions, the objectives and significance of this study and the contributions of this study to the academic literature. This chapter also outlines this structure of the thesis.
Chapter 2
The Institutional Settings in Bangladesh

"Without the institutions of accountable governance, it is like computer without the proper software. It will not run." – Larry Diamond

2.1 Introduction

This chapter provides an insight of corporate governance in Bangladesh. It describes the evolution of corporate governance in Bangladesh, highlighting various internal factors such as the historical background, institutional factors influencing the corporate governance in Bangladesh; in particular the laws and legal institutions, sociocultural aspects, and the economic and political environments that constitute the current corporate governance regime. It exposes several institutional weaknesses and discusses the key issues and challenges evident at firm level.

The detailed organization of this chapter is as follows. Firstly, this chapter begins with providing an overview of Bangladesh in part 2.2. Secondly, it outlines the evolution of corporate governance in Bangladesh by describing the socialist experience, the post socialism period and privatization in parts 2.3 and 2.4 respectively. Thirdly, this chapter covers the institutional factors influencing corporate governance practices in Bangladesh in part 2.5. While doing so that section outlines the corporate legal and regulatory regime and gives an overview of the capital market and stock market collapses. Fourthly, this chapter covers the recent corporate governance reforms in Bangladesh identifying the various initiatives taken by the regulatory bodies, government and non-government sector to overcome such a situation and thereby enhancing the corporate governance framework. Fifthly, this chapter exposes the firm level practices/challenges of corporate in Bangladesh in part 2.6, such as ownership structure, emergence of family ownership, board practices, management and CEO, creditor protection, financial reporting and audit, enforcement and punishment etc. Fifthly, this chapter discusses the corporate control mechanisms that may promote accountability in an emerging economy and Bangladesh in part 2.7. Finally, this chapter covers the recent corporate governance reforms in Bangladesh in part 2.8.
2.2 An Overview of Bangladesh

Bangladesh is a developing country in South East Asia which is located between $20^034'$ to $26^038'$ north latitude and $88^001'$ to $92^042'$ east longitude. It has an area of 147,570 square km (roughly the size of England and Wales) and is situated on a fertile plain land formed by large rivers, such as the Padma, the Meghna and the Jamuna. Its topography is flat with no great mountains or deserts, and its rivers are crisscrossed (Bangladesh Bureau of Statistics, 2006; Dhaka Stock Exchange, 2008a). Bangladesh is bordered by India to the north-east and west, Myanmar (Burma) to the south-east, and the Bay of Bengal to the south.

The population of Bangladesh during the year ended 30th June 2007 stands at around 141.8 million, making it the 8th most populous nation in the world and one of the most densely populated, with more than 961 people per square kilometer (Index of Economic Freedom, 2008). Bangladesh has the highest incidence of poverty in South Asia and the third highest number of poor people living in a single country after China and India (World Bank, 2005b). Bangla is the official language. English is the second language and is used extensively in business and trade, media and education. Nearly 88.3% of Bangladeshis are Muslims, while 10.5.0% are Hindus, 0.6% Buddhist, 0.3% Christian and 0.3% other make up the total population (Dhaka Stock Exchange, 2008a). Dhaka as the capital city was founded approximately 400 years ago by the side of the river Buriganga by Mughal Emperor Jahanagir. It has emerged as the largest and busiest city of Bangladesh, comprising of about nine million people within an area of 1528 square km (Dhaka Stock Exchange, 2008a). Over 80% of the population lives in rural areas where agriculture is the only occupation, contributing over 22.8% to GDP and employing about 60% of the labor force (Bangladesh Bank, 2004).

The territory that constitutes Bangladesh was under the Muslim rule for over five and a half centuries from 1201 to 1757 A.D. Then it came under British rule in the mid-eighteenth century along with the rest of eastern India. The ‘British East India Company’ which was given a Royal Charter in 1600 gradually created a colony in this area (currently known as Bangladesh, India and Pakistan), after the defeat of the last sovereign ruler, Nawab Sirajuddowla, at the Battle of Plassey on the fateful day of 23rd June 1757. During that period Bangladesh was a part of the British Indian provinces of Bengal and Assam (Bangladesh Bureau of Statistics, 2006). After being ruled by British for almost 190 years (from 1757 to 1947), the present political boundary of

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Bangladesh was drawn for the first time on 15th August 1947, as a consequence of independence and partitioning of British India. It emerged as the eastern territory of Pakistan, known as East Pakistan, geographically separated from the western territory by more than 1600 kilometers of India. It consisted of the Muslim majority districts of the former province of Bengal and a part of the adjoining province of Assam. During the subsequent quarter century of political association with West Pakistan (now Pakistan), Bangladesh (then East Pakistan) experienced a very bitter relationship with West Pakistan. Although East Pakistan (now Bangladesh) consisted of the majority of the population of the state of Pakistan, it could exercise little political autonomy. There was a high degree of negligence to the people of then East Pakistan. For example, in army only 1 percent of soldiers were from East Pakistan at the time of partition; in the civil service, only 23 percent of government officials came from East Pakistan in 1966 compared to 77 percent from West Pakistan. At the same time, although East Pakistan was the country’s major foreign exchange earner, West Pakistan’s per capita national income was 61 percent higher than East Pakistan’s (Warner, 2005).

Almost since the emergence of Pakistan, the demand for greater autonomy of East Pakistan began to rise. The Language Movement of 1952 in which students of University of Dhaka scarified their lives, gradually developed into a powerful movement for regional autonomy. Bangladesh became independent on 16th December 1971 after a nine month liberation war.

Bangladesh has a lot of problems; such as an unskilled mass population; high population growth of 2.05% (Dhaka Stock Exchange, 2008a), political instability, low literacy and a high unemployment rate and low per capita income.

As demonstrated in the language movements and liberation war Bangladesh has a tradition of fighting for democracy. Parliamentary democracy was reinstated in 1991 after a nine years fighting for democracy against the Ershad regime. Since then, the President acts as the head of state while the Prime Minister acts as the head of the government. However, section 70 of the Bangladesh Constitution gives some powers to the Prime Minister. Although the political parties understand little about democracy

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5 Following the Pakistani ruler’s declaration of Urdu as the sole national language of the greater Pakistan, it was immediately refused in East Pakistan (Bangladesh), since Bengali is their mother tongue. On 21st February 1952, there was a massive reaction and protest by the students of the University of Dhaka. A number of University of Dhaka students sacrificed their lives, following police action with bullets. In 1956 the national legislature agreed that both Urdu and Bengali would be national languages. On 17th November 1999, UNESCO declared 21st February as the ‘International Mother Language Day’.

6 It was US $ 520 per annum during the financial year 2006-07 (Bangladesh Bank, 2007)
leading to a chronic political instability, the democratic institutions are very strong and the civil society is vibrant and united (Manabzamin, 2006). The international donor agencies, such as the Asian Development Bank (ADB), International Monetary Fund (IMF), United Notations Development Program (UNDP) and World Bank, the donor countries, such as United States, Japan, Saudi Arabia, and West European countries, attach great importance to democracy and governance issues in their development assistance strategies. However, sometimes they unnecessarily interfere the country’s internal affairs and give advice to the government. Bangladesh is a member of the Commonwealth of Nations, SAARC, BIMSTEC, the OIC and the D-8 (Alam, 2007).

2.3 Corporate Governance in Bangladesh: A Socialist Experience

Soon after independence in 1971, Bangladesh inherited an economy dominated by the private sector (Uddin and Hopper, 2003); 66% of the industrial sector was dominated by the private sector (Sobhan and Ahmad, 1980, cited in Uddin, 2005). The then government adopted socialism as the economic and political framework to ensure so called ‘economic justice’ or ‘distributive justice’. Socialism was constitutionally accepted as one of the four fundamental principles of the state (Ahamed, 1978). The Government of Bangladesh in an order (the Bangladesh Government Nationalization Order 1972), nationalized all large and medium sized industries including the Banking and Insurance sectors (Karim, 1995).

The nationalization of industries forced Pakistani entrepreneurs to leave that country. The government nationalized all the industrial enterprises abandoned by Pakistani entrepreneurs. The government also nationalized major industrial units owned by Bangladeshi citizens in the three major manufacturing sectors, namely textiles, jute and sugar industries. All banks and insurance companies were also brought under the umbrella of government control. To facilitate government control ten corporations were formed and the industries were allocated to those corporations. A few of these were the Bangladesh Jute Mills Corporations, which controlled all the nationalized jute mills, Bangladesh Textile Mills Corporation, which controlled all the textile mills and the Bangladesh Chemical Industries Corporations, which controlled the manufacturing

7 It is not very uncommon for the Bangladesh government to react on this issue. The Ministry of Foreign Affairs on 20th March 2008 urged donors not to interfere within the country’s internal affairs (Amar Desh, 2008).
industries etc. (Karim, 1995). The application of the Companies Act 1913\(^8\) was suspended and the only governing rule of those state owned corporations was the ‘Bangladesh Government Nationalization Order 1972’. Through nationalization, the government gained control over 92% of the total industrial assets in the country (Islam, 1999; Uddin and Hopper, 2003). These industries were most commonly known as the State Owned Enterprises (SOEs) or ‘Public Sector Enterprises’. By 1974, there were 350 such enterprises over which the government exercised control. Consequently the activities of the Dhaka Stock Exchange, the symbol of capitalism, were suspended (SECB, 2002). In July 1972, the government imposed a ceiling on private investment. The limit set for private investment in small industrial units was Taka\(^9\) 2.5 million, which was later increased to Taka 3.5 million including the investment of profits, and simultaneously, the government preserved the right to nationalize any private enterprise whenever it was felt necessary (Ahamed, 1978; Banglapedia, 2006). As a result there was no provision for growing private sector enterprises. The economy was similar to that of a socialist country.

### 2.4 Corporate Governance in Bangladesh: Post Socialism Period

After competing for a period of almost 72 years, the socialism failed worldwide in 1989 (although Cuba is an exception). Socialism and the nationalization policy of the then government in Bangladesh also failed even before the formal failure of socialism. It is very common that the government owned firms are significantly less profitable than privately owned firms (Estrin and Perotin, 1991; Dewenter and Malatesta, 2001). In the words of Islam (1999),

> The state owned enterprises (SOEs) were also poorly managed—often by incompetent, inexperienced, and unqualified personnel. Unrealistic pricing and output targets were set without regard to market realities. As a result the SOEs produced high priced, inferior products (p 64).

Therefore, a lot of the state owned enterprises (SOEs) in Bangladesh suffered from huge accumulated losses because of corruption, mismanagement and lack of effective monitoring. It is argued that the biggest public failure in Bangladesh was due

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\(^8\) At that time the Companies Act 1913 was in effect. The current ‘Companies Act 1994’, was enacted in 1994.

\(^9\) Bangladeshi currency approximately A$ 1 = Taka 64.59 as at 21\(^{st}\) April 2008.
to the SOE sector (World Bank, 1995, p 89). Such failures are due to excessive government interference, lack of accountability of the management to the board and shareholders (as the CEO or Chairperson of the board is sometimes a government official or bureaucrat), labor militancy etc. (Akram, 1999a; Islam, 1999; Uddin and Hopper, 2003; Rahman, 2007). It is complained that the losses of those SOEs consumed 30% of annual project aid (Uddin and Hopper, 2003).

The socialist experience was over, following the change of regime on 7th November 1975. After a successful military coup on 7th November 1975 Ziaur Rahman was in power. The Ziaur Rahman regime took adequate steps to rehabilitate the private sector and facilitate industrialization. Socialism was omitted from the constitution and market economy policy was adopted as an economic phenomenon. The government adopted the privatization policy with the hope of greater efficiency, superior firm performance and to promote capital market development. The first phase of privatization started in 1976 following the announcement of a revised investment policy in 1975. It was an important milestone in enhancing the private sector’s investment in Bangladesh (Islam, 2006).

Ahamed (1978) outlined the various steps taken by the new regime to rehabilitate the private sector and to facilitate industrialization. The most significant step was the drastic revision of investment policy. The ceiling of private investment was raised to Taka 100 million. The charges on industrial loans were reduced and the Development Financing Institutions (DFIs), such as the Bangladesh Shilpa Bank (BSB) and Bangladesh Shilpa Rin Sangstha (BSRS) were asked to help the private sector entrepreneurs on a priority basis. The private sector, export oriented industries and agricultural production were encouraged as a new development strategy. That strategy encouraged both domestic and foreign private entrepreneurs (The incentive provided to foreign investors is discussed in part 2.6.1.4). The new regime denationalized a number of state owned enterprises (SOEs); which were nationalized immediately after the independence. The denationalization of the state owned enterprises and adoption of the market economy by that government brought a new era of industrialization. The

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10 From mid August 1975 to early November 1975 there was a large political instability in Bangladesh. There were a few military coups and counter coups. The then Army Chief Major General Ziaur Rahman could win this coup game in a joint revolution by army and civilians on 7th November 1975. This day is observed as ‘National Solidarity Day’ in Bangladesh.

11 Anderson (1976) made a detailed discussion of the change of regime on that day and various related issues.
activity of the Dhaka Stock Exchange (DSE) resumed in 1976 with only nine (9) listed companies (SECB, 2002) and in the same year the government established the first institutional investment body the ‘Investment Corporation of Bangladesh’ (ICB), which created a momentum in the country's capital market (discussed in detail in part 2.6.1.5).

The second phase of industrialization started following the bloodless military coup by General Ershad in 1982. The Ershad government solicited western support by adopting their recommendations to privatize SOEs (Uddin and Hopper, 2003), due to their high reliance on foreign aid (Ramamurti, 1992). The Industrial Policy 1982 was announced (1) to promote manufacturing sectors with increased participation of the private sector, (2) to improve efficiency and profitability of SOEs (Humphrey, 1990, cited in Islam, 2006).

The current ‘Privatization Commission’ was formed under the ‘Privatization Act 2000’ and was established in 1993 under the name of ‘Privatization Board’. The privatization process continued until recent years and within the period of 1976-1992 about 500 state owned enterprises (SOEs) were denationalized (Privatization Commission, 2007a).

Soon after the adoption of a market economy and the “rehabilitation” of the private sector, there was a huge growth in the private sector. For example, the industrial GDP increased from 7.19% in 1974 to 10.88% in 1980 (Alauddin, 2004). It increased to 27.8% in 2004 (Bangladesh Bank, 2004). The performance of the private sector in terms of creation of employment, investment etc. was very high. For example, the private sector contributed 92.6% in employment, 69.7% in investment, 83.9% in value addition and 99.7% in export during the period 1998-99 (New Nation, 2004). As shown in figure 1, the per capita GDP in Bangladesh was negative in 1970s; it was 1.7% in 1980 and rose to 3.1% during 1990-2001. Accordingly Bangladesh could successfully alleviate the curse of being a “Bottomless Basket”\textsuperscript{12}.

Since the inception of privatization in 1976, many of the corporate bodies, including major portions of the banking and jute sectors, paper and textile mills, telecommunication, railway and airline industries were either reserved for the government sector or could not be denationalized due to various difficulties and continued to remain under government control. These enterprises presented a very

\textsuperscript{12} Bangladesh was continued to be called the poorest country until late 1980s. The country was largely dependent on foreign assistance. This image of Bangladesh was once described by former U. S. Secretary of State in the early 1980s implying that whatever assistance is given to the country, it will need a more.
painful experience to the nation. For example, the Adamjee Jute Mills Corporations Ltd., the largest jute mill in the world collapsed in 2002 with the tears of 17,000 workers (75,000 employees including casual or temporary workers), because of mismanagement and corruption. It was the most notorious corporate collapse in the history of Bangladesh (Star, 2002). Star (2002) further reports that this enterprise had an accumulated loss of Taka 11,080 million (approximately equivalent to 171.50 million Australian dollars) in the last 30 years and shutting down of this enterprise could save Taka 370 million (equivalent to 5.73 million Australian dollars) in a year for the Bangladesh government. The total shutting down cost was estimated to be Taka 64 billion (equivalent to 1.00 billion Australian dollars).

Figure 1: Average Annual Per Capita GDP Growth in Bangladesh and Comparator Countries, 1990-2001

Similarly, the Khulna Newsprint Mills, a subsidiary of Bangladesh Chemical Industries Corporations, the largest newsprint mills in Asia was shut down on 26th December 2005 with the tears of around 1500 workers due to huge accumulated losses (Inqilab, 2005; Ittefaq, 2005). The only state owned airline, ‘Biman, Bangladesh Airlines’ is suffering from an accumulated loss of around Taka 5 billion (which is equivalent to 7.7 million Australian dollars) during the year ending 2005 due to corruption and mismanagement (Ittefaq, 2005). Although the performance of the State Owned Enterprises (SOEs) was very poor even before the growth of private sector, the SOEs could not survive the competition from the huge growth in private sector enterprises over this period.
2.5 Institutional Factors Influencing Corporate Governance in Bangladesh

In understanding the corporate governance practices by the firms, it would be very helpful in understanding the institutional factors influencing corporate governance practices in Bangladesh. The institutional factors influencing corporate governance in Bangladesh include the corporate legal environment, the regulatory body Securities and Exchange Commission Bangladesh (SECB), the Capital Market, along with the Registrar of the Joint Stock Companies (RJSC) and institutions directing financial reporting. The Stock Exchanges, Chambers of Commerce and other self-regulatory agencies in the private sector also form a part of the institutional framework for corporate governance in Bangladesh. These are discussed in the following paragraphs.

2.5.1 The Corporate Legal Environment in Bangladesh

In understanding the existing corporate governance enforcement regime from a legal perspective in Bangladesh, a brief outline of the legal framework surrounding corporate entities may be helpful as the legal environment is the dominant determinant of corporate governance. The corporate legal framework in Bangladesh consists of certain Acts and Ordinances, numerous legislative instruments such as orders, notifications, rules, regulations and circulars issued by the Government, Bangladesh Bank\(^{13}\), Securities and Exchange Commission Bangladesh (SECB), Professional Accounting Bodies and other governmental agencies. Moreover, the Stock Exchanges, Chambers of Commerce and other self-regulatory agencies in the private sector also form a part of the legal and regulatory framework for corporate governance in Bangladesh. Following paragraphs outline the related corporate legislation in Bangladesh.

2.5.1.1 The Bangladesh Government Nationalization Order 1972

Immediately after independence the only governing law for companies was the Bangladesh Government Nationalization Order 1972. That law mainly related to governing the SOEs and was not a complete guide for corporate governance and existed only for a short period.

\(^{13}\) Bangladesh is Central Bank of Bangladesh, responsible for the regulation of Banking Sector.
2.5.1.2 The Companies Act 1994

The joint-stock companies in Bangladesh were originally governed by the provisions of the Companies Act 1913. On 1st January 1995 the new Companies Act, 1994\(^{14}\) came into effect. Among several types of legislations, the ‘Companies Act 1994’ is the main governing law for the companies in Bangladesh. This law was given effect to provide more accountability in company governance in Bangladesh. This is the law relating to incorporation of all domestic companies in Bangladesh and the governance of foreign companies incorporated outside, but registered in Bangladesh.

The Companies Act 1994 defines shareholders’ rights and provides various mechanisms for shareholders to enforce such rights, such as rights to attend annual general meetings, a right to dividends, the right to appointment and removal of directors and right to obtain and approve the annual financial statement (Bangladesh Enterprise Institute, 2004). “Although that Act has some inbuilt protection for shareholders in requiring companies to file periodic returns with the RJSC, failing which the directors and management of the defaulting company are liable to various penalties such as fines, and in some cases, imprisonment” (Bangladesh Enterprise Institute, 2004, p 22), that Act does not say anything regarding the ultimate controlling share ownership, a director’s educational qualifications and/or expertise, age, the composition of the board and the leadership structure of the board and management, particularly the role of Chairperson and CEO, director’s fiduciary responsibility etc. That law is very much related to the formation, the role and functions of the Registrar of Joint Stock Companies (RJSC) in company formation, company management, periodic disclosure and audit requirements, liquidation, and the jurisdiction of the courts in relation to companies.

2.5.1.3 Securities Laws and Legislations

The capital markets in Bangladesh are regulated by several types of legislations, such as Securities and Exchange Ordinance 1969, Securities and Exchange Rules 1987, Securities and Exchange Commission Act 1993, Securities and Exchange Commission Act 1994 (Act 18 of 1994) currently governs companies in Bangladesh. It received the assent of the President of the People's Republic of Bangladesh on 11th September 1994 and was published in the Bangladesh Gazette on 12th September 1994. Before its enactment in 1994, companies in Bangladesh were governed by the Companies Act 1913 (passed in the British Parliament) which was adopted as the corporate law in Bangladesh.
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Chapter 2


2.5.1.4 Bankruptcy Act 1997

The Bankruptcy Act 1947 is the law governing corporate insolvency in Bangladesh. This law makes additional provisions to the winding up of companies under the Companies Act 1994, where the winding up is due to the insolvency of the company rather than for any other reason. This law repealed the out-dated Insolvency Act 1920. It also enabled the establishment of Bankruptcy Courts.

2.5.1.5 Other Laws

In addition to these laws, there are provisions in many other laws, such as the Insurance Act 1938, the Bank Companies Act 1991, which was amended by the ordinance of Bank Companies (Amendment) Ordinance 2007 and the Financial Institutions Act 1993, which contain several separate provisions for compliance, disclosure (financial reporting), audit and penalties thereafter, which allows more oversight and greater transparency of corporate governance practices in the financial institutions.

2.5.2 Registrar of the Joint Stock Companies

The 'Registrar' of the Joint Stock Companies (RJSC) or in short the Registrar is the sole authority to give the registration to the company. The joint stock companies
can not be operated in Bangladesh without having a registration. The Registrar of Joint Stock Companies (RJSC) is the official holder of all listed financial and non-financial information of the companies in Bangladesh. Companies are also required to file a copy of the annual report including the audited accounts with the registrar. Any member of the public limited company may apply to inspect any company's file for a small fee. The Registrar has statutory authority to penalize companies for failure to file their annual reports, but penalties are too small (e.g. Taka 1 per day of default) and are paid only if a company voluntarily makes a late filing (Karim, 1995). Karim (1995) further noted that,

The registrar admitted that hundreds of companies do not file annual accounts for years and no action other than sending reminders has so far been taken against companies failing to file accounts with the registrar (p 91).

It is also alleged that getting registration of the new companies in Bangladesh is impossible within a reasonable time without a bribe. It takes about 40 days to get the registration of the new business firm in Bangladesh, whereas it takes 2 days in Australia to get the same (World Bank, 2005a, p 13). Karim (1995) further noted that,

Bribery has become a must for all applicants obtaining registration within a reasonable time. Otherwise it may take months and years to obtain registration (p 91).

After establishing the Securities and Exchange Commission Bangladesh in 1993, the RJSC had in fact no role to play in corporate governance and/or regulating the capital markets and became a bureaucratic institution only in administering the company’s registration, although the company registration formalities could be delegated to SECB.

2.5.3 Securities and Exchange Commission Bangladesh (SECB)

Although there were no ‘Securities Laws’ in Bangladesh immediately after independence in 1971, the ‘Securities and Exchange Ordinance 1969’ passed in Pakistan on 19th March, 1971 and was accepted as an existing law in Bangladesh. The Securities and Exchange Rules 1987 were also enacted in Bangladesh to ensure the regulation of listed companies in Bangladesh. However, there was no authoritative
body to enforce the capital market regulation in Bangladesh before 1993. The Securities and Exchange Commission Bangladesh (SECB) as a corporate watchdog was established on 8th June 1993 under the Securities and Exchange Commission Act, 1993\textsuperscript{15}.

The SECB regulates the 276 listed companies as at 31st December 2008 and holds very wide-ranging powers and is entitled to regulate overall activities of the capital market in Bangladesh with broad licensing and regulatory powers over capital market participants and intermediaries, such as stock exchanges, brokers and dealers, merchant banks and portfolio managers, making the issuance of securities subject to any condition as it may think fit to impose, notwithstanding anything contained in the Companies Act, 1994 or any other law in force. Much of the powers of the SECB under these laws are aimed at proper disclosure to investors, which is at the heart of good corporate governance. It provides policy direction to industry; administers the securities legislations and acts as an administrative tribunal for decisions on the capital markets (SECB, 2001). Listed companies are also required to submit a copy of the Annual Report and proceedings of the AGM to the SECB in addition to submitting these to RJSC.

The SECB registers and regulates the business of stock brokers, sub brokers, share transfers agents, merchant bankers and managers of issues, trustees of trust deeds, registrations of an issue, underwriters, portfolio managers, investment advisors and other intermediaries of the securities market. It takes steps to ensure proper issuance of securities; protect the interests of the investors; promote develop and maintain a fair, transparent and efficient capital market; ensures the issuance of securities in compliance with the securities laws; monitors and prohibits the fraudulent and unfair trade practices relating to securities trading in any securities market; undertakes investigations and inspections relating to any unfair practices; and conducts inquiries and audits of any issuer or dealer of securities, the stock exchanges and intermediaries and any self-regulatory organization in the securities market and overall regulates the business of the stock exchange or any other securities market (SECB, 2006a).

Besides regulating the capital markets, the SECB has a few other objectives which are very noteworthy. It promotes investor’s awareness including investment guidelines, format for lodging a complaint, caution notices regarding fake shares, runs

an investor’s education program and provides training for intermediaries of the securities market (SECB, 2005b). In the investor’s education programs focus is given on regulatory framework, types of securities and rights of shareholders, central depository system, surveillance systems, procedure of investment in primary and secondary market etc (SECB, 2007). Such program is conducted in every quarter in a year and during October-December 2008, a total of 112 investors participated in the said investor’s education program (SECB, 2008b).

2.5.4 Capital Markets in Bangladesh

Although the Bangladesh capital market is one of the smallest in Asia, it is one of the oldest in this region. The capital market in Bangladesh was founded during the Mughal regime (commonly known as Mughal Bengal16) in the early 17th century. Asian and Europeans merchants, especially the English and Dutch East India Companies, were actively trading in this market by providing loans (Banglapedia, 2005). Due to difficulties in getting information by the foreign investors, International Finance Corporation (1999, cited in Sidaway and Pryke, 2000, p 190) described the Bangladesh capital market as the ‘frontier market’. However, the capital market in Bangladesh fulfils the International Finance Corporation (IFC) emerging market criteria as it is located in a low income economy.

After partition of British India, there were two registered stock exchanges in Pakistan, one at Karachi, and the other at Dhaka, namely the ‘Karachi Stock Exchange’ and ‘East Pakistan Stock Exchange Association Limited’ (which is currently the Dhaka Stock Exchange Limited) respectively. The Karachi Stock Exchange was established in 1949. The ‘East Pakistan Stock Exchange Association Limited’ was established in Dhaka in 1954 in Narayanganj, a city adjacent to the capital city Dhaka. However, it started functioning in 1956. It was transferred to Dhaka in 1958 and later renamed as the Dhaka Stock Exchange (DSE) Ltd on 14th May 1964. However, the really active market was that at Karachi Stock Exchange until 1956. The Dhaka Stock Exchange really started functioning in 1976. The Chittagong Stock Exchange (CSE) was established as a Public Limited Company in April 1995. The securities market

16 The Mughal is a line of Muslim emperors who reigned from 1526 to 1858 in the area that is divided today Afghanistan, Pakistan, Kashmir and Northern India (Banglapedia, 2006).
instruments in Bangladesh include shares, debentures, ICB unit certificates and mutual funds.

In addition to relying on the capital market for their financing needs, the companies in Bangladesh also meet their financial needs from various Development Financial Institutions (DFIs), such as the Bangladesh Shilpa Bank (BSB, the Industrial Bank), Bangladesh Shilpa Rin Shangstha (BSRS, Industrial Finance Company), other non-bank financial institutions, and co-operative land mortgage banks (Banglapedia, 2005). The following paragraphs discuss the details of the capital markets including the overview of two stock exchanges in Bangladesh, the Dhaka Stock Exchange and the Chittagong Stock Exchange.

2.5.4.1 Dhaka Stock Exchange (DSE)

The necessity of establishing the Dhaka Stock Exchange (DSE) was first felt in 1952 following the prohibition of trading of the Pakistani shares on the Calcutta Stock Exchange. Today’s Dhaka Stock Exchange was incorporated on 28th April 1954 under the name ‘East Pakistan Stock Exchange Association Ltd’ and started formal trading in 1956. It was renamed as ‘East Pakistan Stock Exchange Ltd’ on 23rd June 1962. It was further renamed as Dhaka Stock Exchange Ltd on 13th May 1964 and continued till the independence war of 1971 (Dhaka Stock Exchange, 2008d). The trading at Dhaka Stock Exchange remained suspended during the nine-month liberation war. Immediately after independence the activities of the Stock Exchanges were suspended again, following the nationalization of major companies in 1971 (discussed in part 2.3). Due to changes of the regime in 1975 and attitude of the new government towards the development of the private sector and promotion of a market economy, the trading activities at DSE were resumed on 16th August 1976, with only 9 listed companies with a total paid-up capital of only Taka 132 million (SECB, 1998). Despite a lot of initiatives, the stock market growth at DSE during the period of 1977 through 1985 was non-significant. The number of listed companies in 1995 was only 69. From figure 2, it is apparent that there was a steady growth of the stock market from 1986 to 1995. However, there was an unusual growth during the period 1996 due to a speculative bubble (which is discussed in part 2.5.5). By the year end of 31st December 2008 there were 412 securities of 276 companies listed on the DSE with a total issued capital of Taka 372.156 billion and market capitalization of Taka 1059.53 billion (SECB, 2008b).
The Dhaka Stock Exchange is a self-regulated non-profit organization. Its activities are regulated by “Dhaka Stock Exchange (Board and Administration) Regulations 2000”, its ‘Articles of Association’, ‘Rules and Regulations’ and ‘by-laws’ along with the Securities and Exchange Ordinance, 1969, Companies Act 1994 and Securities and Exchange Commission Act, 1993. It has provisions for 500 members, but at present number of members are only 235 of which 204 members are the license holders from the SECB (SEC, 2008a). Membership is also open to the foreigners. This Stock Exchange has a 24 Members Council, of which 12 are elected from the general members and 12 are nominated as non-members from different apex bodies who are not members of the stock exchange subject to approval of the SECB (SEC, 2002; SEC, 2006c). As per DSE Article 105B, its management is separated from the council. The executive power of the DSE is vested to the Chief Executive Officer (CEO), who is appointed by the Board with the consent of SECB (SEC, 2003, p 5). The ‘All Share Price Index’ at Dhaka Stock Exchange was introduced on 16th September 1986.

### 2.5.4.2 Chittagong Stock Exchange (CSE)

Chittagong Stock Exchange (CSE), the second stock exchange of the country, was registered as a Public Limited Company in April 1995. The Chittagong Stock
Exchange (CSE) is located at Agrabad, Chittagong. By the end of 31st December 2008 there were 238 securities of 221 companies listed with CSE with a total issued capital of Taka 121.603 billion and market capitalization of Taka 807.684 billion (SECB, 2008b). Similar to Dhaka Stock Exchange, the activities of Chittagong Stock Exchange are regulated by its ‘Articles of Association’ and ‘Rules and Regulations’ and ‘by-laws’ along with the Securities and Exchange Ordinance, 1969, Companies Act 1994 and Securities and Exchange Commission Act, 1993. CSE is also a self-regulated, non-profit organization with its own regulations. Similar to Dhaka Stock Exchange it has provisions for 500 members, but at present number of members are only 134 of which 113 members are the license holders from the SECB (SECB, 2008a). Membership is also open to the foreigners. This Stock Exchange also has a 25 Members Council, of which 12 are elected from the general members and 13 are nominated as non-members from different apex bodies who are not the member of the stock exchange (SECB, 2002; Chittagong Stock Exchange, 2008). The executive power of the CSE is also vested to the Chief Executive Officer (CEO), who is appointed by the Board with the consent of the SECB (Chittagong Stock Exchange, 2008).

2.5.4.3 Listing Rules at Stock Exchanges

Both the Dhaka and the Chittagong Stock Exchange has separate listing requirements. To be enlisted with the Dhaka Stock Exchange companies are required to comply with the ‘Dhaka Stock Exchange (Direct Listing) Regulations, 2006’. To be eligible for enlisted the firm must be registered as the joint stock company, have a minimum paid up capital of Taka 50 million, be in the commercial operations for at least three (3) years and have no accumulated loss. The company who applies for listing is required to pay a listing fee of Taka 10,000 with necessary documentation (including the audited financial statements for last three years) to the Securities and Exchange Commission Bangladesh.

Similarly, to be enlisted with the Chittagong Stock Exchange, companies are required to comply with the ‘Chittagong Stock Exchange (Direct Listing) Regulations 2006’. The company must be registered as the joint stock company; have a minimum paid up capital of Taka 100 million, be in the commercial operations for at least five (5) years and have no accumulated loss. The company who applies for listing will pay a listing fee Taka 10,000 with necessary documentation (including the audited financial
statements for last three years) to the Securities and Exchange Commission Bangladesh.

2.5.4.4 Trading and Settlement of Securities

Dhaka Stock Exchange (2008d) outlines the trading and settlements of securities at Dhaka Stock Exchange. The Dhaka Stock Exchange started the computerized automated trading system in 1995. It introduced screen based ‘Automated Trading System’ (ATS) on 10th August 1998 with state of the art technologies, which was running on the mainframe Server Tandem Non Stop K204 with the capacity of around 15,000 traders per day. The Automated Trading System was upgraded in 2005 on the mainframe Server HP Non Stop S7802 with the capacity of around 50,000 traders per day. It was further upgraded on 30th March 2008 running on the mainframe Server HP Non Stop S7804 with the capacity to handle above 100,000 traders per day. The present automated trading system allows to trade through the local area network (LAN) and wide area network (WAN) within Dhaka city and other branch offices of DSE across the country. In Dhaka Stock Exchange, transactions are settled under the ‘Settlement of Stock Exchange Transactions Regulations 1998’ and ‘Dhaka Stock Exchange Automated Trading Regulations 1999’.

**Figure 3**: The trading and settlement of securities at the stock exchanges

Hossain (2000) outlines the trading and settlement of securities at Chittagong Stock Exchange. There is a screen based trading system on local and metropolitan area network which enables its members to do online real time trade. In Chittagong Stock
Exchange transactions are settled under the ‘Settlement of Chittagong Stock Exchange Transactions Regulations 2005’. It allows an automated screen based sophisticated wide area network (from any place of the country) to its member to do online real time trade.

The stock exchanges receive securities from the clearing house on the settlement day. All transactions of brokers are settled and cleared through the clearing house on 3rd and 5th working day respectively. Settlement day is the fourth day subsequent to the trading day (T+4). The recipient gets the securities/certificates from the clearing house on the 5th day (T+5). The figure 3 above shows the trading and settlement of security at the stock exchanges.

As on 31st December 2008, shares and debentures of 276 companies were being traded in the equity market (412 securities in DSE and 238 securities in CSE). The number of mutual funds traded in the stock exchanges was 16 (in both the stock exchanges) and that of debentures traded was 8 in DSE and 1 in CSE. The number of treasury and corporate bonds traded were 111 and 1 respectively (all in DSE) (SECB, 2008b).

### 2.5.4.5 Problems of Capital Market in Bangladesh

The capital market of Bangladesh have a lot of problems including non-developed securities market, investor’s non-awareness, lack of research, non-professionalism in brokerage business and market intermediaries, tendency of unethical gain by market related persons and lack of transparency (Chowdhury, 2000; SECB, 2003). Like many developing countries the poor functioning capital markets impedes the economic growth in Bangladesh. The growth of the capital market in Bangladesh is very slow because of the highly regulated economic regime and market imperfections. The capital market in Bangladesh is also very speculative.

Like many other developing countries, investors do not have access to up-to-date information in the Capital Markets in Bangladesh. It is complained and established by the 1996 index crash at Dhaka and Chittagong Stock Exchanges that the capital market is subject to mal-trading and manipulation; there is a lack of transparency and

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17 The SECB suspended trading of 16 companies for their abnormal price hike despite the fact that their performance was very poor and many of them were not in commercial operation (SECB, 2004).
disciplines. Among the most common problems in the Bangladesh capital market, is the poor market capitalization rate in respect to GDP.

Table 2: Emerging Stock Market Key Indicators in Asia (data for the period February 2008, Figures in Million U.S. $)

<table>
<thead>
<tr>
<th>Country</th>
<th>Total Value of Share Trading</th>
<th>Market Capitalization (M. C.)</th>
<th>GDP</th>
<th>M.C. to GDP Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bangladesh</td>
<td>102.50</td>
<td>11.73</td>
<td>78.17</td>
<td>17.20</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>378,557.50</td>
<td>2,339.95</td>
<td>202.96</td>
<td>1,152.91</td>
</tr>
<tr>
<td>Japan</td>
<td>1,079,232.30</td>
<td>4,158.09</td>
<td>4,345.95</td>
<td>95.68</td>
</tr>
<tr>
<td>India (BSE)</td>
<td>77,653.30</td>
<td>1,471.41</td>
<td>1,089.94</td>
<td>135.00</td>
</tr>
<tr>
<td>Indonesia</td>
<td>24,523.60</td>
<td>220.12</td>
<td>410.32</td>
<td>53.65</td>
</tr>
<tr>
<td>Malaysia</td>
<td>26,052.50</td>
<td>313.40</td>
<td>164.98</td>
<td>189.96</td>
</tr>
<tr>
<td>Philippines</td>
<td>3,923.00</td>
<td>91.49</td>
<td>141.05</td>
<td>64.86</td>
</tr>
<tr>
<td>Singapore</td>
<td>69,593.30</td>
<td>494.12</td>
<td>153.49</td>
<td>321.92</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>102.50</td>
<td>7.60</td>
<td>31.05</td>
<td>24.48</td>
</tr>
<tr>
<td>Taiwan</td>
<td>154,247.20</td>
<td>691.68</td>
<td>375.65</td>
<td>184.13</td>
</tr>
<tr>
<td>Thailand</td>
<td>25,726.10</td>
<td>209.24</td>
<td>225.82</td>
<td>92.66</td>
</tr>
</tbody>
</table>

Source: Dhaka Stock Exchange (2008d)

The statistics in table 2 shows the market capitalization as a percentage of GDP in various emerging markets with Bangladesh as the lowest. So it clearly indicates that there is a weak capital market participation in Bangladesh. A strong capital market is very imperative for economic development. Further, the rate of institutional investment is very low in Bangladesh. The average ratio is only 17.8 percent (from Table 15) while the Anglo-American standard is found to be 60 percent (Farrar, 2005, p 339).

2.5.5 Stock Market Collapse in Bangladesh

According to Imam (2000b), the Bangladesh stock market gained momentum with the success of big public issues in 1994 and 1995. There were no serious corporate scandals in Bangladesh to undermine the investor’s confidence before 1996. The 1996 index crash (commonly known as 1996 crisis) and thereby collapse of the market at Dhaka and Chittagong Stock Exchanges was a bad memory to the investors as well as to the capital market regulators.

From July 1996, the share price index at the Dhaka and Chittagong Stock Exchange started rising. The all share price index jumped from 959.05 to 3064.99
(Bangladesh Bank, 2006, p 138). It started following the market manipulation primarily by foreign institutional investors with the help of the local brokers-members syndicate. Before the 1996 crash there was a 'lock in' system on foreign investments\(^\text{18}\). After serving 21 years in the opposition, the newly elected Awami League Government was keen to expand the share market operations, the 'lock in' system was withdrawn on 8\(^{th}\) July 1996 and several other incentives were offered by this new regime; which attracted a number of ordinary investors to buy shares (Solaiman, 2006). This created a huge pressure on the stock prices. The foreign investors took this opportunity and arranged sale of shares, issued in their favor under ‘Initial Public Offering’ (IPO) under the 'Delivery Versus Payment' or DVP system. Under this system, the transfer of shares and the settlement of payment would be simultaneously done. The DVP system was widely used in case of transactions of foreign portfolio investments. In practice there had been many baseless DVP deals which were never materialized, nor were they registered with the Stock Exchanges. The intention was to manipulate the market by showing hypothetical transactions that there was heavy buying and selling of certain specific shares. Although these were large transactions, the member-brokers made immediate payments for only a part of the total transaction. The remaining shares were later sold in the bullish market at a higher price and the payments for the balance were settled out of the profits so earned (Prime Minister Office, 2005).

It is also alleged that as part of the manipulations, the brokers, agents and in some cases the company officials were spreading stories about the growth in the business of a company (although these were not performing well) and rumors were going on in full swing at that time. In some cases member-brokers in a planned manner started buying shares of a few companies with a view to creating an impression on the investors that these company shares were in high demand. This was the primary reason for share price rising. The average investors were unable to differentiate between the intrinsic value and market value of shares. Estimated 300,000 small investors were drawn into the market leading to the emergence of a kerb-side market on the street outside the Dhaka Stock Exchange, bringing traffic to a halt (Economist, 1997). Although that market was unauthorized and unregulated, the licensed stockbrokers were also trading in that market. Nearly 25,000 small investors at the kerb-side market

\(^{18}\) It was introduced on 11\(^{th}\) February 1995 so that the shares under Initial Public Offering (IPO) issued in favor of the foreign investors would not be permitted to transfer such shares and repatriate the sale proceeds.
were involved in the trading of share certificates (Economist, 1997; Asian Development Bank, 2005). At the market’s peak, shares were trading on an average of over 80 times of its current earnings. Market capitalization rose by 265%, average daily turnover increased by over 1,000%, and the share price index jumped by over 260% (Asian Development Bank, 2005). One popular stock, for example Confidence Cement, was sold for 1060 times that year’s earnings, after a 1400% increase in its price (Economist, 1996; 1997). The price jump continued until the bubble burst in November 1996.

2.5.5.1 The Collapse was Inevitable

The collapse was inevitable as the market was beyond the control of the regulation. During that upturn and bullish run, the trading in shares increased by a factor of 1000 and the prices index jumped on an average by 260%. From mid November when downturn began, there was a dramatic fall of the share prices. The new investors were actively trying to sell the shares in their possession to avoid the losses, but there was hardly any buyer and the collapse was inevitable (Ittefaq, 1996b). The government imposed the so called ‘circuit breaker’ for the purpose of limiting the rise or fall in daily prices by not more than 5%. Outside on the kerb market it did not produce any result; nothing could keep prices from going down and the market finally collapsed causing serious material losses to thousands of investors (Economist, 1996). Thousands of new and small investors, who invested their household savings in the stock market, lost all of their savings as they had a little knowledge of stock market operations and were hurt seriously. The new investors many of whom were very young, took recourse to street agitation, raised anti-government slogans and demanded action against the speculators and manipulators. It was the worst stock market collapse in the history of Bangladesh or ever happened in Bangladesh.

2.5.5.2 Causes of the Crisis

Solaiman (2006) describes how foreign investors also contributed greatly to the market disaster in 1996. His study reveals that four (4) foreign institutional investors arrived in Bangladesh following the withdrawal of lock-in system. They each employed 100 young people to play with the fortunes of thousands innocent investors, who were attracted by the hope of making money from the securities market in a short period of time. It is alleged that those 400 (4×100) purposefully hired youngsters played a key
role in creating artificial demands for securities, which could not be saturated by the supply.

The inquiry committee formed by ‘Securities and Exchange Commission Bangladesh’ to investigate the causes of the crisis, alleged that there was insider trading, market manipulations and fraudulent activities by the company directors and brokers-members syndicate, which may have contributed to the abnormal fluctuations of share price leading to the market crash in 1996 (Asian Development Bank, 2005), stating,

Market manipulation, insider trading and off loading of shares by the directors of the company, including the broker-members and issuers syndicate (cited in Ittefaq, 1996b).

In particular the inquiry committee claimed that two DSE members and one SECB member were also involved in the activities with those foreign institutional shareholders (Solaiman, 2006). The Securities and Exchange Commission Bangladesh obtained warrants of arrest against 32 people in seven brokerage firms and eight listed companies. But no proceeding could be carried on later (Economist, 1997).

2.5.5.3 The Role of the Regulatory Body During the Crisis

It is mentioned that in 1993, the Securities and Exchange Commission Act, 1993 was passed and Securities and Exchange Commission Bangladesh (SECB) was established as a corporate watchdog to monitor and ensure proper functioning of the capital market. Rules of conduct for the stock dealers, brokers and sub-brokers and forbidding insider trading were framed under this Act, but no initiative was taken either by the government or by the SECB to enforce these rules of conduct.

Even the whole episode of the boom and burst of the share market in 1996 was in the nose of the Securities and Exchange Commission Bangladesh. The SECB was either not concerned to react in time with effective measures against speculators and manipulators or it was not fully equipped to cope with such a situation. There is a provision of huge punishment for manipulations, insider trading and fraudulent activities under the ‘Securities and Exchange Ordinance 1969’ and ‘Prohibition of Insider Trading Regulation 1995’. SECB, instead of taking direct action, such as suspension of trading, canceling broker’s licenses etc., took measures of corrective nature that did not produce any result. The government was also incompetent in
handling the crisis and was silent during the whole episode (Prime Minister Office, 2005).

The issue was vigorously debated in the parliament. The then finance minister Shah Kibria made some comments such as ‘the situation can not be called a collapse unless the price index goes below 1500’ and ‘it is not at all a crashing situation’ (Economist, 1996), which ignited much further debate. His immediate predecessor finance minister Saiful Rahman criticized such comments,

   Although I do not believe in the ‘lock in’ system under the market economy, our market is not similar to that of a developed market, such as market in Hong Kong or in the United States (cited in Ittefaq, 1996a).

This crisis was somehow similar to the Asian Crisis (discussed in part 1.6) as there was a huge flow of foreign capital investment in the capital market before the crisis and there was a sudden fall of stock prices following a sudden exit of foreign capital. In the 'Asian Crisis' the foreign investors withdrew their investment due to fear of loss but in Bangladesh foreigners realized the expected gain after selling their shares. Before the Asian Crisis, the Bangladesh currency was fully convertible\textsuperscript{19} (Islam, 1999). The foreigners took that opportunity and repatriated a large amount of funds from the sale of shares held by them.

\subsection*{2.5.6 Reforms of Capital Market in Bangladesh}

After the incidence in 1996 there was a call for reform by Asian Development Bank (ADB), the International Monetary Fund (IMF), The World Bank, the United States Agency for International Development (USAID) and the United Nations Development Program (UNDP). ADB approved a loan of U.S. $80 million for a Capital Market Development Program (CMDP) for creating a policy environment conducive to the orderly growth of the Bangladesh capital market and help establish the institutional infrastructure necessary to sustain the capital market’s long-term development (Asian Development Bank, 1997). In addition, the ADB provided a technical assistance grant of U.S. $2.04 million, financed by Japan, to build up the capacity of the Securities and Exchange Commission Bangladesh, the stock exchanges and other key institutions. The

\textsuperscript{19} On 24\textsuperscript{th} March 1994, Bangladesh currency was declared to be convertible for current transactions in terms of Articles VII of the IMF Articles of Agreement (Bangladesh Bank, 2004).
assistance would be used to establish market monitoring and surveillance systems, improve information gathering, and train staff of the Securities and Exchange Commission Bangladesh in investigating and prosecuting securities violations.

Although, a few notable measures of reforms were found in the capital market development since mid 1990s, it was geared up after '1996 Crisis'. First, the credit rating of the company has been made mandatory for the Initial Public Offerings (IPO), rights issues and other debt instruments, under the ‘Credit Rating Companies Rules 1996’. Two credit rating agency in this regard is formed in 2004 (this is discussed in part 2.5.6.1). Second, to promote the floating private mutual funds into the capital market, 'Securities and Exchange Commission (Mutual Fund) Regulation 1997' was enacted, which was later replaced by 'Securities and Exchange Commission (Mutual Fund) Rule 2001' (discussed in details in part 2.5.6.2). Third, to protect small investors, one year's lock-in was imposed on private placement excluding institutional investment and mutual funds. Fourth, the Central Depository Bangladesh Limited (CDBL) has been formed (which has been discussed in part 2.5.6.3) at private initiative in order to be registered under depository laws. Fifth, to protect the interests of the investors, a few new provisions have been imposed on public issues, such as, prior approval of the SECB for upward revaluation of securities; share certificates have to be issued within 90 days from date of accepting subscription; audit has to be completed within 120 days from the beginning of a fiscal year and annual general meetings (AGM) have to be called within six months; imposition of penalties in the event of failure to distribute the declared dividend on time and the directors and public shareholding have to be in the proportion of share capital (World Bank and International Monetary Fund, 2003; SECB, 2005a). At last, it has been made mandatory for all enlisted companies to disclose their price sensitive information in two national dailies (one in Bangla and another English) besides reporting to the SECB, and also to circulate the half-yearly reports of the company to the share holders and to let shareholders know by publishing such news in the national dailies (SECB, 2001). There are few more initiatives which are discussed in part 2.5.6.4 through part 2.5.6.7.

2.5.6.1 Credit Rating for Initial Public Offerings

With a view to ensure the good governance the credit rating was made compulsory by SECB for all initial public offerings (IPO), right and bonus issue and
debt instruments through public offering by publicly listed companies. The first credit rating company ‘Credit Rating Information and Services Ltd.’ started its operations in April 2002. The second credit rating agency, namely the ‘Credit Rating Agency of Bangladesh Ltd’ (CRAB) started its operation on 24\textsuperscript{th} February 2004 (SECB, 2004). The credit rating agencies are required to compulsorily follow the same ‘code of conduct’ as followed by the ‘International Organization of Securities Commission’ (IOSCO). With the operation of new credit rating agency, it is expected that competition would result in improvement of quality of credit rating.

2.5.6.2 Mutual Fund and Asset Management

The mutual funds concept was brought into the capital market first by the Investment Corporation of Bangladesh (ICB) in 1977. Before enactment of the Securities and Exchange Commission (Mutual Fund) Regulation 1997 and Securities and Exchange Commission (Mutual Fund) Rules, 2001, only state owned investment agency ICB could issue the mutual funds. There was a flow of private mutual funds to the capital market following the Securities and Exchange Commission (Mutual Fund) Rules, 2001 was enacted. After that a lot of private mutual funds were licensed and listed on the stock exchange(s). The Asset and Investment Services of Bangladesh (AIMS) Bangladesh, a private sector asset management company, first introduced such funds in the private sector and got the license in January 2000 and listed in the stock exchange in 2001. The second such mutual fund was the Grameen Mutual Funds (also issued by AIMS Bangladesh) and was registered in August 2001.

As on 31\textsuperscript{st} December 2008, sixteen (16) mutual funds were trading in the stock exchanges (SECB, 2008b). It is very positive that more mutual funds are still coming to the market as institutional investors, which may play a significant role in the capital market operations and good corporate governance.

2.5.6.3 Central Depository Bangladesh Ltd.

A depository is like a bank for shares instead of issuing share certificates. Instead of holding shares in the form of certificates, investors have accounts in the depository and are able to move securities and settle stock exchange transactions by an electronic update of their accounts. The core service of a depository is the efficient
delivery, settlement and transfer of securities through a computerized data entry system.

Almost all the developed and a number of developing economy (such as, Australia, China, India, Indonesia, Pakistan, Hong Kong, Japan, Korea, Malaysia, New Zealand, Philippine, Singapore, Sri Lanka, Taiwan, Thailand, Uzbekistan) have the Depository for electronic share transfer. In Bangladesh, there was no depository in the share market before 2003. On 23rd December 2003, Central Depository Bangladesh Limited (CDBL), which was incorporated as a public limited company on 20th August 2000, started its commercial operation upon receipt of a business commencement certificate from the Securities and Exchange Commission Bangladesh to operate and maintain the Central Depository System (CDS) of electronic book entry, recording and maintaining securities account, and registering transfer of securities, changing of ownership without any physical movement or endorsement of certificates and execution of transfer instruments (SECB, 2004). Asian Development Bank (ADB), various local banks, stock exchanges and other institutions offered assistances in setting up the Central Depository System (CDS) in Bangladesh.

Since the introduction of CDS, the initial public offerings (IPO’s) must be made through CDBL in a dematerialized form with a view to enhance the transparency and to bring dynamism in the capital market. The dematerialization of securities listed on the stock exchanges began on 24th December 2004, and by 30th June 2007, 32 companies have joined CDBL; by the end of 30th June 2008 it became 150 companies. Trading and settlement of most of the securities at Dhaka Stock Exchange are now done in dematerialized forms (SECB, 2007; SECB, 2008a).

Central Depository facilitates the settlement of transactions and delivery of share certificate, dispatch cash dividends and bonus shares, helps avoiding the risk of lost, damage, theft and duplicity of securities or a probable hazard of keeping the securities in self custody. CDBL brought pace into the share market, by converting physical share certificates into electronic form and eliminated the risks of damage, loss, forgery and duplication of certificates. After the introduction of electronic registry of shares through CDBL trading and settlement have been increased significantly and settlement period of securities transactions has also been reduced (SECB, 2008a).
2.5.6.4 Merchant Banks

Merchant Banks consists of the full-fledged ‘Issue Manager’, ‘Underwriter’ and ‘Portfolio Manager’. From 30th June 2002 a few companies are allowed to work as merchant banks (SECB, 2002). As on 30th June 2007, there were 29 companies (22 companies were full fledged merchant bankers, 6 issue managers and 1 portfolio manager) that obtained registration certificate from the Securities and Exchange Commission Bangladesh to work as a merchant banker and portfolio manager (SECB, 2004).

SECB monitors the activities of the Merchant Bankers and take actions against those whose performance is not satisfactory. For example, the SECB stopped the operation of Saudi- Bangladesh Industrial and Agricultural Investment Company Ltd. in 2003 for poor performance.

2.5.6.5 Inspection and Surveillance

To improve the transparency in the capital market SECB introduced inspection of brokerage houses. In the period of 2003-04 the SECB inspected eleven brokerage houses based on some specific observations of surveillance and monitoring.

The Surveillance Department of the SECB monitors on a real time basis the trading of securities on the Dhaka Stock Exchange Ltd. and Chittagong Stock Exchange Ltd. through a non-trading version of work stations. Through this system the SECB Surveillance Officers watch the daily trading pattern and from time to time inform the top management of the SECB about the market condition. At the end of the trading period, a report containing abnormal activities, if found during the trading period, is prepared and submitted to the Chairperson, members and other senior officials. For example, the SECB fined and suspended the trading of a broker member and the vice president of Dhaka Stock Exchange for gross irregularities and not complying the Companies Act, Brokers, Stock Dealers, Sub-Brokers Regulation and Depository Participant Rule in trading securities (Financial Express, 2005).

2.5.6.6 Analysis of Trading Data

Surveillance Department of SECB analyzes the post trading data on a regular basis. Relevant data and trading information are regularly collected from the stock exchanges based on the objectives of the analysis. In this regard, historical data analysis
of the company is carried out and emphasis is given to the price and volume trend of the securities. If the analysis reveals any abnormal trend or volatility in terms of turnover and price movement, then primary inspection is conducted in order to ascertain the reason(s) behind such movement and if anything is suspected wrong, then the matter is placed to higher authority for further action. During the year 2006-07, the SECB fined 26 directors for certain non-compliance (SECB, 2007).

2.5.6.7 Categorization of Shares

To increase awareness of the investors in the capital market, the listed companies have been categorized by the SECB as A, B and Z, based on profit-loss, status of annual general meeting (AGM) and commercial operational status of the companies. ‘A’ category companies are those which are regular in holding the AGM and pay 10% or more dividend, ‘B’ category companies are those which are regular in holding the AGM but pay less than 10% dividend in the last English calendar year and have paid the dividend within sixty days after the date of declaration. ‘Z’ category shares are the junk shares which fail to hold an AGM or fail to pay any dividend, and whose accumulated loss exceeded the issued capital or companies which are not in operation for more than six months. The surveillance staffs of SECB closely monitor the trading of ‘Z’ category shares, particularly, in respect of price movement of these shares. If any unusual price change in the trading of ‘Z’ category share is noticed, then the matter is taken up with the higher authority and, if necessary, the concerned brokerage houses are asked to furnish the relevant papers for examination (SECB, 2004).

2.5.7 Financial Reporting, Accounting and Auditing Standards

Two professional accounting bodies, such as the Institute of Chartered Accountants of Bangladesh (ICAB) and the Institute of Cost and Management Accountants of Bangladesh (ICMAB) regulate the accounting profession in Bangladesh. After independence in 1971 the government of Bangladesh took much initiative to set some attributes and norms of professional practice. The Institute of Chartered Accountants of Bangladesh (ICAB), the first national professional accounting body of Bangladesh was established under the Bangladesh Chartered Accountants Order 1973 (Presidential Order Number 2 of 1973). The Institute of Cost
and Management Accountants of Bangladesh (ICMB), the second national professional accounting body was established in 1977 under the ‘Cost and Management Accounting Ordinance 1977’ to regulate the Cost and Management Accounting profession in Bangladesh. Although both the accounting bodies encourage the acceptance and observance of International Accounting Standards (IAS) and International Financial Reporting Standards (IFRS), they prescribe separate Bangladesh Accounting Standards (BASs). ICAB became the member of the International Accounting Standards Board (IASB) in 1983.

The accounting practice and company financial reporting in Bangladesh is guided under the several provisions of Companies Act, 1994, the Bank Companies Act, 1991 which was amended by the ordinance of Bank Companies (Amendment) Ordinance 2007 (for banking institutions), the Insurance Act, 1938 (for insurance companies). The Companies Act 1994 provides basic requirement for accounting and reporting applicable to all companies incorporated in Bangladesh. Section 212 of this Act allows the members of the ICAB and section 220 of this Act allows the members of ICMAB to audit the company to ensure that their accounts conform to all Bangladesh Accounting Standards (BASs) as adopted by the Institute of Chartered Accountants of Bangladesh (ICAB) in the implementation time frame given by ICAB.

The Securities and Exchange Commission Bangladesh by a notification on 29th December 1997 required all listed companies to abide by ‘Accounting Standards’ adopted by ICAB and ICMAB, therefore, ensuring the accounting standards are mandatory for the listed companies in Dhaka and Chittagong Stock Exchanges. Being the authoritative body of the companies, effective from February 2000, Securities and Exchange Commission Bangladesh, by a notification has forced the companies to adopt sixteen (16) Bangladeshi Accounting Standards (BASs), to ensure the transparency, accountability and good governance in the corporate sectors.

The amended Securities and Exchange Rules, 1987 ensures that financial reports of the company represent the true and fair picture of the companies’ state of affairs and is prepared in compliance with internationally accepted accounting and auditing standards. Therefore, the financial statements of all listed companies have to be audited by such as a partnership chartered accountants firm which has at least two chartered accountants on their staff with a minimum seven years' experience. None

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20 Former International Accounting Standards Committee (IASC)
among the partners of the concerned companies or their relatives can be associated with the audit. The accounts must be audited by the end of the year. The amended Securities and Exchange Rules, 1987 also empowers the SECB to order special audits at the cost of the companies involved in unfair practices. It also ensures greater accountability of the listed companies.

In order to improve the financial reporting regime in Bangladesh, World Bank and International Monetary Fund (2003) recommended establishing an independent oversight body, namely the ‘Financial Reporting Council’ to introduce the ‘Financial Reporting Act’ and to repeal the provisions of accounting, auditing and financial reporting under the provision of the Companies Act, 1994, the Bank Companies Act, 1991 which was amended by the Bank Companies (Amendment) Ordinance 2007, the Insurance Act, 1938, and other related regulations. Recently the government took initiative probably to implement the World Bank and International Monetary Fund (2003) recommendations and drafted the ‘Financial Reporting Act 2007’. The draft Act contains a provision for establishment of an independent body, ‘The Financial Reporting Council (FRC)’ to oversee the accounting standard setting procedures and public interest oversights of professional accounting bodies. The sole objective of the proposed act is to implement the Financial Reporting and Auditing Standards in the corporate sector. The appropriateness of the FRC is questioned and several criticisms on this proposed Act were made in a general meeting of the ICAB members in late October 2007. It is argued that the enactment of such law based on the United Kingdom model is likely to have an adverse economic impact, through increased ‘cost of doing businesses’ and slowing down of the capital market growth in Bangladesh (Independent, 2007). Nevertheless, although it appeared that the government was quite optimistic in enacting such law, nothing is heard about this law so far.

2.5.8 An Overview of the Banking Sector

A bank can be an important monitor by providing significant part of share of finance and governance. Bangladesh Enterprise Institute (2003) argues that the banking sector can serve as a motivation for better corporate governance through its requirements and procedures for approving and monitoring loans. Therefore, overview of the banking sector is crucial in understanding the corporate governance of a country.

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21 This is confirmed by a Law academic working at an Australian University from his telephone conversation with ‘Ministry of Law’ officials in Bangladesh sometimes in November 2007.
The banking sector in Bangladesh is not very ancient. Banglapedia (2005; 2006) outlined that there is no evidence of existence of banks in Bengal before 400 B.C.; however, there is an evidence of financial assistance between the businessmen. Due to scarcity of funds, traders sometimes relied on local Muhajan for borrowing. However, these are not large scale borrowings. The evidence of commercial banks existence was only found during the second half of the 17th century. Those banks were mainly engaged in trade financing and providing short-term loans. With the increase in trade, the increase in activities of traders and mercantile communities there was a resultant increase in the money circulation and it ultimately led to the development of banking throughout Mughal Bengal. The Bengal Bank which was established in 1784 was the first modern bank in India. Dhaka Bank started its operation in 1806 and Bengal Bank opened its first branch in Dhaka city by purchasing Dhaka Bank in 1962.

After the emergence of Pakistan in 1947, the country inherited a banking and credit structure consisting of 631 branches of various banks, including some foreign banks and the central banking activities were vested upon the Reserve Bank of India until July 1948 under the partition arrangement. The State Bank of Pakistan was established in July 1948 (Banglapedia, 2005).

After independence in 1971, Bangladesh inherited 1,130 branches of 12 commercial banks, 10 insurance companies established between 1958 and 1971, and the Co-Operative Bank Ltd. It also inherited a number of industries, including the jute and textile sectors, as a consequence of independence and most of which were abandoned by Pakistani entrepreneurs. So in one hand there was a large vacuum in the various sectors including the Banking and Insurance sector and on the other hand the then Bangladesh government was facing severe problems of managing the abandoned industries as there were lack of policies (or no policy at all) as how those industries will be run and governed (Banglapedia, 2005).

The banks in Bangladesh can be considered extremely closely held corporations and the majority of the banks are not publicly listed companies. On an average only 20 percent share of banks is publicly traded in the Bangladesh stock market and a large majority of the shares are owned by a small number of ‘sponsor’ shareholders leaving a highly concentrated ownership (Reaz and Arun, 2005). Although the Securities and Exchange Commission Bangladesh (SECB) is working to bring the discipline in the

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22 They are the individual lender, lending with very high rate and compounded monthly.
listed companies at the stock exchanges, the scope of SECB is limited, since a majority of the banking companies in Bangladesh is not listed with stock exchanges. It is the Bangladesh Bank which regulates the banking sectors in Bangladesh.

The Bangladesh Bank is the central bank of Bangladesh, which was established as a corporate body in 1972 under the ‘Bangladesh Bank Order 1972’ with effect from 16th December 1971. Through this order, the entire operation of the former State Bank of Pakistan in the eastern wing was transferred to Bangladesh Bank. The everyday business affairs of the Bangladesh Bank is directed and managed by nine member ‘board of directors’ which consists of the governor as a chairman, a deputy governor, three senior government officials and four persons having experience and proven capacity in the fields of banking, trade, commerce, industry or agriculture - all are nominated by the government. The board, which is the highest policy making body, meets at least six times a year and at least once in every quarter under the governor as the chair. The governor, appointed by the Government of Bangladesh as the chief executive officer, directs and controls all the affairs of the bank on behalf of the board (Bangladesh Bank, 2004).

Bangladesh Bank has been entrusted with all the traditional central banking functions including the sole responsibilities of printing and issuing of currency, keeping the reserves, formulating and managing the monetary policy and regulating the credit system of Bangladesh with a view to stabilizing domestic and external monetary value and promoting and maintaining a high level of production, employment and real income in the country. Bangladesh Bank exercises its wide range of power in credit control through different types of traditional and non-traditional methods. In addition to bank rate and open market operations, it uses a number of other weapons in controlling the banking sector. It can vary the minimum reserve requirements of scheduled banks whenever circumstance so warrant. Being responsible for maintaining external value of Bangladesh currency, the bank also handles the exchange control. It ensures that all foreign exchange inflows are accounted for, and surrendered to the authorized Bangladesh Bank dealers. It allocates and rations the foreign exchange in accordance with the set priorities. Bangladesh Bank is empowered to manage the country's international reserves, which represent aggregate of its holding of gold, foreign exchange, Statutory Deposit Reserve (SDR) and reserve position in the IMF. The bank also acts as the representative of the government in different international agencies and
other forums such as ADB, Asian Clearing Union, IMF, World Bank etc. (Bangladesh Bank, 2004).

The bank also acts as the banker to the government and accepts government deposits, checks and drafts, and undertakes collection of checks and drafts drawn on other banks. The government deposits all its cash balances with the Bangladesh Bank for free of interest. The bank transfers government funds from one place to another as requested by the government and its agencies.

Bangladesh Bank has 9 branch offices of which two in the capital city. Bangladesh Bank has correspondent relationships with one international and eight foreign central banks, such as the Federal Reserve Bank of New York, Bank of Canada, Bank of England, Bank De France, Deutsche Bundes Bank, Bank of Japan, Svereges Riks Bank of Stockholm, Reserve Bank of India and the Bank for International Settlements, Basle. In addition, Bangladesh Bank has now invested its foreign exchange reserves with 14 banks at different international financial centers.

The powers and functions of Bangladesh Bank are governed by various legislations. It regulates the banking activities of bank companies (commercial banks) which are operated under the Bank Companies Act 1991, which was amended by the Bank Companies (Amendment) Ordinance 2007. The provisions of the Bank Companies Act 1991 and Bank Companies (Amendment) Ordinance 2007 are in addition to the provisions of the Companies Act 1994. Similarly, non-banking financial institutions are also governed by Bangladesh Bank (BB) in terms of the provisions of the Banker's Books Evidence Act 1891, Insolvency Act 1920, Banking Companies Ordinance 1962, Bangladesh Bank Order 1972, Foreign Exchange (Regulation) Act 1986, Money Loan Court Act 1990, Financial Institutions Act 1993 and Rules 1994, Companies Act 1994 and Bankruptcy Act 1997. Those laws allow the regulatory steps which may be taken by Bangladesh Bank, including powers to license and give directions to such companies in the public interest, in the interest of monetary and/or banking policy, in order to prevent the affairs of such companies being conducted in a manner detrimental to the interest of the companies or depositors, and to ensure their proper management (Bangladesh Bank, 2004).

The overall banking sector in Bangladesh comprises of four types of scheduled banks, such as nationalized commercial banks (NCBs), government owned development finance institutions (DFIs), private commercial banks (PCBs) and foreign commercial banks (FCBs). As at 30th June 2007 there were 6,562 branches of 48
commercial banks were in operation in Bangladesh, of which 4 nationalized commercial banks (NCBs), 5 state owned development finance institutions (DFIs), 30 domestic private commercial banks (PCBs), 9 foreign commercial banks (FCBs) and 28 non bank financial institutions (Bangladesh Bank, 2007). The table 3 below helps in explaining the performance of the banking sector for the year 1999 through 2006.

Table 3: Profitability ratios of various banks (Calendar year basis)

<table>
<thead>
<tr>
<th>Year</th>
<th>Return on Assets (ROA)</th>
<th>Return on Equity (ROE)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>NCB</td>
<td>PCB</td>
</tr>
<tr>
<td>1999</td>
<td>-0.03</td>
<td>0.80</td>
</tr>
<tr>
<td>2000</td>
<td>0.05</td>
<td>0.83</td>
</tr>
<tr>
<td>2001</td>
<td>0.06</td>
<td>1.12</td>
</tr>
<tr>
<td>2002</td>
<td>0.10</td>
<td>0.75</td>
</tr>
<tr>
<td>2003</td>
<td>0.08</td>
<td>0.69</td>
</tr>
<tr>
<td>2004</td>
<td>-0.10</td>
<td>1.20</td>
</tr>
<tr>
<td>2005</td>
<td>1.36</td>
<td>1.06</td>
</tr>
<tr>
<td>2006</td>
<td>0.00</td>
<td>1.10</td>
</tr>
</tbody>
</table>

Source: Bangladesh Bank (2006; 2007)

2.5.9 Insurance Companies, NGOs and Micro Finance Institutions

Apart from the banks, there are a number of insurance companies working in Bangladesh under the “Insurance Companies Act 1973” (amended in 1984), some Non-Governmental Organizations (NGOs) which are mostly working and extending credit to the rural people. ASA, BRAC, Grameen Bank (Rural Bank) and Proshika are considered to be the big NGOs. Grameen Bank is the largest NGO in Bangladesh. NGOs have specific social agenda. The NGOs micro finance programs attach great importance to the rural development and poverty alleviation. The Grameen Bank’s ‘Micro Finance Program’ for poverty alleviation attracted worldwide attention. During the financial year ending 30th June 2007, the NGOs through their micro finance project disbursed loan amounting to Taka 158.4 billion and their average recovery rate is almost 95% (Bangladesh Bank, 2007). Some NGOs have collaborative program such as, agriculture, infrastructure, human resource, education and health care (Sarker, 2003).
2.6 Corporate Governance Practices in the Listed Firms

From the discussion above, it appears that Bangladesh is struggling towards the institutional sweeping change in strengthening the corporate governance best practices. However, it is very important to ensure that the firms are adopting the corporate governance practices. The recent corporate collapses such as collapses of Enron and HIH were due to the absence of firm level corporate governance within the respective firms (Mardjono, 2005). Firms in Bangladesh were not required to report information on corporate governance in their disclosure documents (OECD, 2003). It is the ‘Corporate Governance Notification 2006’ (discussed in part 2.8.1 and provided in Appendix 3), which requires the firms to comply and to disclose the compliance of corporate governance best practices in the prescribed format. However, the compliance of such practices by the firms is not noteworthy. An independent survey in late 2006 with the help of Securities and Exchange Commission Bangladesh (SECB) revealed that about 55 percent of companies did not comply with the good practice guidelines and only about of 33 percent companies appointed the independent directors (Jai Jai Din, 2006). Following paragraphs may help in explaining the firms level various corporate governance practices in Bangladesh.

2.6.1 Ownership Structure

The corporate ownership structure strongly influences the corporate governance mechanisms in a country. So understanding the ownership structure is very important in understanding and ensuring the suitable corporate governance mechanism in a country. The various ownership structures that may influence the firm level corporate governance practices in Bangladesh are discussed below.

2.6.1.1 Family Ownership

Similar to other Asian Countries, the shares of public limited companies in Bangladesh are not widely held and the control of the companies remains in the hands of dominant shareholder groups, although these companies are listed on the stock exchanges. A few shareholders account for a significant portion of total share value. On an average the top three largest shareholders hold more than fifty percent of the share capital of the listed firms (from the descriptive statistics in table 15). Apart from a few controlling ownership by foreign investors, government and financial institutions, the
joint stock companies in Bangladesh are mainly controlled by founding sponsors/directors who are in turn the family members leading to very high degrees of ownership concentration and control. Representatives of these concentrated owners hold the position on the company board and in management, leading to poor monitoring and control. Due to the wave of privatization, very recently the government controlled ownership is relatively very small. The foreign ownership is a new concept in Bangladesh. Despite a number of incentive offered to foreigners (this is discussed in part 2.6.1.4), the foreigners controlled entities are relatively low in Bangladesh. The cross shareholding and pyramidal structure is not common in Bangladesh and therefore the controlling ownership is not defined in Bangladesh company law.

2.6.1.2 Emergence of Family Ownership

The privatization policy adopted in Bangladesh in late 1980s severely influenced the corporate ownership structure in Bangladesh. The privatization in Bangladesh encouraged new firms to come to the existence and listed in the stock exchanges; however, it could not promote the capital market development until recent years (table 2). The poor and less liquid stock market operations led to the excessive reliance on bank financing, which consequently allowed the control of the firms to remain in the hands of sponsors, directors, and founding family members leading to a high degree of control by individual investors (Berglöf, 1991; Shleifer and Vishny, 1997). Therefore, a class of wealthiest people emerged in the country who borrowed huge funds from commercial banks with the state patronage in the name of business, remained defaulted (Akram, 1999b; Sarker, 2003); leading to a crony capitalism (Uddin, 2005).

While it is argued that the Privatization usually leads to greater firm performance (such as, Boubakri et al, 2004; Boubakri et al, 2005; D'Souza et al, 2005; Megginson and Sutter, 2006); the privatization in Bangladesh failed to attract sufficient foreign investment (Akram, 1999b); it failed to increase returns to society, privatized companies' contributions to state revenue declined in real terms and as a proportion of value added (Uddin and Hopper, 2003). Potts (1999) in a case study of Czech Republic, Poland and Russia concluded that privatization without restructuring the firm and its management is unlikely to produce a real change. In this context Dharwadkar et al (2000, p 650) suggest that the "post privatization performance can be enhanced by
using appropriate ownership, management and corporate structure that mitigate the agency problems in the context of weak governance”.

2.6.1.3 Minority Shareholders Right

Minority shareholders are those shareholders who do not have sufficient voting powers to influence the company affairs. Minority shareholder's rights in Bangladesh context are very poor. The Bangladesh Companies Act 1994 offers several protections for shareholders rights. For example, section 81 allows the shareholders to attend the AGM, section 85 allows them to vote, and section 106 allows them to remove the directors. However, there is no provision in the existing law that allows the shareholders to call a meeting. Further, the shareholders are not aware of their basic rights and lack appropriate motivation to exercise their rights (Haque et al, 2006); the shareholders often misunderstand their function as shareholders, they are happy to attend the AGM in a nice location rather than exercising shareholding right in the company management (Bangladesh Enterprise Institute, 2004). The average non-controlling shareholder is an individual who has a little knowledge about the share market operations, does not possess significant level of education, is not aware of his or her rights or how to exercise them or does not have the understanding and sophistication required to exercise the pressure on a company management to enforce his or her rights to attend meetings, right to dividends, right to appoint and remove directors and right to obtain financial information as well as right to approve the annual financial statement (Bangladesh Enterprise Institute, 2003). Moreover, it is very hard for the average non-controlling shareholders to achieve necessary votes to pose a threat to the company management. Unlike in many developed countries, there is no legislative guidelines in calling for an annual general meeting (AGM) by the shareholders, in enforcing the company constitution. As the company constitution is drafted based on the guidelines from founding family members, it has very little role in upholding minority shareholders’ right.

2.6.1.4 Foreign Ownership and Incentives to Foreigners

Foreign ownership is a new concept in Bangladesh. The Industrial Policy 1991, the Taxation Legislation 1984 and other associated trade policies allowed Bangladesh to adopt a very liberal industrial policy to attract foreign investment (Privatization
Commission, 2007b). It is the Foreign Private Investment (Promotion and Protection) Act 1980, which ensures legal protection to foreign investment in Bangladesh against nationalization and expropriation. It also guarantees repatriation of capital, profit and dividend and equitable treatment with local investors. Adequate protection is available for intellectual property rights, such as patents, designs and trademarks and copyrights.

During the last 32 years (since 1976), the government allowed various facilities to foreigners as well as to non-resident Bangladeshi investors to attract the foreign investment; these are summarized below as adapted from Dhaka Stock Exchange (2008c).

(a) No permission of the government is required to set up new industries by the foreign investors.
(b) Foreign investments with 100 percent foreign equity holdings are allowed.
(c) Foreigners employed in recognized industries are exempted from income taxes for first 3 years.
(d) Except five reserve sectors (arms, ammunition and other defense equipment and machinery; nuclear energy; forest plantation and mechanized extraction; security printing and railways and air transportation), foreign private investments are open.
(e) Upon registering the industries with the Board of Investment (BOI), it is possible to get various facilities such as procurement of land, electricity, gas and sewerage connection, import of capital machinery and raw materials with tax rebate, duty drawback facilities etc. by the foreign investors.
(f) Enterprises with foreign ownership may remain as private limited companies. In case of public limited companies, the public offering of shares is optional.
(g) If foreign investors reinvest their repatriable dividends and or retained earnings, those will be treated as new investment.
(h) Foreigners employed in Bangladesh are entitled to remit up to 50 percent of their salary and will enjoy facilities for full repatriation of their savings and retirement benefits.
(i) Foreign investors are allowed to buy newly issued shares/debentures of Bangladeshi companies.
(j) 10 percent (10%) quota of the Initial Public Offerings (IPO) is reserved for non-resident Bangladeshis.
(k) Foreign investors can deposit foreign currency in the Non-Resident Foreign Currency Deposit (NFCD) Account.

(l) There is a tax holiday schemes for the period of 5-10 years for foreigners depending on location of the industries.

(m) There is a 15 years tax holiday for foreign private power generation companies.

(n) There is a tax exemption on interest on foreign loan.

(o) There is a tax exemption on royalties, technical know-how and technical assistance fees.

(p) There would not be any double taxation on the basis of bilateral agreements.

(q) Issuance of multiple entry visas to prospective foreign investors for 3 years.

(r) Guarantee of legal protection to foreign investment in Bangladesh against nationalisation and expropriation. It also guarantees non-discriminatory treatment between foreign and local investment, and repatriation of proceeds from sales of shares and profit.

(s) Moreover, several provisions are applicable under the Income Tax Ordinance 1984. A few of these are ‘Tax Holiday’ for 5-7 years depending on the industry location, tax exemption, accelerated depreciation, reduced import duty on capital machinery import.

Despite those incentives the foreign direct investment (FDI) and foreign ownership in Bangladesh is not noteworthy. The foreign direct investment (FDI) during the year 2006-07 stood U.S. dollar 263 Million (Dhaka Stock Exchange, 2008b). U.S. Department of Commerce (cited in Index of Economic Freedom, 2005, p 104) identified some reasons behind such situation,

Foreigners often find that ministries require unnecessary licenses and permissions. Added to these difficulties are such problems as corruption, labor militancy, an uncertain law and order situation, poor infrastructure, inadequate commercial laws and courts, inconsistent respect for contract sanctity, and policy instability (i.e., policies being altered at the behest of special interests, and decisions taken by previous governments being overturned when new ones come to power).

In one hand it is very hard to induce the foreign investors to come to Bangladesh, on the other hand it is also very hard to ensure that the incentives offered to foreigners are not misused. That is it is the balancing interest of the foreigners and the country itself.
2.6.1.5 Institutional Ownership in Bangladesh

Unlike the firms in Anglo-American countries, institutional investors do not own the majority of shares in the listed firms. Due to absence of insurance based investment products in Bangladesh in most of the firms institutional shareholders own a very low stake of shares (Farrar, 2005). The concept of institutional shareholding came to light in Bangladesh following the establishment of Investment Corporation of Bangladesh (ICB) on 1st October 1976 under the ‘Investment Corporation of Bangladesh Ordinance 1976’. Investment Corporation of Bangladesh (ICB) is the first, single-most institutional investor in the country. It is an investment bank established to accelerate the pace of industrialization, to provide institutional support, to meet the equity gap of public limited companies in the industrial sector and to develop a sound securities market in Bangladesh (Banglapedia, 2006). Its main responsibilities are to manage the mutual funds consisting of shares and debentures in several portfolios securities and merchant banking; manage the investors’ accounts, unit funds, participate in direct purchase, sale and underwriting of securities by participating in trading in the stock exchanges. ICB also makes professional analysis of securities before constructing the portfolios. In the mid-1980s, two other private investment companies namely, National Credit Ltd. and Bangladesh Commerce and Investment Ltd., were permitted to participate in the capital market, although their activities remained limited. Lately, some private institutions have also begun underwriting. Other institutional investors are commercial banks, insurance companies and foreign investors. There is a dearth of foreign institutional investors in Bangladesh capital market (Solaiman, 2006). The flow of private institutional funds (mutual funds) to the capital market is also very limited (discussed in part 2.5.6.2). There are no ‘pension funds’ or ‘provident funds’ in the market (as seen in part 2.5.4.4). Due to huge dominance of family shareholding the institutional investors could ever exercised the power that they hold or such investors are not in a position, to force companies, on behalf of their clients, to improve performance, disclose voluntary information or improve their corporate governance.

2.6.2 Board of Directors

Section 90-114 of the Bangladesh Companies Act 1994 provides the guidelines for the appointment, qualification and disqualification of directors. Section 91 (1) (a) allows the subscriber to become the directors, until the directors are formally appointed.
Section 91 (1) (b) requires that the appointment of directors may be made from the existing members in an ‘Annual General Meeting’. However, Section 91 (1) (c) allows the casual vacancies to be filled by the existing directors. Section 94 outlines the disqualification to hold the position of a director. Unlike the corporate boards in continental Europe such as, Germany, Finland Holland and the Netherlands, traditionally the corporate boards in Bangladesh are one-tier board or management board. There is no supervisory board and both the executive and the non-executive directors perform duties together in one organizational layer, which is most common in Anglo-Saxon countries such as, the United States, the United Kingdom and Canada, Australia, and New Zealand. Therefore, the CEO duality is very common in Bangladeshi corporate sector. The "Corporate Governance Notification 2006" requires that the office of the Chairperson of the Board and the Chief Executive Officer (CEO) should preferably be filled by two different individuals. It also leads to some incidences of CEO duality in some listed companies, giving enormous powers to the CEOs, reducing the check and balances and ultimately the monitoring function of the board. In general board does not have any committee other than the ‘Audit Committee’.

There are limited roles and responsibilities of a board of directors in the context of Bangladesh. Although there is no provision for shadow directors in the board, some shareholders from the family controlled firms exercise huge powers, which reduce the effectiveness of the board. A study by Bangladesh Enterprise Institute (2003) identified that the boards are heavily dominated by the sponsor-shareholders in about 73% of the non-bank listed companies. The Companies Act 1994 does not say anything regarding the roles and responsibilities of the directors and penalties for non-compliance of fiduciary duties. The stock market scandal in 1996 (discussed earlier in part 2.5.5) revealed that the boards of directors of some listed companies were involved in malpractice.

There are no legislative guidelines for the directors’ duties. There is no legislative definition of ‘Independent Director’; there are no legislative guidelines for their qualifications and there are no guidelines for appointing them into the board. As a result there is a provision for appointing the outside independent directors due to having personal close relationship with the family, existing board members or large shareholder. Although the U. K Higgs Report 2003 suggests that the independent directors should not have any “relationships or circumstances which could affect, or appear to affect, the directors’ judgment”. However, the ‘Corporate Governance
Notification 2006’ allows the independent director(s) to be appointed by the elected directors. The pilot study of a number of company’s annual reports reveal that a number of the independent directors, who were appointed following the ‘Corporate Governance Notification 2006’, were the former shareholders of the company. They managed a position in the board after changing their hat. Although the U. K. Tyson Report 2003 recommends the appointment of non-executive directors with diversity in background, skills and experience to enhance board effectiveness and improved stakeholders’ relationship; in the Bangladesh context very few independent directors are appointed for their expertise and the priority in appointing them is usually due to having a close relationship with the family, or having personal connections with existing board members, company management and large shareholders or having some other connections that can be used for the company in the future. Bangladesh Enterprise Institute (2003) identified that, the directors who would fit the definition of ‘independent’ in Bangladesh are often current or former government officials or bureaucrats. They are appointed to help the company get licenses or as payback for previous favors. When boards need an independent opinion they rely on employing outside consultants or advisors. Therefore, independent directors may not serve as an advocate for minority shareholders or as a source of new and different ideas in the context of Bangladesh.

2.6.3 Management and CEO

The term CEO is an unknown concept in Bangladesh corporate sector. The Bangladesh Companies Act 1994 gives some guidelines regarding the position of managing director who are in turn CEO. Under section 2 (1) (m) of the Act, managing director (CEO) is,

a director who, by virtue of an agreement with the company or of a resolution passed by the company in its general meeting or by its directors or by virtue of its memorandum or articles of association, is entrusted with the substantial powers of management which would not otherwise be exercisable by him and includes a director occupying the position of a managing director by whatever name called.

Under section 109 of the Companies Act 1994, a person can not be appointed as a managing director if he is the managing director of another company. Under section
110, the term of office of a managing director can not exceed five years at a time unless extended in an annual general meeting. Several provisions have been introduced prohibiting compensation to directors for loss of office, so as to prevent collusive arrangements between companies and individuals (Bangladesh Enterprise Institute, 2003).

In most of the companies, the CEOs are the representative of the controlling shareholders, family members of the controlling shareholders. Their qualification and expertise does not always prevail in appointing them into the firm. Therefore, there is an absence of any accountability structure of management to the board. The existing laws do not require the companies to disclose the CEO pay in the disclosure documents, despite there is an increased concern in the corporate governance literature whether the well paid CEOs are performing well (Jensen and Murphy, 1990a).

2.6.4 Creditors Protection

The corporate bankruptcy procedures in Bangladesh are carried out under the provision of Bankruptcy Act 1997, in addition to the provisions Part V of the Companies Act 1994. Due to poor loan recovery mechanisms there were no rigid measures to recover overdue loans or preventing them from turning into bad debts. This is a common problem that banks are not able to recover their overdue loans, even through the enforcement of court. Prothom Alo (2006), for example, reports that the Bangladesh banking sector is under the hostage of a leading company, BEXIMCO, as a number of banks have huge amounts of outstanding loans, but the banks are unable to collect them. According to this report, BEXIMCO group has total loans of Taka 26,000 million from 20 banks (approximately equivalent to 402.54 million Australian dollars) of which Taka 4,250 million is outstanding. The report identified that, due to poor enforcement of law and through political influence, instead of initiative to collect them, these loans were rescheduled (renewed) whenever these are due to pay. A statistics shows that the classified loans as a percentage of total loans outstanding for Nationalized Commercial Banks, Public Commercial Banks and Foreign Commercial Banks at the end of 2001 were 45%, 26%, and 4% respectively implying that collection performance of the Nationalized Commercial Banks is the lowest (Bangladesh Enterprise Institute, 2003). Due to poor loan recovery mechanisms there were no rigid measures to recover overdue loans or prevent their turning into bad debts. Although
there are dedicated courts such as, Money Loan Courts, Bankruptcy Courts for debt recovery by banks and financial institutions, the Money Loan Courts suffer from a shortage of judicial officers and delays in executing decisions. The Bankruptcy Courts established under the Bankruptcy Act 1997 are not a favored option for banks. Therefore, banks often insist on blanket personal guarantees from company directors before giving out loans (Bangladesh Enterprise Institute, 2003). This picture ideally depicts such a worse situation that banks are unable to make the firms accountable.

### 2.6.5 Financial Reporting and Audit

Although the accounting failures is one of the root cases of corporate failure around the world, such as the failures of Enron, WorldCom and HIH Insurance (Lawrence, 2004; Kaplan and Kiron, 2004; Gopalkrishnan, 2006; Haswell, 2006), Bangladesh could not make significant progress towards the accounting profession and financial reporting. After independence in 1971 the government of Bangladesh took initiatives to set some attributes and norms of professional practice. The World Bank and Bangladesh Enterprise Institute (2003) states that the accounting and auditing practices in Bangladesh suffer from institutional weaknesses in terms of their regulation, compliance and enforcement of standards and professional rules. The preparation of financial statements and conduct of audits, in many cases, are not consistent with internationally acceptable standards and practices. Despite the requirement of the Audit Committee in ‘Corporate Governance Notification 2006’, most of the firms do not have an Audit Committee. Despite provisions of huge penalties for non-compliance in Companies Act, Securities Laws and Legislations, firms complying with full and accurate corporate disclosure requirements are few in number (Akhtaruddin, 2005). There is no effective enforcement of the timely and accurate filling of financials statement and the published financial statements have numerous compliance gaps (World Bank and Bangladesh Enterprise Institute, 2003).

This problem is further aggravated as the numbers of meritorious students do not admit into the Chartered Accountancy or Cost and Management Accountant Programs. This is due to time consuming education structure and low salary structure in this job as the accounting profession in Bangladesh is sometimes neglected. The employer’s attitude is that, this is merely a clerical job. Therefore, the university accounting graduates in Bangladesh do not join the accounting profession as it is not
given the prestige of a rewarding career. The World Bank (2002) states that, there is a
gross imbalance in the distribution of professional accountants in Bangladesh. Only 2%
work in the public sector and 98% work in the private sector, which reflects the limited
role, low status and low pay of government accountants compared to the private sectors
accountants. The out-of-date legal requirements, widespread non-compliance with
accounting and auditing standards, ineffective enforcement mechanisms, poor quality
accounting education and training, and inadequate adherence to professional ethics
have contributed to the weakness of the financial reporting regime. Moreover, due to a
lack of research in the educational institutions in Bangladesh, academics usually are not
concerned in directing the accounting practice (as argued in positive accounting theory
by Watts and Zimmerman, 1986). Rather, academics sometimes consider the poor
industry practice by the accountants who have lack of adequate knowledge and do not
follow uniform practice. Howieson (1996, p 31) argues that an unwilling to tackle this
policy issue is arguably an abrogation of academic's duty to serve the community which
supports them.

It appears that Bangladesh accounting standards are heavily aligned with the
European "Concept and/or Principles-Based" rather than the U.S. "Rules-Based"
accounting standards. This is primarily due to colonial influence and due to difficulties
in applying U.S. rules directly to emerging economies because of different cultures and
socio-political problems (Hoque, 2007, p 25). ICAB became the member of the
International Accounting Standards Board (IASB) in 1983. So far Bangladesh
adopted sixteen Bangladeshi Accounting Standards (BASs) on the basis of International
Accounting Standards which are principles-based as opposed to rules-based.
Professional accountants are given the rights to judge the 'true and fair view' of a
company financial report. Therefore, there is a provision of flexibility and professional
judgment in explaining the transactions and the auditors sometimes compromise with
their clients as the auditing standards are not precise. Audit firms mostly employ their
students to conduct the audit tasks and the accountant simply approves it. It can be
questioned how the accounting graduates who do not have the significant practical
knowledge in accounting can judge the economic substance of a transaction.

It is argued that the developing countries do not have their own accounting
standards and therefore adopt directly the standards developed by IASC and later by
IASB (Deegan, 2005, p 37). Similarly, the Bangladesh Accounting Standards adopted
by the ICAB in fact is a true copy of the IASs (Mir and Rahaman, 2005). The ICAB
does not provide adequate guidelines to its members to improve the quality of audit performed by its members (World Bank and International Monetary Fund, 2003). Although there are some general professional practice guidelines/codes for its members, ICAB however has no effective measures to ensure that members maintain the highest professional standards.

The professional accounting education program offered by ICAB to become its member is very complex. Students are required to engage with Chartered Accountancy firms at least for three years, sometimes which is worth nothing. Due to such barriers a number of meritorious students do not come forward to enroll into the ‘Chartered Accountancy Program’. The World Bank and International Monetary Fund (2003) argue that the training program offered by the ICMAB is inadequate and does not meet the practical application for international standards. The World Bank and International Monetary Fund (2003) further argue that the out-of-date legal requirements, widespread non-compliance with accounting and auditing standards, ineffective enforcement mechanism, poor quality professional accounting education and training, and inadequate adherence to professional ethics have contributed to an unsatisfactory corporate governance regime in Bangladesh.

Although there are number of existing laws, regulations, orders, notifications directly related to the capital market regulation and company management, the guidelines for financial reporting are inadequate and inappropriate. Without appropriate guidelines for financial reporting, it can be questioned whether good corporate governance can be ensured.

2.6.6 Enforcement and Punishment

La Porta et al (1998) argue that due to weak enforcement of law the investor’s protection is very poor in emerging economy. Similarly the enforcement of law in Bangladesh is either very poor or difficult to enforce. The degree of compliance with existing financial regulation is historically very low in Bangladesh (Ahmed and Nicholls, 1994). Such poor law enforcement is exemplified by occurrences of the 1996 stock market collapse, in which a syndicate of company directors and brokers had proceedings brought against them by the Securities and Exchange Commission Bangladesh. Subsequently, there is no evidence of punishment to these company directors and the brokers-members syndicate, because the proceedings were abandoned
due to poor enforcement of the law. Although there are provisions of penalties for non-payment of declared dividend or not-holding AGM in time under the Companies Act 1994, the firm's compliance with these are quite limited in number. Moreover, as the many shareholders are not aware of their rights, such non-compliance, such as non-holding the AGM in due time and non-declaration of dividend for a long period of time is very common in Bangladesh as Karim (1995, p. 262b) noted.

It was found that a considerable number of DSE listed companies have not been publishing their annual report for holding their annual general meetings for a number of years. There was no evidence of any action taken against any company by the DSE for not holding of AGMs and or not publication of annual reports.

This example suggests that the investor's protection is very poor in Bangladesh and corporate governance is of increased concern.

### 2.6.7 Corporate Financing Pattern in Bangladesh

Although the Bangladesh capital market is equity dominated, the borrowing in the form of bank credit to the stock market capitalization is very high. The size of the capital market is quite small relative to the banking sectors. The corporate debt-equity ratios in East and Southeast Asia are much higher compared to the international norms or in western system and the reliance on external debt financing is significant (Wade and Veneroso, 1998 and Claessens et al., 2000; Fan and Terada-Hagiwara, 2003; International Finance Corporation, 2005).

Wade and Veneroso (1998) further documented that, such a high debt-equity ratio in these countries are due to huge household savings. The gross domestic savings to GDP are one third or more, compared to 15-20 per cent in Western systems. The house-holds savings are mostly kept in bank deposits, as bank deposits are much less risky than equity investment. Therefore, the banks are found to be biased towards lending to firms as neither the households nor the government are significant net borrowers. In western countries, financial companies normally carry an amount of debt that is not bigger than the value of their equity capital; and banks do not lend to companies with higher levels of debt.

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23 For example during the year 2006-07, 25 listed companies defaulted in holding AGM; 38 failed to declare dividend (SECB, 2008a).
Bangladesh has similar trends of house-holds savings usually kept in banks as banks are the main depository of the economic system in the developing countries like Bangladesh (Arun and Turner, 2004). These investors are mostly risk averse, do not have sufficient knowledge of stock market operations and scarcely go to the stock market to invest their savings. The stock market scandals in 1996 further eroded investor confidence in the stock market; the consequence is the less liquid and underdeveloped capital market. Due to the absence of a liquid and strong capital market and as raising equity from stock market sometimes requires complying with bureaucratic formalities and additional disclosure requirements, overall due to fear of losing control, companies do not find much incentive of raising equity from the capital market. Moreover, due to its availability and soft terms, low transaction cost (in terms of preparation of prospectus and other disclosure documents), the tax advantages of debt contracts, the equity became less necessary and debt became more attractive as an alternative source of financing. Therefore, the bank credit to the stock market capitalization is very high and banks are the predominated source of external financing by large firms, which is also apparent in figure 4 above.

2.7 Mechanisms of Accountability to Manage the Agency Problems

While this thesis discusses the corporate governance mechanisms, some scholars (such as, Potts and Matuszewski, 2004) discussed the issue of ethics in corporate governance. But it is hard to place ethics in the corporate governance
mechanism or in the agency theory assumptions and it can only be achieved by monitoring and control (Roberts, 2004). That is, there is no optimal contract without monitoring. It is assumed in agency theory that, every person is essentially self-interested and it is very hard to find an altruist in the corporation. Therefore, once the problem is identified it is expected that appropriate action will be taken to resolve it or to prevent the unexpected event rather than to solve them after the event. In other words, “prevention is better than cure”.

**Figure 5: Internal and External Corporate Governance Mechanisms**

Corporate control mechanisms are remarkably different in different corporate governance models. These differences are largely due to the law and regulatory differences (Prowse, 1996) and cultural settings (Bhasa, 2004a); however some mechanisms are very common. In terms of mechanisms of accountability, academic studies (such as, Jensen and Meckling, 1976; Fama, 1980; Walsh and Seward, 1990; Rediker and Seth, 1995; Agrawal and Knoeber, 1996; World Bank, 1999; Denis and McConnell 2003) suggest that the corporate governance mechanisms may be internal or external to the firm. The figure 5 outlines the process of internal and external corporate governance mechanisms.

*Source: World Bank (1999)*
External mechanisms also referred as the ‘outsider control system’ which is most common in the United States, the United Kingdom, Canada, Australia and New Zealand acts within the ‘market-based’ model. On the other hand internal mechanisms also referred as the ‘insider control system’ which is most common in Germany and Japan acts within the ‘bank-based’ and ‘relationship-based’ model. These are further discussed in the following sections.

2.7.1 External Mechanisms

The external mechanisms are regulation in the market ensuring transparency and discipline over a company (Jensen, 1989). These are also referred as the ‘outsider control system’. These mechanisms work well in the developed capital market with low ownership concentration (Aoki, 1995). Therefore, these are most common in the United States, the United Kingdom, Canada, Australia and New Zealand and acts within the market based model by ensuring legal protection to the investors (Shleifer and Vishny, 1997; Denis McConnell, 2003; Solomon, 2007). The dominant external mechanisms are the mergers and takeovers (Asian Development Bank, 2000; Denis and McConnell, 2003), which are sometimes also referred to as the market for corporate control.

2.7.2 Internal Mechanisms

The internal mechanisms are also referred to as the ‘insider control system’ which is most common in Germany, Japan and East Asia. It acts within the "relationship-based" model (Solomon, 2007). Internal mechanisms are control mechanisms inside the firms, which include ownership structure, monitoring by the board of directors, structural independence or separation of the position of CEO and Chairperson on the board, managerial incentives and debt policy (Denis and McConnell, 2003; Gillan, 2006). These are explained by the agency theory framework. According to the World Bank (1999) internal mechanisms define the relationships among the key players of the corporation. Internal mechanisms “provide an early warning system to put the organization back on track before the difficulties reach a crisis stage” (Jensen, 1993, p 862).
2.7.3 Control Mechanisms for Emerging Economies

As noted earlier, due to differences in institutional settings not all the control mechanisms may be appropriate in all countries. The 'outsider control system' or external mechanism are most common in the United States, the United Kingdom, Canada, Australia and New Zealand where the ownership is relatively dispersed and the markets are very active in monitoring company performance. However, as argued earlier, the protection of shareholders' interests in this model is very poor because shareholders' influence on management is weak. This mechanism may not work well due to "deficiencies in shareholders protection in the legal systems" (Cuervo, 2002, p 84); "the actions which corporations take to improve their internal governance cannot make up for deficiencies in the external framework, notably if an appropriate and enforceable legal system is lacking" (Claessens, 2003, p v).

Deficiencies of external control mechanisms mean relying on the internal governance mechanisms, which monitor management behavior and make them accountable. In the words of Boubakri et al (2005),

The deficiencies of this external governance mechanism offer an interesting opportunity to investigate whether..........., an internal governance mechanism plays an important role and interacts with the legal system to address the........agency problem (p 370).

Berglöf and von-Thaden (1999) argue that, when the firm is closely held the emphasis shifts away from shareholder-oriented governance mechanisms, such as board of directors, shareholders meetings etc. They described the governance problem in terms of ownership concentrations which is outlined in table 4.

Table 4: Corporate Governance Problem in Terms of Ownership Pattern

<table>
<thead>
<tr>
<th>Types of Ownership</th>
<th>Self Interested Parties</th>
</tr>
</thead>
<tbody>
<tr>
<td>Widely Held Firms</td>
<td>Strong Managers</td>
</tr>
<tr>
<td>Closely Held Firms</td>
<td>Strong Blockholders</td>
</tr>
<tr>
<td>Family Firms</td>
<td>Strong Managers</td>
</tr>
<tr>
<td>Transition Firms</td>
<td>Omnipotent Manager</td>
</tr>
<tr>
<td>Development Firms</td>
<td>Strong Managers</td>
</tr>
<tr>
<td></td>
<td>Weak Owners</td>
</tr>
<tr>
<td></td>
<td>Weak Minorities</td>
</tr>
<tr>
<td></td>
<td>No Outsiders</td>
</tr>
<tr>
<td></td>
<td>Little Resistant</td>
</tr>
<tr>
<td></td>
<td>Related Investors</td>
</tr>
</tbody>
</table>

Source: Berglöf and von-Thaden (1999, p 22)
Due to differences in institutional settings in Bangladesh from that of developed markets, the external mechanisms are not suitable for Bangladeshi firms. As discussed in part 2.6.1.1, the shares of public limited companies in Bangladesh are not widely held and the control of the companies remains in the hands of dominant shareholder groups. Therefore, corporate governance problem in terms of ownership can be described as the ‘Strong Blockholders-Weak Minorities’. The internal mechanisms may be the most suitable to monitor management behavior and may be a means of resolving the firm’s agency problems in Bangladesh, as well as other developing countries, as internal mechanisms can be implemented at low cost (Lukviarman, 2004). However, as this study has already described (in part 3.5.6) the Bangladesh corporate governance model as a ‘hybrid model’ or ‘emerging economy model’, some of the control mechanisms in the developed countries are also present in Bangladesh.

Therefore, throughout this thesis, relevant control governance mechanisms that may promote accountability in the Bangladesh corporate sector are examined. After identifying the mechanisms of accountability (suitable governance mechanisms), this study considers the empirical research in the later chapters (Chapter 5 and 6) to determine whether these control mechanisms may promote accountability or influence the firm economic performance.

2.8 Corporate Governance Reforms in Bangladesh

While it is argued that corporate governance mechanisms are practically non-existent in the less developed countries (Shleifer and Vishny, 1997), this situation is changed in many less developed countries and it is not too late to address the corporate governance issues in Bangladesh. The Securities and Exchange Commission Bangladesh (SECB) is working to safeguard the investor’s interest, ensuring the transparency and improving the corporate governance. It organized several workshops, seminar and symposium in this regard (SECB, 2004; SECB, 2005b). For example a two-day long national workshop on ‘Corporate Governance in Bangladesh’, jointly arranged by the Securities and Exchange Commission Bangladesh and the Asian Development Bank (known as the SECB-ADB Workshop) was held at the Sonargaon Hotel, Dhaka on 9th and 10th July 2003 (SECB, 2004). The second workshop was also jointly organized by the Securities and Exchange Commission Bangladesh and Asian Development Bank at CIRDAP auditorium, Dhaka on 24th May 2004. The third
workshop on corporate governance was organized by SECB with the help of ADB on 28th May, 1st and 12th June and 9th July 2005 in CIRAP and BIAM auditorium (SECB, 2004; SECB, 2005). Local and foreign consultants and commission officials highlighted the various aspects of corporate governance. They also highlighted the various aspects that may require to be implemented to improve corporate governance practices at firm level. The last corporate governance workshop was jointly organized by Dhaka Stock Exchange, Center for Corporate Governance and Finance Studies (CCGFS), on 23rd September 2006 in the CIRDAP Auditorium. Moreover in 2004, a four-member team of senior officials and policy specialists representing the National Board of Revenue, Janata Bank, Department of Finance and Banking of the University of Dhaka, and AIMS, Bangladesh attended a workshop on corporate governance and public pension management hosted by the Asian Institute of Corporate Governance in Seoul (Asia Foundation, 2004). To train the investors and other stakeholders involved in the stock market operations and overall to ensure the good governance, the establishment of ‘Bangladesh Institute of Capital Market’ is under process (SECB, 2008a). Following paragraphs outline some of the initiatives in the development of ‘Corporate Governance Code of Best Practices’.

2.8.1 Corporate Governance Code of Best Practices in Bangladesh

There are some notable initiatives taken by the private sector in promoting corporate governance in Bangladesh. Bangladesh Enterprise Institute (BEI) established in October 2000, has been working in improving the corporate governance in Bangladeshi firms. It published a series of guidelines on corporate governance in Bangladesh including the ‘Code of Corporate Governance for Bangladesh’ (Bangladesh Enterprise Institute, 2004) as the principles and guidelines for best practice in the private sector, financial institutions, state-owned enterprises (SOEs) and non-governmental organizations (NGOs). However, since such initiatives are not recognized by the regulatory bodies, such as SECB, it does not have authenticity to exercise the power to enforce the codes.

In early 2006 the SECB issued an order namely ‘The Order Related to Corporate Governance’, dated 9th January24, which is directly related to corporate governance. This order specifically gave some guidelines regarding the composition of

24 Actually announced in a press conference on 24th January 2006
the ‘Board of Directors’ such as the ‘Board Size’ (which is to be 5-20 members), position of ‘Independent’ or ‘Non-Shareholder Directors’ in the Board (which is to be at least 1/10th of the total board members or minimum one), and thereby the guidelines for board leadership structure, guidelines for appointment of Chief Financial Officer and Head of Internal Audit; requirement and guidelines for the constitution of the ‘Audit Committees’ etc., for which there were no guidelines in the Companies Act 1994. The representation of the independent (non-shareholder) directors, the separation of the executive function of the board from its monitoring function would enable better monitoring; protect the interest of the shareholders and thereby enable the good corporate governance. The SECB however, in a subsequent notification on 20th February 2006 replaced the ‘Order Related to Corporate Governance’ and issued the ‘Corporate Governance Notification 2006’. Although the ‘Order Related to Corporate Governance’ required independent leadership structure (CEO non-duality), the ‘Corporate Governance Notification 2006’ does not require independent leadership structure, which is in one sense a backward step as it will reduce the supervisory capacity of the board. However, this notification is probably the first published comprehensive corporate governance best practices guidelines in Bangladesh and may be considered as an important landmark of the corporate sector in Bangladesh. This is somehow the corporate governance best practices guidelines for listed firms in Bangladesh.

However, these guidelines have some limitations and in no way meet the international standards of corporate governance, such as the ‘Cadbury Report 1992’ or ‘Higgs Report 2003’. That notification does not require independent directors to have any specific qualification and/or expertise to sit in the board. Rather, it allows them to be elected by the existing board members. It also may be criticized whether minimum one independent director may have any significant influence into the board. That notification also allows dual leadership structure in the form of CEO duality. While the dual leadership structure may work well in some Anglo-American countries; due to institutional differences it may not work well in a developing country, such as Bangladesh. It may also reduce the board’s ability to exercise the governance function and creates a conflict between management and board. Such conflict of interest may reduce the board independence and may lead to severe problems as seen in Enron (Zahra, 1990; Solomon, 2007). Moreover, there are no adequate guidelines in existing laws regarding the financial reporting, auditor’s independence, accountability of the
board of directors and professional expertise required by management, compensation of executives, and prevention of fraud by management and punishment thereafter and corporate social responsibility.

2.9 Chapter Summary and Conclusion

This study examines if the corporate governance mechanisms influence firm performance in the developing countries by considering Bangladesh as a case study. While doing a country study, it would be very helpful in understanding the institutional settings of a country. This chapter exposes the key issues and challenges in the existing corporate governance regime and unique characteristics of corporate governance in Bangladesh.

This chapter begins with providing the detail discussion of the socio-political and cultural environment in Bangladesh. It exposes the evolution of corporate governance in Bangladesh, highlights the various internal factors, such as the historical background, laws and legal institutions, socio-cultural, economic and political environments that constitute the current corporate governance regime in Bangladesh. It explains the socialist experience of the country, the failure of socialism and how the country moved from socialism to the capitalism. This chapter outlines the role and responsibility of the ‘Registrar of the Joint Stock Companies’ and Securities and Exchange Commission Bangladesh’ in company formation and governance; provides an overview of corporate legal and regulatory regime, such as the Companies Act, Securities Laws and Legislations, Insolvency Act, and other related laws and legislations; provides an overview of capital market, stock market collapse and reforms of capital market in Bangladesh. It also gives a brief idea about the Financial Regulation, Financial Reporting and Accounting and Auditing Standards.

This chapter outlines the firm level challenges of corporate governance in Bangladesh; in particular the ownership structure, ‘board of directors’, ‘management and CEO’, ‘creditor protection’, ‘enforcement and punishment’ etc. It is revealed that, although there are many similarities of corporate governance between the developed countries and emerging economies, such as Bangladesh; some of the characteristics are very unique. The domination of internal systems followed by institutional weaknesses of current corporate governance regime, pose serious challenges to the firm level effectiveness of corporate governance in Bangladesh. This chapter discusses the
corporate control mechanisms that may promote accountability in an emerging economy and Bangladesh.

This chapter also covers the recent corporate governance reforms in Bangladesh. It is revealed that, following the high degree of corporate collapses and scandals around the world, Bangladesh seems to be working to strengthen the corporate governance best practices. Several guidelines have been published both in the government and the private sector. The ‘Corporate Governance Notification 2006’ is the most comprehensively published guidelines for corporate governance in Bangladesh.

As mentioned earlier, this chapter provides an opportunity both for the academics and practitioners to gain more understanding and insights of corporate governance in an emerging economy, such as Bangladesh.
3.1 Introduction

This chapter is the theoretical framework part of this thesis. The organization of this chapter is as follows. Firstly, this chapter discusses the good corporate governance once again in part 3.2. It discusses the various theoretical frameworks that explain the principal-agent relationship in part 3.3. Such theoretical lenses are required to explain the practice of corporate governance and its associated problems. Secondly, this chapter reveals that corporate governance problems in Bangladesh are not necessarily same as the Berle and Means (1932) model of corporate governance. It is necessary to find a theoretical model to explain the specific corporate governance problems of Bangladesh. In part 3.4 and 3.5 of this chapter, the ‘Bangladesh Corporate Governance Model’ is developed subsequently in light of existing corporate governance models in the literature. It is revealed that although many of the corporate governance characteristics of the Bangladeshi context align with the German-Japanese ‘bank-based’ or ‘relationship-based’ model, the Bangladesh corporate sector also has some characteristics of ‘Anglo-American’ market-based model of corporate governance. Therefore, this thesis describes Bangladesh corporate governance as a hybrid of internal and external control systems which can also be described as the ‘emerging governance model’ of corporate governance. Finally, following the identification of the corporate governance models, the mechanisms of accountability are subsequently discussed throughout that chapter. The empirical studies on corporate governance and economic performance at the firm level are conducted in Chapter 5 and Chapter 6 in light of the mechanisms of accountability described in this Chapter.

3.2 Good Corporate Governance

Following the high profile corporate collapses/scandals around the world, investors have shown a growing demand for a global benchmark of good corporate behavior, which can help create shareholder value regardless of the particular system
Corporate Governance research should be no different from scholarly enquiries in natural sciences in terms of methodological approach. Such research requires that corporate governance scholars place the subjective process of developing ideas into a logical framework of challenge and questioning through debate and data collection. This is a continuous process starting with conceptual and propositional analysis for defining terms, model building and theory development.
Therefore, it would be very helpful in understanding the dominant theories on corporate governance. Scholars such as, Coase (1937), Jensen and Meckling (1976), Fama and Jensen (1983a; 1983b), Watts and Zimmerman (1986), Eisenhardt (1989), Barney (1990), Donaldson (1990a; 1990b), Donaldson and Davis (1991), Davis et al (1997); Turnbull (1997) developed dominant theories on corporate governance that explain corporate governance problems that arise due to the separation of ownership and control. These are the Stewardship Theory, Agency Theory, Transaction Cost Theory and Stakeholder Theory. These are discussed below.

3.3.1 Stewardship Theory

Stewardship Theory has its foundation in psychology and sociology and it is designed to examine situations in which executives as stewards are motivated to work in the best interests of the principals/shareholders (Donaldson and Davis, 1991; Davis et al, 1997). Stewardship theory defines situations in which managers are not motivated by individual goals, rather are stewards whose motives are aligned with the objectives of their principals (Davis et al, 1997, p 20). Stewardship Theory is the theoretical foundation of corporate laws and legislations (Tricker, 1994c). Although due to effective separation of ownership and control, the agent may be opportunistic, this theory assumes that there are no opportunistic agents; rather agents are motivated to work in the interest of their principal due to fiduciary responsibilities (Barney, 1990; Donaldson, 1990a, 1990b; Donaldson and Davis, 1991). There are no conflicts of interest between managers and shareholders and managers are team players and a trusty steward of the corporate assets. This is the idea of joint stock companies that the agent will work in the interest of the principals. This idea emerged in the mid-nineteenth century when the concept of a company is developed.

Classical corporate governance, derived from the mid-nineteenth concept of the corporation, is rooted in the philosophy that men can be trusted; that directors can be relied on to act in the best interest of the company (Tricker, 1994a, p 3).

This is an optimistic view about the directors and managers of corporations. However, it is very hard to find an altruistic in an organization.
We could imagine a world, perhaps there would be no conflict of interest, no hard choices, no tragedies, and in which people could fulfill both their desires and their responsibilities without adversely affecting anyone else. But that would just an imaginary world ... One person's gain is often another person's loss. One desire conflicts with another (Solomon and Martin, 2004, p 70).

This is also exemplified by a number of corporate collapses, such as Enron, WorldCom, HIH Insurance, Global Crossing and Tyco International, that the CEOs were opportunistic.

### 3.3.2 Agency Theory

Agency theory, which originated in economics and finance, is recognized as one of the theories explaining corporate governance. "...the heart of this theory is the human, which can be traced to 200 years of economic research" (Davis et al, 1997, p 22). It holds a less optimistic or pessimistic view of human (managerial behavior) arguing essentially that an individual is self-interested and self-opportunist, rather than altruistic. Therefore, the focus in agency theory is on extrinsic rewards: tangible, exchangeable commodities that have a measurable "market" value (Davis et al, 1997, p 27). Due to the separation of ownership and control, there is a relationship between the principal (the owner) and the agent (the managers), which is commonly known as the agency relationship (Jensen and Meckling, 1976). Such relationship may lead to a conflict of interest between the manager and shareholders as both may act in their own interest. Jensen and Meckling are generally given credit for the development of agency theory, but there are many predecessors such as, Alchian and Demsetz (1972) and Ross (1973) who also discussed the agency theory to explain the manager and shareholders agency problem that emerges from the separation of ownership and control (Godfrey et al, 2006; Solomon, 2007). Jensen and Meckling (1976) defined the agency relationship "as a contract under which one or more persons (the principals) engage another person (the agents) to perform some service on their behalf which involves delegating some decision making authority to the agent" (p 308). Agency theory assumes that due to separation of ownership and control, managers (the agent) may not have significant interest in the firm in the form of stock ownership and they may be driven by self-interest, and unless restricted from doing otherwise, will undertake self-serving
activities that could be detrimental to the economic welfare of the principals (Deegan, 2006, p 225).

As corporate governance is rooted between the separation of management and control, agency theory is recognized as the dominant area of corporate governance research focusing exclusively on resolving agency problems (Dalton et al, 1998; Brennan and Solomon, 2008). Scholars such as Jensen and Meckling (1976), Fama and Jensen (1983b), Watts and Zimmerman (1986)25, Eisenhardt (1989) and Jensen (2004) worked to explain the agency theory. It is argued that efforts to manage conflicting interests will generate agency costs or an agency problem may lead to the ‘agency cost’ (the cost associated with avoiding the agency problem). This includes the costs of restructuring, monitoring (for example financial audit), and bonding a set of contracts among agents with conflicting interests, plus the residual loss incurred, which is also known as an indirect agency cost (Jensen and Meckling, 1976; Jensen, 2004). Any potential loss of profit for managerial misconduct or under-performing by the managers in an agency relationship is an agency cost, and is also known as direct agency cost (Deegan, 2006, p 218). The agency conflict may be classified on the basis of conflict between the managers and shareholders and on the basis of conflict between the managers26 (shareholders) and debtholders (Jensen and Mechling, 1976). Agency conflicts may also be classified on the basis of conflict between the dominant and minority shareholders (Asian Development Bank, 2000). The managers-shareholders agency problem is the problem of the principal-agent relationship between shareholders (the principals) and managers (the agents) that arise from the separation of ownership and control (Shleifer and Vishny, 1997; Asian Development Bank, 2000). Managers are supposed to work for the shareholders and they are considered to be an agent. But sometimes there is a problem of aligning the interest of the shareholders (principals) and managers (agents) as it is very hard to verify whether the agent is working appropriately. The problem may also arise due to there being a different view towards risk by the principal and agent (Eisenhardt, 1989, p 58). It means that the shareholders are ready to accept high risk as they can diversify their investment portfolio in a variety

25 Their work is based on positive accounting theory (PAT), which focuses the relationships among various individuals involved in providing resources to an organization and how accounting is used to assist in the functioning of such relationships (Deegan, 2000, p 203). Agency theory is an important part of PAT.

26 The managers are used instead of shareholders as the managers will be acting in favor of the shareholders.
of firms; whereas the managers (the agent) may prefer less risk and invest in a less risky project, as they have undiversified human capital (managerial talent) invested in a single firm (Godfrey et al, 2006). The cost arises due to the potential conflict between the managers and shareholders (owners) can be referred to as the agency cost of equity. The managers (shareholders)-debtholder’s agency problem is the conflict between the shareholders and the debtholders. Agency cost of debt may arise due to ‘the divergent behavior of the borrower’ (Deegan, 2005, p 86). This view argues that the recipients of the debt may undertake activities that reduce or even eliminate the possibility that the funds will be repaid (further discussed in part 3.10).

3.3.3 Transaction Cost Theory

Transaction cost theory also explains the same problems of managerial behavior as agency theory using different terminology (Williamson, 1988; Solomon, 2007). Coase (1937) while studying the managerial opportunism using a different lens, first used the term transaction cost economics (TCE). Williamson (1979; 1981; 1988) subsequently worked on Agency and Transaction Cost Economics (TCE). TCE, in the words of Williamson (1979), is also the ‘self-opportunism’ behavior of an individual to pursue his or her own goal(s). TCE relies on ex post resolution of disputes, while agency relies on ex ante resolution (Main et al, 1995, p 298). The ex ante perspective is the efficiency perspective which relies on optimizing of contractual arrangements, implying what mechanisms are to be placed up front and the ex post perspective is the opportunistic perspective which undertakes the various contractual arrangements between owners and managers and between the debtholders and managers to minimize agency cost (Gaffikin, 2005, p 13; Deegan, 2006, p 232).

3.3.4 Stakeholder Theory

All of the theories discussed above are classified as shareholder theories and consider that the “shareholders are owners of the corporation who, by virtue of such ownership, are entitled to control the corporation and have it serve their interest alone…the fiduciary duties of the directors are to run the corporation in the best interest of the shareholders” (Dallas, 1988, p 19). Therefore, the shareholders are unable to see anything beyond their interest and they induce the managers to work in the interest of them. However, the shareholder theory (or agency theory) of corporate governance was
challenged following the work of Freeman (1984) on stakeholder theory. This theory
has a broader view and argues that “the physical assets in which individuals invest are
not the only assets that create value in the corporation” (Bhasa, 2004a, p 8).

The traditional stakeholder model ......is responsible to a wider
constituency of stakeholders other than shareholders........include
contractual partners such as employees, suppliers, customers, creditors,
and social constituents such as members of the community in which the
firm is located, environmental interests, local and national governments,
and society at large (Maher and Anderson, 1999, p 8).

Therefore, rather than to maximize the interest of the shareholders, the
stakeholder theory calls for maximizing the interest of the wider groups involved in
corporations, such as employees, customers and suppliers, communities and even the
environment (Freeman, 1984; Blair 1995; Maher and Anderson, 1999; Stovall et al,
2004). The ethical view of 'Stakeholder Theory' argues that "regardless of whether
stakeholder management leads to improved financial performance, managers should
manage the business for the benefit of stakeholders" (Hasnas, 1998, p 32).

3.3.5 Accountability to Whom?

In line with the above argument, an important question can be raised,
“accountability to whom?” It is argued that the idea of stakeholders is overly broad
(Blair, 2005). It is also questioned whether companies can maximize their shareholders’
wealth in an agency theory framework and at the same time satisfy a broad range of
stakeholders’ needs, since the balancing of different stakeholder group is notoriously
difficult (Solomon, 2007). Therefore, managers may use ‘stakeholder’ reasons to justify
poor firm performance (Maher and Anderson, 1999). It is also argued that the powerful
stakeholder is not feasible without considerable support from the legal institution
(Wright et al, 2003). Therefore, Sternberg (1997) argued that stakeholder theory has
certain defects and is incapable of providing better corporate governance. She made
several observations, such as, ‘stakeholder theory is incompatible with businesses,
‘stakeholder theory is incompatible with corporate governance’, ‘the stakeholder theory
of accountability is unjustified’ and ‘stakeholder theory undermines private property,
agency and wealth’.
Although balancing the needs of multiple stakeholders is difficult, this should not be used as an excuse for not attempting to achieve a balance (Solomon, 2007). Hill and Jones (1992) expanded the principal-agent problem to create a ‘stakeholder agency theory’. In their expanded principal-agent relationship, the managers can be viewed as the agent of all the stakeholders as well. Although due to the absence of a powerful institutional framework in Bangladesh (as discussed in Chapter 2) the attributes of a stakeholder model is absent in Bangladesh. The roles of employees, suppliers, customers and even the lenders (for example the banks) in resolving conflicts are largely ineffective in a developing country, such as Bangladesh. This study also considers that the resolution of corporate governance problems will have a beneficial effect on all the stakeholders.

3.3.6 Theoretical Consideration of This Study

To explain corporate governance and its problems a theoretical lens is required. Therefore, this part of the study attempts to frame a theoretical framework of the overall study and justifies the choice of a specific theory. Although, the principal-agent relationship can be studied within the agency or stewardship relationship, it is based on the extent of risk that the principals are willing to assume (Davis et al, 1997). Davis et al (1997) further argue that there are a number of factors that differentiate agency and stewardship theories. They presented a model which suggests that, there are (a) psychological factors such as motivation, identification, and use of power; (b) situational factors, such as management philosophy and culture (individualism-collectivism) and power distance, which predispose individuals to agency and stewardship approaches to relationships. “The choice between activity and stewardship relationship is similar to the decision posed by a prison dilemma (p 38)”.

This thesis examines whether corporate governance mechanisms, such as ownership structure, board practices, compensation and capital structure influence the firm economic performance in Bangladesh. As noted before, agency theory argues that essentially an individual is self-interested and self-opportunist, rather than altruistic. Therefore, firstly, in an agency theory perspective separation of ownership and control may lead to a problem of aligning the interest of the dispersed shareholders with that of management (Jensen and Meckling, 1976). Secondly, this thesis examines if the board composition in form representation of outside independent directors may influence the
firm performance in Bangladesh. Although stewardship theory suggests that outside independent directors are not necessary as agents are best stewards to their corporations and are not motivated by individual goals (Davis \textit{et al}, 1997; Luan and Tang, 2007), agency theory suggests that board composition in the form of representation of outside independent directors will be able to monitor any self interested actions by managers (Zahra and Pearce II, 1989; Bathala and Rao, 1995; Nicholson and Kiel, 2007; Kaymak and Bektas, 2008), which may in turn enhance firm performance (Luan and Tang, 2007). Stewardship theory also ignores the independent advice that the outside directors may bring (Nicholson and Kiel, 2007). Thirdly, this thesis examines if the CEO non-duality influence firm performance. Consistent with this, stewardship theory argues that the power of the executives and best stewardship role can only be exercised when the role of the CEO and Chairperson of the board is combined (Donaldson and Davis, 1991; Ong and Lee, 2000). However, agency theory suggests that “CEO duality diminishes the monitoring role of the board of directors over the executive manager, and this in turn may have a negative effect on corporate performance” (Elsayed, 2007, p 1204). This theorist also suggests that CEO duality reduces the firm performance due to CEO entrenchment and a decline in board independence (Kang and Zardkoohi, 2005). Fourthly, this thesis examines if the executive compensation may influence firm economic performance. Due to effective separation of ownership and control, there may be a conflict of interest between the manager and shareholders as both may act in their own interest (Jensen and Meckling, 1976). Further, manager may try to diversify their risk as they do not have any ownership interest in the firm and it is their undiversified human capital (managerial talent) invested in a single firm (Godfrey \textit{et al}, 2006). Agency theory suggests that attempts to force agent to act in the interest of the principals may involve huge monitoring cost. If the agents are paid lower salary; such lower salary will compensate the principals for the anticipated opportunistic behavior of the agent (Finkelstein and Hambrick, 1989; Deegan, 2006, p 236). This theory suggests that if the agents are satisfied with the additional salaries they will reduce their set of available opportunistic action. Finally, this thesis examines if the corporate capital structure reduce agency cost and influence the firm performance. Consistent with this, agency theory suggests that financing policy (debt contract) may reduce the financing cost of manager’s discretion (Stulz, 1990); may reduce the shareholder-debtholder agency problem by playing a disciplinary role (Berger and Bonoaccorsi di Patti, 2006; Zeitun and Tian, 2007b; Margaritis and Psillaki, 2007).
Considering all of the above, this study is conducted within agency theory perspective relying on *ex ante* resolution contrary to the *ex post* resolution of disputes as argued in ‘transaction cost theory’ (Main *et al*, 1995, p 298). However, this study does not necessarily reject the stewardship theory keeping in mind the ‘stakeholder agency theory’ as discussed above (Hill and Jones, 1992).

### 3.4 The Underlying Problems of Corporate Governance

Due to separation of ownership and control, there is a contract between the financiers and managers, “that specifies what the managers does with the funds and the returns are divided between him and the financiers” (Shleifer and Vishny, 1997, p 741). Berle and Means (1932) based their work on three foundations, which is summarized by Farrar (2005) as follows:

(a) There was a dispersal of shareholding and no shareholder typically owned a significant fraction of stock.

(b) The management holds a very small fraction of stock.

(c) There is a conflict of interest between shareholders and management.

The Berle and Means (1932) model of corporate governance illustrates that the primary control of the firm is in the hands of management. They described such a situation as a managerial capitalism. The shareholders elect the board of directors, which has supervisory powers over management. The various stakeholders, such as employees, suppliers, customers and lenders may influence the management at various levels.

However, due to differences in institutional settings, corporate governance practices may vary widely across countries and across firms (Doidge *et al*, 2007). Due to the presence of relationship based capitalism (discussed in part 3.5.4), unlike the firms in Anglo-American countries there is a domination of family ownership in Asian countries (Claessens and Fan, 2002; Li, 2003). Although, the family ownership is not common, due to the presence of increased insurance related investment products and other forms of indirect investment, in recent times there is a domination of institutional investment in Anglo-American countries since 1945, which can be described as ‘institutional capitalism’ (Farrar, 2005). Consequently, Berle (Berle, 1965) restated his theory considering ‘entrepreneurial capitalism’. The revised Berle and Means model of corporate governance with institutional investors is presented in figure 6.
Due to differences in ownership structure and financing patterns of corporations around the world, agency conflict may vary. In other words, corporate governance mechanisms that work well in some developed countries may not work well in some emerging economies (Majumdar and Chhibber, 1999). Dharwadkar et al (2000) classified the agency problems as ‘traditional’ agency problems, which is most common in developed economies with dominant outsiders as opposed to ‘unique’ agency problems, which is most common in emerging economies. The “traditional agency solutions that mitigate agency problems in the strong governance context of developed economies might not necessarily be effective in the weak governance context prevalent in emerging economies” (p 651).

Figure 6: The revised Berle and Means model of corporate governance with institutional investors.

Source: Blair (1995, p 31)

Consequently, it is questioned to what extent the international corporate governance practices which are mainly developed in the West are relevant to emerging economies such as Bangladesh that lack advanced markets, second-order institutions
such as experienced investment bankers, lawyers and accountants to monitor markets, and an effective judicial system that is given discretion and legitimacy to apply fiduciary duties (Paredes, 2005; Chuanrommanee and Swierczek, 2007). Trying to fit international corporate governance into emerging economy may prove that ‘one size fits all’ is problematic (Davies and Schlitzer, 2008); or like an “ugly sister’s attempts to squeeze their unshapely feet into Cinderella’s shoe!” (Solomon, 2007, p 181). Therefore, it must first be determined, what is an appropriate corporate governance model for Bangladesh, an emerging economy?

3.5 Corporate Governance Models

A popular Chinese proverb says, “the river has its source and a tree has its roots” (Sycip, 2003, p 1390). Corporate governance has its origin (roots) in developed countries. However, each country in the world has a unique system of corporate governance which is strongly influenced by both internal and external factors (Solomon, 2007). Internal factors are the differences among countries, such as historical background, structure of laws, legal institutions and their enforcement, politics, and culture (Prowse, 1994; La Porta et al, 1999a; La Porta et al, 2000; Gugler et al, 2003; Cornelius, 2005; Solomon, 2007). External factors can be foreign capital inflows, the global economic climate and cross-border institutional investment (Solomon, 2007).

Academic studies (such as, Prowse, 1994; Prowse, 1996; Berglöf, 1997; Rajan and Zingales, 1998; La Porta et al, 2000; Asian Development Bank, 2000; Modigliani and Perotti, 2000; Levine, 2001; Li, 2003; Bhasa, 2004b) compared two dominant and alternative models of corporate governance, the Anglo-American model with the German-Japanese model. These two models emerged from different ownership structure and different financing patterns and hence have fundamental differences.

This part of the thesis explains three alternative corporate governance models and then attempts to describe the attributes of an appropriate corporate governance model for Bangladesh. In doing so, it describes the Anglo-American and German-Japanese models and the Asian Models. It is not the intention of this study to prescribe a model for Bangladesh, but rather to illustrate the importance and impact of local factors in determining corporate governance regulations and enforcements. Such
description helps in setting policies that may promote accountability in Bangladesh corporate sector.

3.5.1 The Anglo-American Model

The Anglo-American model is recognized as a ‘rule-based’ system of corporate governance, and is distinguished both by the attributes of the prevailing legal and regulatory environment (Prowse, 1996), and by its ‘arm’s length’ financing arrangements which are most common in Anglo-American countries (such as United States, United Kingdom, Canada, Australia and New Zealand). Under this model share ownership is widely dispersed. Shareholders are protected by explicit contracts and managers are monitored by an external market for corporate control and there is a fiduciary relationship between shareholders and managers (Rajan and Zingales, 1998; Asian Development Bank, 2000; Cernat, 2004). Managers are monitored by an external market for corporate control and board of directors are usually dominated by outsiders known as independent directors (Kaplan, 1994b).

Due to the dispersed nature of the shareholding, and typically strong management control over a firm, it is very hard for shareholders to be successful in finding a vote to remove management or to achieve a threat of removing the management (Brigham and Gapenski, 1993, p 24). Strong management control also leads to a high degree of information asymmetry. Therefore, the protection of shareholders’ interests in this model is very poor because shareholders’ influence on management is weak. Consequently, jurisdictions where this model of corporate financing prevails rely heavily on laws and transparency (information disclosure) to enforce shareholders’ rights (Asian Development Bank, 2000).

Under this model finance is provided by large number of investors’ and unsatisfactory firm performance often ends up in shareholders selling shares or ‘takeovers play[ing] a key governance role (Prowse, 1994, p 35; Blair, 1995, p 145; La Porta et al, 2000, p 17; Denis and McConnell, 2003, p 4). As a result, institutional relationships matter less and the market becomes a more dominant medium of

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27 It is a situation when some relevant information is known to have some but not to all parties involved. Particularly this is the situation, when firm managers will know more about the firm’s future than that of shareholders. Managers may try to use information about the firm for their own benefit, which is not available to the shareholders (see Myers, 1984; Myers and Majluf, 1984; Miller and Rock, 1985 and Deegan, 2005). It may not be possible if the market is efficient and the market adopts the required information.
governance, hence it is also identified as a ‘market-based’ system of corporate governance.

3.5.2 The German-Japanese Model

In German-Japanese model, as an alternative corporate governance model, firms keep a long-term close relationship with the banks or other investors (Levine, 1997; Asian Development Bank, 2000; Murphy and Topyan, 2005). This model of corporate governance is common in some parts of Europe and Asia, which typically have underdeveloped or less liquid capital markets; therefore this model allows corporations to use both a large portion of debt and a large portion of equity in the same firm leading to a concentrated ownership (Zysman, 1983; Prowse, 1990; Prowse, 1996; Asian Development Bank, 2000; La Porta et al, 2000; Aguilera and Jackson, 2003).

Depending on the financing pattern, managers are supposedly monitored under this model by the core investors; it may be a bank, a combination of banks, a non-bank financial institution, other corporations, large corporate shareholders or other intercorporate relationships (Asian Development Bank, 2000). If the firm borrows from a main bank, it being the significant fund provider is the significant monitor (La Porta et al, 2000). The lending banks hold supervisory positions on the corporate boards (Cable, 1985; Kroszner and Strahan, 2001). Therefore, corporations keep a close relationship with their banks. This model is also known as the ‘bank-based’ model or ‘relationship-based’ model (Kaplan, 1994a; La Porta et al, 2000; Levine, 2001; Fan and Terada-Hagiwara, 2003). It is argued that this model as an alternative governance model is particularly suitable for developing countries with poor legal systems (Gerschenkron, 1962, cited in La Porta et al, 2000; Rajan and Zingales, 1998).

3.5.3 Comparison Between the two Corporate Governance Models

The Anglo-American model or market based system, and the German-Japanese model or bank centered relationship based system of corporate governance system is compared in Table 5 below, which has been adapted from (Prowse, 1994, p 3), Berglöf (1997), Khan (1999) and Cernat (2004, p 150).

There are two other corporate governance models seen in the literature. These are the ‘transition governance model’ and ‘emerging governance model’ (Bhasa, 2004b). The ‘transition governance model’ emerged following the collapse of socialism
for the Central and Eastern European countries including Czech Republic, Hungary, Poland and Russia (Aoki 1995; Bhasa, 2004b).

**Table 5: Anglo-American and German-Japanese Corporate Governance System**

<table>
<thead>
<tr>
<th>Mechanisms</th>
<th>Types of Corporate Governance System</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Anglo-American</strong></td>
</tr>
<tr>
<td></td>
<td>Arm’s Length</td>
</tr>
<tr>
<td>Ownership Structure</td>
<td>Widely dispersed</td>
</tr>
<tr>
<td>Share of Control Oriented Finance</td>
<td>Low</td>
</tr>
<tr>
<td>Financial Markets</td>
<td>Large, highly liquid</td>
</tr>
<tr>
<td>Monitoring by financial institutions</td>
<td>Little</td>
</tr>
<tr>
<td>Monitoring by individual shareholders</td>
<td>Little</td>
</tr>
<tr>
<td>Shares of all firms listed on the stock exchanges</td>
<td>Large</td>
</tr>
<tr>
<td>Ownership of debt and equity</td>
<td>Dispersed</td>
</tr>
<tr>
<td>Investor’s Orientation</td>
<td>Portfolio oriented</td>
</tr>
<tr>
<td>Shareholder’s Right</td>
<td>Strong</td>
</tr>
<tr>
<td>Use of mechanism for separating control and capital base</td>
<td>Limited</td>
</tr>
<tr>
<td>Dominant Agency Conflict</td>
<td>Between shareholders and management</td>
</tr>
<tr>
<td>Creditor’s right</td>
<td>Strong</td>
</tr>
<tr>
<td>Role of board of directors</td>
<td>Important</td>
</tr>
<tr>
<td>Role of Insolvency and Bankruptcy</td>
<td>Potentially important</td>
</tr>
</tbody>
</table>
3.5.4 Corporate Governance: The Asian Model

Asia is a diverse region in terms of economic development and institutional settings. Income and capital varies from U.S. $1,000 in India and Indonesia to more than U.S. $30,000 in Hong Kong and Singapore (Claessens and Fan, 2002). The economies of that region experienced unprecedented growth before the Asian Financial Crisis (Li, 2003). Wade (2000) documented that the economy of that region had been growing at 5%-10% a year for decades. China was growing at 9% a year since mid 1980s. By the early 1990s this region including Japan accounted for 25% of world output and half of the world growth. In the words of Wade (2000),

Through the 1980s, Asia, led by Japan, seemed set to become an equal leg of a tripolar world with North America and Europe. The United States seemed a diminished giant……… (p 86)

Despite such economic growth, corporate governance practices in this region are very poor. Due to weak state enforcement of property rights along with weak legal systems, poor law enforcement and corruption, corporate share ownership is predominately concentrated in the hands of a small number of shareholders, who are mainly family investors28 (Claessens and Fan, 2002; Li, 2003). Due to shareholders’ control over management, and weak investors' protection, the corporate control

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28 However, there are exceptions to these; listed firms in China for example are in fact the State Owned Enterprises (SOEs) and in many cases state, local, city or regional government has the controlling stake (Firth et al, 2006).
mechanisms in these countries are mostly insider oriented (Solomon, 2007). The dominant internal corporate governance mechanism, the board of directors, is typically dominated by insiders (Claessens and Fan, 2002). Independent directors in the board in some countries range from 25% to 50% (Nam and Nam, 2004). World Bank conducted several studies of corporate governance practices on eight Asian countries such as India, Indonesia, Korea, Malaysia, Pakistan, Philippines, Thailand, and Vietnam. Bangladesh, China and Japan were absent in these studies. These studies were subsequently summarized by McGee (2008). It is revealed that none of the countries earned a perfect score of 100 percent; while India came closest with a percentage score of 83.6 and Vietnam, had the lowest score at 50.1 (McGee, 2008). Poor corporate governance was one of the causes that led to the ‘Asian Financial Crisis’ or "East Asian Miracle" in 1997 (Radelet and Sachs, 1998b; International Monetary Fund, 2000; Asian Development Bank, 2000; Wong, 2000; Johnson et al, 2000; Claessens and Fan, 2002; Machold and Vasudevan, 2004; Nam and Nam, 2004).

Unlike the firms in the Anglo-American countries, firms’ economic activities in Asia are based on personal or mutual relations, outside the formal legal and institutional arrangement of ‘rule-based’ governance known as ‘relationship-based capitalism’ (Wade, 2000; Li, 2003; Li et al, 2004). In such a system banks are the key financial institutions mediating deposits from households and channeling them into loans made directly to firms (Aguilera and Jackson, 2003; Fan and Terada-Hagiwara, 2003; Kaymak and Bektas, 2008). Therefore, there are higher corporate debt-equity ratios in this region compared to the international norms or in the Western system, and there is a significant reliance on external debt financing, keeping a close relationship with banks as part of the ‘relationship-based’ model (Wade and Veneroso, 1998; Asian Development Bank, 2000; Claessens, Djankov and Lang, 2000; Fan and Terada-Hagiwara, 2003; International Finance Corporation, 2005). Due to a personal relationship with the firm, finance is also provided by the dominant shareholders. Therefore, the firm is supposedly monitored by those investors and the firm keeps a close relationship with them. Due to effective ownership involvement in the corporations, the corporate governance system in East and South East Asia is also known as an ‘ownership-based’ model.
3.5.5 The Best Model of Corporate Governance

There is no universally accepted model of corporate governance that may promote accountability. All economies have the essential elements of good corporate governance (Shleifer and Vishny, 1997, p 739); there is no evidence that the particular financial system is effective at promoting growth (Levine, 2001). Due to differences in corporate legal environments, legal systems and institutional settings, no specific corporate governance system is best suited to a particular country. If one model is suitable to one country, it may not be suitable to another country.

Under the German-Japanese (or bank based model), a bank is able to acquire more information about a firm, which reduces the information asymmetry. It allows the banks to influence the management to use the firm’s resources most effectively and efficiently, so that firm will be able to make the repayment in time (Gorton and Schmid, 2000). It enables the firms to oversee the managers and thereby produce more effective corporate control that may increase the resource allocation and promote economic growth (Prowse, 1996; Modigliani and Perotti, 2000, p 82; Levine, 2001). If the banks own a significant stakes of shares, ownership claims by banks reduces the cost of financial distress (Hoshi et al, 1990). Due to maintaining a close relationship with the banks and other long term debt and equity holders, Germany and Japan had a lower cost of capital (Becht et al, 2005); the large shareholdings by banks allowed German and Japanese firms to have a lower monitoring cost. Further, the corporations in Japan and Germany were tend to manage for the long run, while the United States managers are forced to maximize short term earnings (Porter, 1992; Kaplan, 1994b).

Due to superior performance of German and Japanese economy during 1980s and prior to 1990s, researches tend to favor ‘German-Japanese’ model or ‘bank-based’ system (Morck and Nakamura, 1999; La Porta et al, 2000; Murphy and Topyan, 2005). However, there are several criticisms of this model. This model may not be effective in the situation if the banking sector is in crisis (Baek et al, 2004, p 268). Due to the availability of inside information about the firms, banks may extract higher future profits from the firm in the case of new investment or debt negotiations, which may reduce the firm incentive to undertake investment in innovative and profitable ventures (Rajan 1992, cited in Levine 2001). Further, the so called ‘Asian Miracle’ proved that this model to be inefficient and corrupt (Rajan and Zingales, 1998; Clarke, 2000; Fan and Terada-Hagiwara, 2003).
In the 1990s the researchers tend to favor 'Anglo-American' systems following the economies were outperforming in these countries (Murphy and Topyan, 2005). Prowse (1996) argue that the technology, globalization of capital markets and changing structure of the firm may have made the German-Japanese model less attractive over time. Mobius (1995), La Porta et al (1997) and Cernat (2004) argue that the financing pattern in Anglo-American made the German-Japanese model less attractive. However, the bankruptcies and scandals in United States and collapses of world class companies such as Enron, WorldCom, Global Crossing and Tyco International have proved the ineffectiveness of the Anglo-American or market based system (Murphy and Topyan, 2005; Choi, 2006).

3.5.6 Corporate Governance: The Bangladesh Model

In the context of Bangladesh, it is the internal factors such as the historical background, laws and legal institutions, socio-cultural, economic and political environments which constitute corporate governance regime in Bangladesh. Due to poor rule of law, a weak judiciary to enforce the existing laws, the Anglo-American 'rule-based' model is not appropriate in the Bangladesh context. Similar to some other Asian countries, firms' economic activities in Bangladesh are also based on personal or mutual relations, outside the formal legal and institutional arrangement of 'rule-based' governance.

In view of the features of the corporate governance practices described above, the table 5 can be rearranged to summarize the characteristics of the Bangladesh corporate governance situation in Table 6 below, which is adapted from Rashid et al (2007). From table 6 it appears that, similar to other Asian Countries, the shares of public limited companies in Bangladesh are not widely held and the control of the companies remain in the hands of dominant shareholder groups, although these companies are listed on the stock exchanges. Representatives of these concentrated owners hold positions in the company board and management, leading to poor monitoring. Moreover, as the presence of pyramidal or cross shareholding structure is not very common in Bangladesh, individual shareholdings are also quite large, which is evident from table 15. Therefore, there is no guideline regarding the ultimate controlling ownership in the Bangladesh Companies Act 1994.
### Table 6: Characteristics of the Bangladesh Corporate Governance

<table>
<thead>
<tr>
<th>Corporate Governance Characteristics</th>
<th>Bangladesh Situation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ownership Structure</td>
<td>Concentrated in the hands of family, banks, financial institution, other corporations or dominant shareholders</td>
</tr>
<tr>
<td>Share of control oriented finance</td>
<td>High concentration of control by a small number of shareholders. These are predominately either from family investors or financial institutions.</td>
</tr>
<tr>
<td>Financial Markets</td>
<td>Small, not very liquid.</td>
</tr>
<tr>
<td>Monitoring by financial institutions</td>
<td>Supposed to be extensive, but really very little.</td>
</tr>
<tr>
<td>Monitoring by individual shareholders</td>
<td>Yes, if family or financial institution because in a position of power and knowledge or incentive to do so. No, for smaller investors as they have lack of power (voting rights) to do so. No formal policing of structures – regulations.</td>
</tr>
<tr>
<td>Shares of all firms listed on the stock exchanges</td>
<td>Small – still a large number state owned enterprises are not listed.</td>
</tr>
<tr>
<td>Ownership of debt and equity</td>
<td>Concentrated.</td>
</tr>
<tr>
<td>Investor’s Orientation</td>
<td>Control oriented.</td>
</tr>
<tr>
<td>Shareholder’s Rights</td>
<td>Weak – lack of knowledge about their rights.</td>
</tr>
<tr>
<td>Dominant Agency Conflict</td>
<td>Between controlling and minority shareholders.</td>
</tr>
<tr>
<td>Creditor’s Rights</td>
<td>Weak.</td>
</tr>
<tr>
<td>Role of Board of Directors</td>
<td>Limited.</td>
</tr>
<tr>
<td>Role of Insolvency and Bankruptcy</td>
<td>Limited – even though high debt financing involvement. The roles of banks are very limited.</td>
</tr>
<tr>
<td>Board Independence / Power</td>
<td>There is an absence of any accountability structure of management to the board. In case of State Owned Enterprises (SOEs), when the Chairperson of the Board is also a cabinet minister, there is a tendency to treat the SOE as a government department rather than a corporate entity (Rahman, 2007).</td>
</tr>
<tr>
<td>Over Management</td>
<td>Takeovers are absent due to highly concentrated ownership in the hands of family and also due to lack of takeover regulations and non-efficient market.</td>
</tr>
</tbody>
</table>
Due to the absence of a liquid and strong capital market and as raising equity from the stock market sometimes requires complying with bureaucratic formalities and additional disclosure requirements, companies do not find much incentive for raising equity from the capital market. Similar to some other Asian countries, Bangladesh has a trend for house-hold savings to be usually kept in the banks and financial institutions. Investors are mostly risk averse, do not have sufficient knowledge of stock market operations and scarcely go to the stock market to invest their savings. The stock market scandals in 1996 (discussed in part 2.5.5) further eroded investor confidence in stock market operations; the consequence of which is the less liquid and underdeveloped capital market. Banks are channeling the household’s deposits to the firms in the form of loans and the firms keep a close relationship either with the banks or with the dominant shareholders group (discussed in part 3.5.4). Therefore, many of the corporate governance characteristics of the Bangladeshi context align with German-Japanese ‘bank-based’ or ‘relationship-based’ model of corporate governance. However, unlike the firms in Germany and Japan, the lending banks do not have any position on the board and they have very little role in firm governance.

Due to absence of insolvency law, the poor quality of enforcement of contracts and property rights there is very little control by the banks over the firms’ management, rather banks seek the better way in collecting the overdue loans leading to a poor monitoring. Due to poor loan recovery mechanism there are no rigid measures to recover overdue loans or prevent them from turning into bad debts. It is a common problem that banks are not able to recover their overdue loans, even through the enforcement of court. Prothom Alo (2006), for example, reports that the Bangladesh banking sector is the hostage of a leading company, BEXIMCO, as a number of banks have huge amounts of outstanding loans, but the banks are unable to collect them (also discussed in part 2.6.4). According to this report, BEXIMCO group has total loans of Taka 26,000 million from 20 banks (approximately equivalent to 402.54 million Australian dollars) of which Taka 4,250 million is outstanding. The report reveals that, due to poor enforcement of law and through political influence, instead of undertaking initiative to collect them, these loans were rescheduled whenever they are due to be paid. Being the significant fund provider and due to effective ownership involvement in the corporations, its governance is also heavily influenced by dominant investors. Therefore, corporate governance in Bangladesh context may also be described as the ‘ownership-based’ model.
Similar to corporations in Germany, Japan and East Asia the corporate control mechanisms in Bangladesh are mostly insider oriented, such as ownership structure as the core investors own the significant stakes of shares which is also known as ownership control approach (Xu and Wang, 1999) and, in general, are the board of directors. Due to highly concentrated ownership, lack of takeover regulations, a non-efficient market, and due to huge transaction costs associated with the takeover process, some of the important external control mechanisms, such as, a market for corporate control or takeovers are largely absent in the Bangladesh corporate sector (Franks and Mayer, 1990; Sarkar, et al, 1998; Asian Development Bank, 2000). Due to the absence of a liquid capital market, some other dominant control mechanisms, such as compensation in the form of stock options, debt covenants (even though banks are the major source of corporate financing), and effects of dividend policy in corporate monitoring are also absent in the Bangladesh corporate sector (Rashid and Rahman, 2008). However, similar to corporate boards in Anglo-American countries, there is the representation of the outside independent directors on the corporate boards in Bangladesh. Therefore, it can be concluded that the corporate control mechanisms in the Bangladesh context is a hybrid of internal and external control systems which can also be described as the ‘emerging governance model’ of corporate governance. These relevant control mechanisms are discussed in the subsequent paragraphs.

### 3.6 Ownership Structure and Control

Corporate ownership structure is one of the most important factors in shaping the corporate governance system of any country. It determines whether the conflict is between managers and shareholders or between controlling and minority shareholders and varieties of such ownership forms may be good monitors and prevent managers from such behavior (Asian Development Bank, 2000). It is also argued that ownership structure plays a key role in determining firm’s objectives, shareholders wealth and how managers of a firm are disciplined (Porter, 1990; Jensen, 2000; Yammeesri and Lodh, 2004; Yammeesri et al., 2006). Ownership structure plays a key role as a good

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29 Due to concentrated shareholding, dividend payment found not to be necessary as a signaling device or to reduce the manager’s discretion over free cash flow.

30 This is required following the enactment of ‘Corporate Governance Notification 2006’, provided in the appendix.
monitor in countries where the investor’s protection is weak (Shleifer and Vishny, 1997; La Porta et al, 1998; La Porta et al, 2000; Boubakri et al, 2005).

As noted earlier (in part 3.3), Berle and Means (1932) argued that, due to the separation of ownership and control, the powers of the modern corporations are delegated to the professional managers and the interests of the dispersed shareholders are overseen by these professional managers, stating,

Management ……in law, have formally assumed the duties of exercising domination over the corporate business and assets (Berle and Means, 1932, p 196).

This is based on the idea that the shareholders are not expert in running the company and therefore the company affairs are to be left to the professional managers. Due to such effective separation of ownership and control, managers are appointed who do not have any equity interest in the firm. Therefore, there is a problem of aligning the interest of the dispersed shareholders with that of management. However, as noted earlier the fundamental agency problem in large corporations around the world is not the Berle and Means (1932) conflict of interest; i.e. not the conflict between outside investors and managers (Shleifer and Vishny, 1997). Since the late 20th century there was a marked shift of ownership structure around the world (even in the more developed economies with strong capital markets, for example, in the United States) and the ownership is concentrating in the hands of financial institutions, such as pension and mutual funds (Holderness and Sheehan, 1988; Hawley and Williams, 1997). Such ownership narrows the gap between the controllers’ (management) of the corporation with that of shareholders, which also reduces the effective separation of ownership and control as argued in Berle and Means (1932) thesis. Therefore, there is a relative irrelevance of the Berle and Means (1932) model of corporation around the world and there is a predominance of controlling shareholders in the form of individual, family, institutions etc. This is confirmed by academic studies, such as Franks and Mayer (1990) on France, Germany and United Kingdom; Gorton and Schmid (2000) on Germany; La Porta et al (1998) on 49 countries and La Porta, Lopez-de-Silanes and Shleifer (1999) in on 27 wealthy countries. These studies identified that the ownership pattern is changing and concentrated ownership is increasing around the world in order to gain more interest and control. Claessens, Djankov and Lang (2000) on a sample of 2,980 sample firms from 9 East Asian countries found that there is a concentration of
ownership, predominance of family control and family management of the corporations. That study confirmed that more than two thirds of the firms are controlled by a single shareholder and managers or by the relatives of the controlling shareholder’s family.

Farrar (2005) classified the ownership of modern companies in three broad categories, such as (a) significant (dominant) shareholders, (b) institutional shareholders and (c) outside shareholders. This study classifies the ownership in two broad categories, such as (a) concentrated and (b) dispersed (outside) ownership. These are discussed in the following sections.

3.6.1 Concentrated Ownership

Concentrated shareholding is holding a majority shares by some dominant investors. It is one way in reducing the principal-agent conflict and improving the firm efficiency. It is an important internal governance mechanism that can prevent the managers from self-opportunistic behavior. Concentrated shareholding helps in exercising the high degree of corporate control by the voting power or representing in the board of directors (Prowse, 1994; Asian Development Bank, 2000; Coulton and Taylor, 2004). As the large shareholding is associated with the cost of non-diversifying that may lead to huge loss, it provides the investors with both the incentive and the ability to monitor and control the management (Prowse, 1994). Therefore, shareholders will always tend to closely control the managers in the interest of themselves, which may in turn increase the firm performance. Concentrated ownership can help protect the organization from harmful environments (Fischer and Pollock, 2004); concentrated ownership with its power and control, is able to influence the agents that may reduce the self-opportunistic act of the agents or may reduce the agency problem (Garvey, 1992; Prowse, 1994, p 3; Prowse, 1996; Deegan, 2006, p 236); it is the most effective governance mechanism in countries where the investor protection is weak (Shleifer and Vishny, 1997).

The benefits of concentrated ownership are confirmed by many academic studies. Studies for example by Huddart (1993) and Admati et al (1994) on the United States, Xu and Wang (1999) on China; Claessens, Djankov and Pohl (1996), Claessens (1997) and Claessens and Djankov (1999a; 1999b) on the transition economies, such as Czech Republic; Lemmons and Lins (2003) on East Asia; La Porta et al (1998) around
the world (in 49 countries) and Gorton and Schmid (2000) on Germany found that the concentrated ownership enables better monitoring and thereby increases the firm performance. Franks and Mayer (1990) in a study on France, Germany and United Kingdom argued that the concentrated shareholding is a tradeoff between alternative methods of correcting managerial failure and such ownership in the form of banks, families, and state ownership may impede the takeover process.

Concentrated ownership may have different groups. Different concentrated ownership group may have different monitoring skills and may have different objectives on corporate decisions (Shleifer and Vishny (1997, cited in Yammeesri, 2003). For example individual or family shareholders will be interested about both the pecuniary and non-pecuniary returns (benefit from having the control as well as the social status). Banks will prefer the less risky investment (Yammeesri, 2003) and institutional investors will be concerned about the short term firm's profitability (Yammeesri, 2003; Solomon, 2007). The most common types of concentrated ownership categories are the directors and/or managerial ownership, blockholding, institutional ownership. These are further discussed below:

3.6.1.1 Directors and/or Managerial Ownership

Directors and/or managerial ownership is a form of concentrated ownership in reducing the principal-agent conflict and improving the firm efficiency. This is based on the idea that partial or non-ownership by management (agent) induce them to behave in a way, which is contrary to the interest of the shareholders as they do not bear the full cost of such dysfunctional behavior (Godfrey et al, 2006). Controlling shareholders by directors and/or managers enables them the rights in participating management (Coulton and Taylor, 2004), which enables them to oversee the company interest (La Porta, Lopez-de-Silanes and Shleifer, 1999). Their involvement in the board reduces the information asymmetry and enhances the shareholders control that may uphold their interest (Morck et al, 1988; La Porta et al, 2000). Jensen and Murphy (1990a) suggest that the substantial amount of company stock owned by CEO is the powerful link between shareholder wealth and executive wealth. Further, Jensen and Meckling (1976) and Jensen (1993) 'convergence of interest' hypothesis suggest that the managerial shareholding may align the interest of the managers with that of shareholders and thereby enhance corporate performance.
3.6.1.2 Blockholding

Blockholding is another form of concentrated ownership in reducing the principal-agent problems. Blockholding is not just the concentrated ownership; with the specific skills, wealth and expertise, blockholders have strong incentive to monitor the management (Barclay and Holderness, 1991; Gibson, 2003). Firms monitored by outside blockholders are substitute for incentive pay for executives (Kraft and Niederprüm, 1999). Denis and McConnell (2003) argue that the outside blockholders may influence the management which increases the overall shareholder value in the form of 'shared benefit of control'. They further argue that the blockholders are more likely to have a statistically significant effect on firm performance in countries other than United States.

3.6.1.3 Institutional Ownership

Institutional shareholding is another form of concentrated ownership in reducing the principal-agent conflict and improving the firm efficiency. Institutional investor is a broad term and it covers the banks, other corporations, pension or mutual funds, superannuation funds and even the charitable organization (Farrar, 2005). It is a form of concentrated shareholdings and may be done through the cross shareholdings\(^{31}\), holding companies, pyramid structure\(^{32}\) etc to exercise control. Although it is not very uncommon to have the institutional shareholding in some emerging economies, the institutional investors are the key investors in the Anglo-Saxon countries (Farrar, 2005). Such investors hold more than 50 percent of all equity traded in the United States (English \(\text{II et al.},\ 2004\)).

Due to significant shareholding in the firm, institutional investors demand for strong performance. Due to having commitment to the return on investment related product, they also have a professional interest in developing the firm's corporate governance (Nandelstadh and Rosenberg, 2003). Public pension funds in United States have led the way in shareholder activism by targeting under-performing board of directors and demanding better performance and higher standards of corporate

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\(^{31}\) Cross shareholding is holding two companies shares by each other, as a means of enhancing corporate control.

\(^{32}\) Berle and Means (1932) defined, pyramid structure, as owning a majority of the stock of one corporation, which in turn holds a majority of the stock of another, which is repeated for a number of times.
governance (Spencer Stuart, 1999, cited in Kakabadse et al, 2001). For example, the CalPERS (the Californian Public Employees' Retirement System), one of the largest pension funds in USA, has launched attacks on IBM, General Motors, American Express, Kmart and Sears, among many others (Spencer Stuart, 1999, cited in Kakabadse et al, 2001; Mobius, 2001; Engardio, 2002). Some institutional investors have also identified as a key factor in determining the performance in the emerging market as they may prefer to work inside the firms to change its policies (Baysinger and Butler, 1985, p 107; Gibson, 2003). However, it is also argued that the "institutional investors are powerless. Their only option is to vote with their feet." (Jensen, 1989, p 66).

3.6.1.4 Problems of Concentrated Ownership

There are some obvious problems under the concentrated ownership and the agency problem under the concentrated ownership may vary depending on the form of concentrated ownership. These are discussed below.

Firstly, the concentrated shareholding may give enormous control to the owners and the power sometimes goes to the dominant shareholders. The dominant or controlling shareholders may act in their own interest at the expenses of the minority shareholders and other stakeholders (such as, creditors and employees). Therefore, the minority shareholders right tends to be weak and the agency problem will be between the controlling and minority shareholders (La Porta et al, 1998; Asian Development Bank, 2000). The fundamental problem under this system is to protect the minority shareholders from the expropriation by controlling shareholders (Claessens et al, 1999; La Porta, Lopez-de-Silanes and Shleifer, 1999). The concentrated shareholders may pay special dividends to themselves, undertake a risky project for which minority shareholder and creditors will bear the consequences (Yammeesri, 2003).

Secondly, concentrated shareholding by the institutions may primarily be interested in short term profit rather than long-term one (Solomon, 2007); public pension funds may face political constraints that may prevent them from serving as effective monitors (Romano, 1993); the cost of the institutional investment may exceed the benefits of such investment (Macey, 1997).

Thirdly, the concentrated shareholders may not have the idea about the nature of the firms and skills and expertise required in its operation, they may participate in the
management that already facing the governance problems (Romano, 1993); the management may resist the appointment of professional managers in the firm (Alba et al, 1998); management behavior can not be changed to adjust the current economic circumstances which may affect the firm performance (Yammeesri, 2003).

Finally, in addition to the weak shareholders control and monitoring, it reduces the effectiveness of some important mechanisms, such as the system of the board of directors, shareholders participation through voting and transparency and disclosures (Asian Development Bank, 2000). Therefore, in the absence of strong regulatory framework, expected gains of concentrated ownership may not be realized (Jesover and Krikpatrick, 2005) and both the legal protection and some forms of concentrated ownership are essential elements of good corporate governance (Shleifer and Vishny, 1997; La Porta et al, 1998).

3.7 Board of Directors

A corporate board is the governing body or ultimate legal authority of a corporation. It is also the central entity in functioning corporate governance system. Being the representative of the shareholders, it has enormous roles and responsibilities in running and protecting the corporation (Dayton, 1984). A number of different forms of corporate boards are found in corporate governance literature. Such as, constitutional boards, consultive boards, collegial boards and communal boards as alternative board forms (Molz, 1985, p 88); managerial boards, financially controlled boards, class hegemony boards, reciprocity boards, and multilevel limited rationality boards (Bazerman and Schoorman, 1983); managerial dominated and pluralistic board, or activist board (Molz, 1988). A managerial dominated board is one made up primarily of inside directors (officers of the firm). A pluralistic board is one made up of more diverse directors (including some outside independent directors). Managers have very little domination in such a board. Board of directors, hereinafter refereed to as ‘board’, has enormous roles, powers and responsibilities in running the corporation (Dayton, 1984).

3.7.1 Role of the Board

The academic studies (such as, Chaganti et al 1985; Zahra and Pearce II, 1989; Gopinath et al, 1994; McNulty and Pettigrew, 1996; Hung, 1998; Dalton and Daily
1999; Rindova, 1999; Maassen, 2002; Brennan, 2006) identified a variety of different roles of the board of directors in decision making. The three most critical of these are the service roles, control roles and strategic roles. Service role is the service provided by the board to the company. Pursuant to this role, board enhances company reputation and prestige; provides advices to CEO and top management by formulating policies; involves in enhancing company’s reputation and performance; helps the company establishing contract with other external parties and helps the company in dealing with its environment, (Gopinath et al, 1994; Johnson et al, 1996; Maassen, 2002; Brennan, 2006). The control role is the wide range of formal powers exercised by the board to control. It involves the hiring and firing the CEO and monitoring the CEO’s performance to safeguard the interests of shareholders and exercising direct control in crisis period (Chaganti et al, 1985; Carpenter 1988; Zahra and Pearce II, 1989; Johnson et al, 1996; Brennan, 2006). The strategic role involves the framing objectives and vision of the business, revision and evaluation of managerial analysis and recommendation of changing strategies (Zahra, 1990; Brennan, 2006). Johnson et al (1996) added one more role of the board, namely the resource dependence role. It views the board as a means for facilitating the acquisition of resources critical to the firm’s success (Johnson et al, 1996; Kula, 2005).

The role of the board may also be classified in terms of performance (operational) and conformance (governance) roles (Tricker, 1994b; Asian Development Bank, 2000). The performance roles of the board are “to formulate corporate policy, approve strategic plans, authorize major transactions, declare dividends and authorize to sale of additional securities……to hire, advise, compensate and if necessary remove management……” (Asian Development Bank (2000, p 8). The governance roles are, “ensuring that the company is conforming to policies, procedures and plans laid down by the board and being properly accountable for its activities” (Tricker, 1994b, p 98).

Molz (1985) argues that in protecting the shareholders interest, the role of the board is similar to that of an umbrella. It is the instruments of control between the stakeholder and organization. It also include the hiring, monitoring and firing of CEO, selecting and replacing the board members, reviewing the firm’s financial performance, and ensuring the compliance with law and social responsibility (Main et al, 1995, p 299; Asian Development Bank, 2000, p 8; Leblanc, 2005). Therefore, the ‘board’ is
another important mechanism in shaping the corporate governance system and in running the organization by playing a variety of roles.

Table 7: Role of Board in Terms of Economic Theories

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Theory</th>
<th>Role of the Board</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control Roles</td>
<td>Agency Theory and Legalistic Theory</td>
<td>Supervision of management, representing and protecting shareholders interest.</td>
</tr>
<tr>
<td>Service Roles</td>
<td>Stakeholder Theory and Resource Dependence Theory</td>
<td>Board enhances organization legitimacy and performance by providing information and resources.</td>
</tr>
<tr>
<td>Strategic Roles</td>
<td>Stewardship Theory and Institutional Theory</td>
<td>Identify the interest of the firm and recommendation of various strategies.</td>
</tr>
</tbody>
</table>


Zahra and Pearce II (1989), Gopinath et al (1994) and Maassen (2002) classified the role of the board in terms of organizational theories such as ‘Agency Theory’ or ‘Legalistic Theory’; ‘Stakeholders Theory’ or ‘Resource Dependence Theory’; ‘Stewardship Theory’ or ‘Institutional Theory’. Agency theory assumes that the board will contribute to reduce the agency cost; will protect the interest of the shareholders and will not involve in the day to day operational activities (Zahra and Pearce II, 1989). According to ‘Stakeholder Theory’, the directors will extract successful firms operations due to prestige concern in the professions and communities (Zahra and Pearce II, 1989) and will provide information and resources to enhance firm performance (Gopinath et al, 1994). The roles of the board in terms of institutional theories are summarized in table 7.

3.7.2 Attributes of the Board

Similar to the roles of the board, corporate governance studies (for example, Zahra and Pearce II, 1989; Maassen, 2002) identified four sets of board attributes; such as, composition, characteristics, structure and process, which may ultimately influence the firm performance. Board composition refers to the size and structure of the board and the mix of different director's demographics (insiders/outsiders or shareholders/non-shareholders, male/female, foreign/ local) and the degree of directors’ affiliation in a firm (Zahra and Pearce II, 1989; Maassen, 2002); whether the position of CEO and Chairperson are held by same individual (Denis and McConnell, 2003). In
other word it allocates the board seats among the set of potential board members, which includes the representative of shareholders, professional managers and board members (Thomsen, 2004). The board composition may also be studied from a demographic perspective, such as age, tenure, managerial experience, industry experience etc. of members (Finkelstein and Hambrick, 1996).

Figure 7: Board attributes and roles

Source: Adapted from Zahra and Pearce II (1989)

Board characteristics encompass the director's backgrounds, such as director's experience; tenure; functional background; skills, knowledge, independence; stock ownership and other variables that influence director's interest and their performance (Hambrick, 1987; Zahra and Pearce II, 1989). Board structure refers to the formal organization of the board and determines the size of the board and division of labor/power between the Chairperson of the board and CEO (Finkelstein and Hambrick, 1996; Linck et al, 2008). Board process refers to decision-making styles of board; the frequency and the length of board meetings; CEO-board interference, level of consensus among the directors, the formality of board proceedings and board culture on evaluation of director's performance (Zahra and Pearce II, 1989; Pettigrew, 1992).
The board attributes is summarized in figure 7 above, which ultimately influence the firm performance.

### 3.8 Board as a Governance Mechanism

A corporate board is the primary, low cost and dominant internal corporate governance mechanism (Brennan, 2006). Board monitors or supervises management, gives strategic guidelines to the management and even may act to review and ratify management proposal (Jonsson, 2005). A board will work to enhance the firm performance due to legally vested responsibilities or due to its fiduciary duty (Zahra and Pearce II, 1989). A board will take every initiative in spotting the problems earlier. In the words of Salmon (1993, p 75) “the board must spot the problems early and must blow the whistle”. In the context of the agency theory, the board may be an important governance mechanism to alleviate agency problems by monitoring the management (Zahra and Pearce II, 1989).

Although the board may play an important role in corporate governance by monitoring the management, the “board culture is an important component of board failure” (Jensen, 1993, p 863). The wave of recent corporate scandals at Enron, WorldCom and HIH raise the question to what extent the board is able to monitor the management (Mizruchi, 2004, p 614; Brick et al, 2006, p 421). Enron, WorldCom and HIH management were involved in the creative accounting or Accounting Fraud and these problems were undetected for longer time (Main, 2002; Lawrence, 2004; Kaplan and Kiron, 2004; Solomon, 2007). The board members of the Penn Central Railroad in 1970 were lulled by the management and accountants (Weidenbaum, 1986; Mizruchi, 2004, p 614). Geneen (1984) in a study found that among the board of directors of fortune 500 companies, 95% are not doing what they are legally, morally, and ethically supposed to do. Therefore, it is criticized that (1) the board is a rubber stamp, (2) the board is dominated by CEO, and (3) the board is plagued with the conflicts of interests (Weidenbaum, 1986); board responds to the wishes of a controlling shareholders (Jesover and Krikpatrick, 2005, p 128).

Asian Development Bank (2000) argues that, sometimes instead of representing the overall corporate interest, board in some Asian countries (especially the countries

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33 Deegan (2005, p 97) states that it is the clever way of selecting accounting methods for the desired results by the preparers. In a sense it is the fraudulent misrepresentation of accounts. It is not found in the normal business circumstances.
affected by the Asian Crisis) represents the interest of the particular group. Boards of directors in those countries are shareholders that represent the interest of families or family group and the board does not have the independent directors. Although there is a legal requirement, but business procedure in some affected countries does not allow the independent directors to participate in the board’s decision (Asian Development Bank, 2000). Therefore, an important question of monitoring the board may arise. That is, who will monitor the monitors? Although it is argued that the shareholders will monitor the board by exercising their ownership right by appointing and removing board members, shareholders may not be aware of the inside activities of the firm.

Corporate governance literature debated within two extreme streams of board practices. Firstly, whether the board composition in the form of representation of outside independent directors may influence firm economic performance. Secondly, whether the structural independence of the board influence the firm performance. This study also investigates whether board composition in the form of representation of outside independent directors and leadership structure may influence the firm performance in Bangladesh. These are discussed in the following sections.

3.8.1 Board Composition

Board composition refers to the combination of executive directors (including the chief executive officer) and non-executive directors in the board. The executive directors are the so called “insiders” of the company, usually are full time employee. Butterworth’s (2002, p 195), defines executive directors as “a director engaged by a company under a contract of employment to perform functions additional to those involved in being a member of the board of directors”. They are high ranking full time officer of the firm, who works on a day to day basis for the position of CEO, president or vice president (Dalton and Kesner, 1987; Dalton and Daily, 1999).

The non-executive directors are not the employee of the company. Butterworth’s (2002, p 341) defines non-executive director as “a director who does not take part in the day to day management of the company”. They are appointed due to huge qualifications, expertise and experience and they may effectively influence the board’s decision and ultimately add value to the firm (Fields and Keys, 2003). Sometimes they are appointed from outside and they may not have any material interest
into the firm also known as independent directors\textsuperscript{34}. These directors are believed to be more efficient and efficient monitors of firm management than insiders (Kula, 2005, p 267); these directors can play a useful role in relation to strategic planning and risk management (Farrar, 2005); "……..may contribute both expertise and objectivity in evaluating the manager’s decisions" (Byrd and Hickman, 1992, p 126).

Although it is the fiduciary responsibilities of all directors to oversee the interest of the shareholders, outside directors are particularly appointed to fulfill this objective (Morck \textit{et al}, 1988). Since the inside directors are better informed regarding the quality of firm projects, outside directors can help the board implement higher value projects (Raheja, 2005). The legalistic theory literature (such as, Zahra and Pearce II, 1989; Gopinath \textit{et al}, 1994; Maassen, 2002) also suggest that outside directors will work for the interest of shareholders. Therefore, it is widely debated in the corporate governance literature whether board composition in the form of representation of outside independent directors may add any value to the firm performance. The outside directors are more vigilant as they mainly focus on the firm financial performance, may dismiss the CEO following poor performance to maintain their personal reputation as directors (Finkelstein and Hambrick, 1996, p 225); can freely evaluate management’s performance and act to remedy inappropriate and unacceptable situations (Kesner \textit{et al}, 1986); “resolve the problem of information asymmetry” (Ozawa, 2006, p 104). The higher proportions of outside directors and smaller board are tend to make decisions, such as acquisitions, executive compensation and CEO replacement (Hermalin and Weisbach, 2003). The presence of outsiders in the board is an indication of board resource dependence role (Johnson \textit{et al}, 1996). In the absence of the outside directors the insider dominated board in one hand will get enormous powers and the board may abuse such powers; on the other hand without the expertise of the outside directors, the board may not be effective (Dalton and Daily, 1999).

However, the representation of outside independent directors as a commonly used measure of board vigilance to promote shareholder interests is sometimes controversial. Although directors hire and fire the managers and executive but in

\textsuperscript{34} According to United Kingdom Higgs Report 2003 “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”. This study considers the independent directors as the directors who do not have any material interest into the firm and fits the definition of ‘Independent Director’ provided in the ‘Corporate Governance Notification 2006’ issued by Securities and Exchange Commission Bangladesh.
practice they are nominated by the management. It is argued that the outside director candidates are known by CEO or other inside directors. The new outside board members who are proposed by inside board members may have relationship with them. Further, most effective directors are insiders as they have more information of the firm than the outsiders and thus outside directors must rely on them to make a decision (Finkelstein and Hambrick, 1996, p 225); “inside directors lives in the company they govern, they better understand the business than outside directors and so can make better decisions” (Nicholson and Kiel, 2007, p 588). Many outside directors may not be competent to perform their assigned tasks as many of them are part-timers and they do not have inside information of the firm (Brennan, 2006). Such information asymmetry may reduce the control role of the outside directors in the firm.

Flanagan (1982) noted that 80 percent of the outside director(s) candidates in the United States firms are known by either CEO or by other board members. Some studies (such as, Patton and Baker, 1987; Jensen, 1993) argue that outside directors are the ‘creatures of CEO’ and are more likely to be aligned with top management rather than shareholders, as CEO and top management has great influence over who sits in the board. Some other studies (such as, Brickley et al, 1994) argue that, due to reputation concerns and fear of lawsuits, outside directors will be motivated to represent shareholders. However, the ability to issue commands and instructions by these directors are limited as they do not ordinarily have formal authority to do so (McNulty and Pettigrew, 1996). These directors only monitor in case of crisis (Dayton, 1984). The WorldCom board was composed of more than 50% of non-executive directors; however the board could not prevent the bankruptcy (Kaplan and Kiron, 2004). Further, there is no consensus of common definition of independent director (Brennan and McDermott 2004, p 326); they are neither the employee of the company, nor have any business or personal relationship with the firm (Hulbert, 2003); outside directors serve on too many boards and grow older as there is no age limit on them (Core et al, 1999).

3.8.2 Structural Independence of the Board

Structural independence of the board refers to the board leadership in the form of Chairperson and management leadership in the form of CEO. Both the Chairperson and the CEO’s contributions are equally important in a corporation. Although there is a sacred and secret relationship between them (Kakabadse et al, 2006), monitoring by the
board depends on the distribution of power between the Chairperson of the board and the CEO (Pearce II and Zahra, 1991; Finkelstein and Hambrick, 1996). The professional integrity and trust to each other are the salient features that may influence the firm performance (Kakabadse et al., 2006). Leadership skill of the Chairperson is an important factor in determining board process, optimal decision making and overall effectiveness of a board of directors (Leblanc, 2004; Leblanc, 2005); ‘the chief executive officer’ (CEO) is the executive who has overall responsibility for the conduct and performance of an entire organization’ (Finkelstein and Hambrick, 1996, p 7). It is argued that the board will not involve in the day-to-day operational activities of the management or not become the part of management, as it may lead a conflict of interest between the management and board (Morck et al., 1988; Rechner and Dalton, 1991; Tricker, 1994b; Yermack, 1996; Abdullah, 2004). Due to legalistic perspective board is responsible for corporate leadership without actual interference in day to day operations, which are duties of CEO and senior executives (Zahra and Pearce II, 1989, p 292). The CEO will bridge between the corporate board and management (Rechner and Dalton, 1989). Firms having one individual serving as both Chairperson and CEO are considered to be the so called CEO duality. It is the situation in which the titles of both the Chairperson of the board and CEO go to one individual. In the words of Rechner and Dalton (1991, p 155), it is “a board leadership structure in which the CEO wears two hats; one as the CEO of the firm, the other as chairman of the board of directors”.

The CEO non-duality, which separates the executive function of the board from its monitoring function, is commonly found in the two-tier board, which is most common in continental Europe, such as Germany, Finland, Holland and the Netherlands (Tricker, 1994b; Maassen, 2002). The CEO duality is very unusual in the two-tier boards as the CEO has no seat in the supervisory board; such supervisory function of the board is formally independent from the executive (management) function. The management functions of the board mostly oversee the operational issues and headed by Chief Executive Officer (CEO) and supervisory functions of such board deals with the strategic decision and oversee the management function of the board headed by Chairperson as non-executive director (Solomon, 2007). In one-tier board, which is most common in Anglo-Saxon or Anglo-American countries, such as the United States, the United Kingdom and Canada, Australia, New Zealand, both the executive and the non-executive directors perform duties together in one organizational
layer. In such a board there may be any combination of executive and non-executive directors (Maassen, 2002; Solomon, 2007).

The proponents of the CEO duality suggest that the CEO duality may be required when such duality can enhance conformity and encourage performance (Tricker, 1994b) and the firm requires strong leadership (Finkelstein and Hambrick, 1996). CEO duality has several advantages, such as it places the CEO in a powerful position in managing the firm's operations and enables to make quick decision (Finkelstein and Hambrick, 1996). Kang and Zardkoohi (2005) by reviewing extant literature identified five antecedents of CEO duality, such as (1) duality as a reward for CEO’s good performance, (2) duality is a solution to the environmental resource-scarcity, complexity and dynamism, (3) duality is conforming to institutional pressure, (4) duality as result of social exchange reciprocity and (5) duality as imposed by powerful CEO.

However, such duality is criticized in the literature that there is a problem of monitoring the management by the board if the Chair of the board and the CEO is the same person. In the context of agency theory, CEO duality (the combined leadership structure) may give enormous power and authority to the CEO, which may weaken the board. It also reduces the check and balances and CEO tends to be motivated by self-interest (Tricker, 1994b). Such a powerful CEO can influence the board activities, such as formation of board committees in pursuant to his personal interest; manipulate the board meetings by not raising an important agenda. As the CEO duality board is usually dominated by the management, it may reduce the board’s ability to exercise the governance function and creates a conflict between management and board (Morck et al, 1988; Zahra, 1990; Rechner and Dalton, 1991; Tricker, 1994b; Yermack, 1996; Solomon, 2007). The CEO may not want a capable board as the capable board may challenge their power and authority; therefore with their power, the CEO dominated board may select, reward or replace a director. It is also argued that the CEO can not represent the shareholders and the management at the same time (Rechner and Dalton, 1991). In the words Abdullah (2004, p 52), “who will watch the watchers.”

To avoid these conflicts of interests, some studies advocate the separation of the positions of CEO and Chairperson and appoint the position of Chairperson as an outside independent director. Separating the position of CEO and board Chairperson reduces the CEO and inside directors to exercise the opportunistic behavior which will in turn allow the board to better exercise its control (Daily and Dalton, 1994a). It also
facilitates the objective assessment of CEO and top management performance (Weidenbaum, 1986). Therefore, the proponents of CEO non-duality further argue that the separation will lead to a powerful board (Pearce II and Zahra, 1991), may reduce the agency problems (Solomon, 2007), which is associated with corporate superior (improved) financial performance (Donaldson and Davis, 1991). Without such separation CEO tends to be motivated by self interest, ignoring the interest of the various other stakeholders. The separation of the positions of CEO and board Chairperson reduces the CEOs dominance over the board (Daily and Dalton, 1994b; Maassen, 2002). Therefore, it enhances the board effectiveness and reduces the ‘self-opportunism’ behavior of the CEO.

Despite such debate it is still a puzzle whether the independent leadership structure will enhance the board effectiveness that may lead to better firm performance. There is no optimal board leadership structure; both form of leadership structure may have potential costs, as well as benefits (Boyd, 1995; Brickley et al, 1997; Elsayed, 2007). In other words, leadership structure has no particular advantages for shareholders (Kang and Zardkoohi, 2005). Enron Corporation had its CEO also served as Chairperson of the board (i.e. CEO duality) while both WorldCom and Global Crossing separated the positions of CEO and Chairperson (i.e. CEO non-duality); although, the role of Chairperson of the board is a powerful position within these firms, the holder of this position did not have the ability to control corporate wrongdoings within these three corporations (Petra, 2005).

3.9 Management and Executives Compensation

Management and and/or executives compensation is another internal corporate governance mechanism. As argued in the Berle and Means (1932), the management of the corporation by law is vested to the professional managers or there is an effective separation of ownership and control. Due to such effective separation of ownership and control, there is a relationship between the principal (the owner) and the agent (the managers), which is commonly known as the agency relationship (Jensen and Meckling, 1976). Such relationship may lead to a conflict of interest between the manager and shareholders as both may act in their own interest. Therefore, it is very important to introduce some mechanisms, checks and balances to achieve the firm’s objective in a cost effective way (for example the financial audit). However, it is argued
that human nature can not be altered through regulations, checks and balances (Solomon, 2007, p 69). Even attempts to force agent to act in the interest of the principals may involve huge monitoring cost. If the agents are paid lower salary; such lower salary will compensate the principals for the anticipated opportunistic behavior of the agent (Finkelstein and Hambrick, 1989; Deegan, 2006, p 236).

Due to effective separation of ownership and control, manager may try to diversify their risk as they do not have any ownership interest in the firm and it is their undiversified human capital (managerial talent) invested in a single firm (Godfrey et al, 2006). Therefore, what will attract the professional managers to invest their undiversified human capital? Although the power, prestige, and public visibility, attract the highly qualified people (professional managers) to the corporations; it is primarily the monetary compensation that they receive will induce them to work (Jensen and Murphy, 1990a). Maslow’s (1970) needs hierarchy theory suggests that the human basic needs are the physiological needs, then, in order, love needs, esteem needs (self-esteem and the esteem of others), and self-actualization. People deserve the power and prestige once the basic needs are met. In the market where the individuals are perfectly informed agents will also bear the cost of the potential opportunistic behavior or cost of bonding and monitoring (Deegan, 2006, p 236; Godfrey et al, 2006). As individuals are not perfectly informed, it is expected that agents will be satisfied with the additional salaries and will reduce their set of available opportunistic action.

In line with the above discussions, it can be argued that the contracting can be used to provide incentive to minimize the agency conflict (Godfrey et al, 2006). Compensation in the form of monetary reward may act as a contracting device that may motivate managers to act in the interest of shareholder. It is also emerged as an important mechanism in resolving the agency conflict and became the dominant issue in corporate governance literature (Conyon and Peck, 1998). It is argued that the executive compensation is the “smoking gun” of governance failure (Monks, 2005); the executive pay may be the substitute of the outside directors (Coulton and Taylor, 2004, p 19). Academic studies (such as, Main, 1991; Mangel and Singh, 1993; Asian Development Bank, 2000; Bebchuk and Fried, 2003) suggest the executive compensation as the ‘optimal contracting approach’ in resolving the agency problem and may play a key role in governance mechanism in areas where the monitoring of performance is difficult. In the words of Bebchuk and Fried (2005),
...executive compensation have typically assumed that pay arrangements are produced by *arm's-length contracting*- contracting between executives attempting to get the best possible deal for themselves and boards trying to get the best deal for shareholders (p 8).

According to Asian Development Bank (2000), the exact form of the optimal incentive package depends on the specific details of the agency problem but often involves performance related pay. CEO compensation depends on a number of factors. Such as, board leadership structure (Berg and Smith, 1978; Lin, 2005); CEOs task complexity and compensation should be higher, if multiple functions are performed by CEO and vice versa (Berg and Smith, 1978); firm size (Finkelstein and Hambrick, 1989); performance (Finkelstein and Hambrick, 1989); CEO’s power (Finkelstein and Hambrick, 1989; Sridharan, 1996; Elhagrasey *et al*, 1999; Ueng *et al*, 2000); board vigilance (Finkelstein and Hambrick, 1989) and CEO’s human capital (Finkelstein and Hambrick, 1989). Usually the fixed salaries, bonuses or even the fortune of the managers motivate them to work in the interest of the shareholders. However, if the executives are paid the fixed salary, they may not have any incentive in showing the creativity as the managers will not get any potential gain on it. If the executives are paid based on share of profits, it may motivate them in taking actions that may lead to increase profits and/or firm value. Similarly if the executives’ compensation is based on share options and shares based compensation, they will have a vested interest in enhancing firm performance.

However, following the recent corporate collapses, there is a widespread debate on CEOs and executives compensation. Whether the highly paid executives may influence the firm performance is a complex, challenging, and often highly emotional issue (Hannafey, 2003). Despite huge compensation, there is a concern that the well paid executives are not working well; they are not spending significant time for their company. The highly compensated CEOs are sometimes underperforming and the award winning CEOs are spending significant time and effort on public and private activities outside their company, such as assuming board seats or writing books (Malmendier and Tate, 2005). If the executives are paid based on share options and share based compensation, which relies on various factors and it may not finalized in the reporting date. When the actual pay amounts are revealed on the reporting date, the shareholders sometimes express their concern or sometimes there are public shocks or so called outcries (Simerly *et al*, 2000). Therefore the academic studies for example by
Jensen and Murphy (1990a; 1990b) argued that the CEOs are paid like bureaucrats\(^{35}\), although there is no link between pay and performance; CEOs of bad firms receive larger wages (Friebel and Matros, 2005). The annual changes in executive compensation do not reflect the changes in corporate performance (Jensen and Murphy, 1990a; 1990b).

Further, the poorly designed or implemented share based compensation plan may lead to excessive compensation that may destroy the organizational value (Jensen, and Murphy, 2004); when the compensation is largely based on share options, the managers may maximize short term shareholders benefit to increase their own compensation (Maher and Anderson, 1999); if the executives are rewarded on the basis of accounting profits, they will tend to manipulate the accounting numbers to improve their apparent performance or will adopt a particular accounting method that will increase the accounting profit (Deegan, 2005; Deegan, 2006; Godfrey \textit{et al}, 2006). In the words of as Deegan (2006),

> In considering the cost of implementing incentive schemes based on accounting output, there is a possibility that rewarding managers on the basis of accounting profits may induce them to manipulate the related accounting numbers to improve their apparent performance………their related rewards (p 240).

There is a further concern that the CEOs with their managerial power may set their own pays (Coakley and Iliopoulou, 2006). Therefore, it is argued that the CEOs must not set their own pay and it must be set in the boardrooms (Conyon and Peck, 1998).

### 3.10 Corporate Capital Structure

The debate of the corporate capital structure ignited following the publication of Nobel laureates Modigliani and Miller (1958) renowned article on the cost of capital and capital structure. They demonstrated that in the absence of bankruptcy costs and tax subsidies on the interest payment, the value of the firm is independent of its capital structure; the capital structure in the form of debt and equity can increase the value of

\(^{35}\) There is a counter of this view; Hall and Liebman (1998) concluded that the CEOs are not paid like bureaucrats and there is strong sensitivity between pay and performance probably due to increased pressures from outside investors on firm and its board.
the firm if the firm can borrow at a lower rate than that of investors. They further (Modigliani and Miller, 1963) demonstrated that the existence of tax subsidies on the interest payments may cause the value of the firm to rise with the amount of debt financing.

Modigliani and Miller hereinafter referred to as MM capital structure theory was much debated in the academic literature. Although corporate capital structure in the form of debt and equity may increase the firm value, a growing number of studies argue that corporate capital structure may create the agency problem between the debt and equity holders. Such agency problem may generate the agency cost and may ultimately reduce the value of the firm.

Once the firm relies on more debt; its ability to pay fixed interest out of its current earnings declines (Asian Development Bank, 2000). Therefore, the agency conflict between the principal (debtholders) and agent (manager) may arise. The principal in such a situation is the debtholders and agents in this situation are the managers, acting on behalf of the shareholders. The agent may increase the value of the firm due to efficient contracting (Godfrey et al, 2006). Alternatively the agent may undertake the divergent behavior that may tend to transfer the wealth from debtholders to shareholders; the agent (firm) may undertake such activities, for example paying excessive dividends, undertaking very risky projects, which may ultimately reduce the possibility of repaying the debts (Smith and Warner, 1979; Asian Development Bank, 2000; Deogan, 2005, p 86; Deegan, 2006, p 246). Once the firm relies on increased debt, shareholders become more tolerant towards risk and they may prefer to maximize the value of firm’s equity, without maximizing the value of debt, as they are benefited from the risky action by avoiding the full cost of such action (Prowse, 1994; Heinrich, 2000; Godfrey et al, 2006). In other words, shareholders are benefited from investing in very risky projects by borrowing. If the risky action gives a return, the shareholders capture most of the gain and debtholders will not get any excess, as they have a fixed claim. Asian Development Bank (2000) described it as the risk shifting effect, as debtholders bear the consequences, if the investment fails. Further, when the firm issues additional debt with higher priority than the existing debtholders, it increases the funds available to increase the value of the firm and the ownership interest (Godfrey et

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36 This is also due to the debt hypothesis, which predicts that the managers will adopt certain accounting methods that will shift the reporting profit from future periods to current periods to transfer the wealth of debtholders to the shareholders (Godfrey et al, 2006).
However, it creates a ‘claim dilution’ as the new debtholders may compete with the existing debtholders for repayment (Smith and Warner, 1979). Therefore, the debtholder may restrict the firm’s further borrowing. In both the situation described above, the companies with growth opportunities facing financial difficulties may be adversely affected as the debtholder may restrict the firm’s further borrowing (Margaritis and Psillaki, 2007). It may cause managers (shareholders) to ‘under-invest’ in situations where shareholders bear all the cost of the investment but debtholders capture most of the return (Myers, 1977).

Debt may also create some other problems. Such as, it may create the financial distress and bankruptcy cost (Harris and Raviv, 1991). If the debt is raised in the form of borrowing from banks, due to information availability of the firm, bank may use such information for the benefit of the bank, ignoring the interest of the borrowing firm and its shareholders (Yammeesri, 2003). Banks may also prevent to adopt such policies, which will tend to transfer wealth from debtholders to shareholders (Prowse, 1990). Further, there is an exchange risk of un-hedged foreign debt that led to the ‘Asian Crisis’ (Glick, 1999; Kawai et al, 1999; Fan and Terada-Hagiwara, 2003).

There is an alternative perspective to the debt in the corporate capital structure. This perspective suggests that the capital structure in the form of debt and equity not only the alternative financing instruments but also may be a form of governance mechanism (Williamson, 1988; Shleifer and Vishny, 1997, p 761); may reduce the shareholder-debtholder agency problem by playing a disciplinary role (Margaritis and Psillaki, 2007); may act in motivating the organizational efficiency (Jensen, 1986); higher pre-distress leverage increases the probability of operational action (Ofek, 1993, p 3). Further, due to Jensen (1986, p 324) ‘control hypothesis’ interest obligation of debt may reduce the agency cost of free cash flow by reducing the cash flow available for spending at the discretion of managers as the larger level of debt commits managers to pay a certain cash flow to the outsiders. If the firm does not maintain its promises to make the interest and principal payment, the debtholders may take the firm into bankruptcy court. Therefore “debt in exchange for stock, managers are bonding their promise to pay out future cash flows in a way that can not be accomplished by simple dividend increases” (Jensen, 1986, p 324). In other words the financing policy (debt contract) may reduce the financing cost of manager’s discretion; it may tend to diversify the investment across projects which may reduce the agency costs of managerial discretion (Stulz, 1990).
Debt in the form of bank borrowing may also reduce the information asymmetry, as bank already has the information about the firm and thus may enable better monitoring and prevent or minimize the probability of bankruptcy. It also ensures that the firm’s resources are used effectively and efficiently, so that the firm will be able to make the repayment (Gorton and Schmid, 2000). Moreover, due to close relationship with banks, banks are able to sit in the board and it will enable the firm to get financing from the banks (Yammeesri, 2003). It will also provide a signal to the market that there is a less possibility of failure by the firm (Kroszner and Strahan, 2001). Debt contract (covenants) may restrict the choice of particular accounting techniques in valuing assets (Watts and Zimmerman, 1990, p 139; Cotter, 1999). Higher leverage allows the firms’ interim financial statement to be audited and tend to reduce the management shareholding in the firm (Ettredge et al, 1994).

As noted earlier, due to ‘claim-dilution’ problem the debt may cause shareholders to ‘under-invest’ in situations where the shareholders bear all the cost of the investment but debtholders capture most of the return (Myers, 1977). Such under-investment incentives related to debt can be useful to improve the investment efficiency in a variety of situations where shareholders would have the incentive to over-invest if no debt were issued (Titman, 1984; Heinkel and Zechner, 1990). Further, due to ‘claim-dilution’ problem, the existing debtholders will try to restrict the level of firm’s borrowing, resist the firm to invest in a risky project or negative net present value (NPV) project (Shleifer and Vishny, 1997), which will be ultimately helpful to improve the investment efficiency of the firm. Therefore, “financing arrangement can alter a firm’s ability to compete” (Campello, 2003, p 374) and helps restore investment efficiency and plays a positive role in mitigating agency conflicts (Zhang, 1998). An optimal capital structure or appropriate level of debt will also balance the bankruptcy cost and marginal tax sheltering benefits associated with raising additional debt for equity (Stiglitz, 1988; Asian Development Bank, 2000); will maximize its performance by minimizing its financing cost (Zeitun and Tian, 2007b). Greater financial leverage may reduce the agency cost through the threat of liquidation, which causes personal losses of managers, such as, salaries, reputation, etc. (Berger and Bonoaccorsi di Patti, 2006).

Managers may increase the debt beyond the optimum level to exercise the control rights, which may also act as an anti-takeover device (Harris and Raviv, 1988; OECD, 2005). Due to incomplete or imperfect capital market, an important issue of
capital structure in the emerging economy is exercising the degree of control, which sometimes promotes the concentrated ownership (Shleifer and Vishny, 1997) or alternatively the countries in where concentrated ownership dominates, the firms tend to have higher level of debt (Berglöf, 1991). Such concentrated ownership has huge role in disciplining the firm management.

In line with the above discussion it can be argued that corporate capital structure in the form of debt and equity may reduce the shareholder-debtholder agency problem by playing a disciplinary role and may influence the performance (e. g. Jensen and Meckling, 1976; Myers, 1977; Myers and Majluf, 1984; Jensen, 1986; Jensen, 1989; Triantis and Daniels, 1995; Majumdar and Chhibber, 1999; Heinrich, 2000; Campello, 2003; Harvey et al, 2004; Berger and Bonoaccorsi di Patti, 2006; Zeitun and Tian, 2007b; Jiraporn and Gleason, 2007; Margaritis and Psillaki, 2007). Therefore, this study also investigates whether the capital structure may be a form of governance mechanism. While doing so, this study examines whether the debt instrument may reduce the agency cost and examines to what extent debt may enable the disciplinary role into the firm and enhance the firm performance.

3.11 Chapter Summary and Conclusion

This chapter is the theoretical framework of this thesis. This chapter discusses the various theoretical frameworks in explaining the principal-agent relationship. Such theoretical lenses are required in explaining the corporate governance and problems. This chapter reveals that the corporate governance problems around the world are not necessarily the same as Berle and Means (1932) model of corporate governance. Focusing this issue was necessary to find a theoretical model in explaining the corporate governance and problems in Bangladesh. The ‘Bangladesh Corporate Governance Model’ is developed subsequently in light of existing corporate governance models in literature. It is revealed that although many of the corporate governance characteristics of the Bangladeshi context align with German-Japanese ‘bank-based’ or ‘relationship-based’ model, Bangladesh corporate sector also has some characteristics of ‘Anglo-American’ market based model of corporate governance. Therefore, this thesis describes the Bangladesh corporate governance model as the hybrid of internal and external control model which can also be described as the ‘emerging governance model’ of corporate governance. Following the identification of
the corporate governance models, the mechanisms of accountability (in particular the ownership structure, board of directors, compensation contract and capital structure) are discussed throughout this chapter. Empirical studies on corporate governance and firm economic performance are conducted in Chapter 5 and Chapter 6 in light of the mechanisms of accountability prescribed in this Chapter.
Chapter 4  Review of The Corporate Governance Literature

4.1 Introduction

This thesis provides an insight of corporate governance in Bangladesh as well as by using the firm level data, it empirically examines whether various corporate governance mechanisms influence the firm economic performance in Bangladesh. Chapter 3 of this thesis describes the theoretical framework, giving the background to economic and finance theories on corporate governance and its problems. That chapter discusses the underlying problems of corporate governance under the Berle and Means (1932) model. It is revealed that the corporate governance problems around the world are not necessarily the same as Berle and Means (1932) model of corporate governance. This is demonstrated through an explanation of corporate governance problems in Bangladesh. It is revealed that although many of the corporate governance characteristics of the Bangladeshi context align with German-Japanese ‘bank-based’ or ‘relationship-based’ model, the Bangladesh corporate sector also has some characteristics of the ‘Anglo-American’ market based model of corporate governance. Therefore, this thesis describes Bangladesh corporate governance attributes as a hybrid of internal and external control systems, which can also be described as the ‘emerging governance model’ of corporate governance. Following the identification of the corporate governance model, the mechanisms of accountability are discussed throughout that chapter. Empirical studies based on these mechanisms of accountability and firm economic performance are conducted in Chapter 5 and Chapter 6.

This chapter reviews and summarizes the earlier research on corporate governance since a reasonable body of research on corporate governance exists. The review of such literature helps in identifying the deficiencies in earlier studies and establishes the justification of the current study, which is also the basis of hypothesis development. The organization of this chapter is as follows. Firstly, the relevance of agency theory in literature review is discussed. Secondly, a review of earlier studies on various corporate governance mechanisms, such as ownership structure, board practices, managerial compensation and corporate debt policy is made. Thirdly, a
summary of earlier studies is presented in a tabular format. Finally, a critique on earlier studies and a concluding remark is made.

4.2 The Relevance of Agency Theory in Literature Review

A literature review distills the existing literature in a field of inquiry; the objective of the literature review is to summarize the state of the art in that subject field; from literature review, it becomes possible to identify areas in which further research would be beneficial (Rowley and Slack, 2004).

This thesis examines whether corporate governance mechanisms, such as ownership structure, board practices, compensation and capital structure influence the firm economic performance in Bangladesh. To do so, this thesis adopted the agency theory in explaining corporate governance and problems (discussed in part 3.3.6). It is explained within this theoretical perspective that the separation of ownership and control may lead to a problem of aligning the interest of the dispersed shareholders with that of management (Jensen and Meckling, 1976). It is also explained that the board composition in the form representation of outside independent directors, CEO nonduality, executive compensation and corporate capital structure may influence the firm economic performance in Bangladesh. The empirical analysis on corporate governance and economic performance are conducted in Chapter 5 and Chapter 6.

It is worth mentioning the relevance of theoretical perspective used in this literature review. The literature review in this study primarily reviews the earlier studies on corporate governance and agency theory is very relevant as the earlier studies were also conducted either within an agency or stewardship theory perspective (which is in fact opposite to agency theory). Acceptance of one theory has rejected the other (such as, agency or stewardship theory). Form this review it is apparent that the earlier studies failed to reach a consensus on a theory which justifies the further research. A detail review of relevant literature is provided under respective headings below.

4.3 Ownership Structure and Control

The empirical evidence of the ownership structure as the dominant governance mechanism came to light following the work of Demsetz (1983), where the ownership structure is described as “an endogenous outcome of competitive selection in which
various cost advantages and disadvantages are balanced to arrive at an equilibrium organization of the firm” (p 384). A firm will adopt a certain ownership structure which is beneficial to its own characteristics and cost and benefits of which may vary across firms (Mak and Li, 2001).


Corporate governance literature also examines whether the specific ownership concentration in the form of directors/sponsor and institutional ownership may influence the firm performance. Therefore, the relevant studies on director and/or managerial ownership and firm performance, institutional ownership and firm performance and foreign ownership and firm performance studies are discussed in next three sections.
4.3.1 Director and/or Managerial Ownership

Director and/or managerial ownership is a form of concentrated ownership that may influence firm performance. Director and/or managerial ownership may be substantially different across firms (Zhou, 2001); it may impact large and small firms differently with respect to value (Kole, 1995). It is argued that the percentage of stock ownership by directors may be a substitute form of governance or monitoring mechanism (Core et al, 1999; Linck et al, 2008).

The empirical evidence on the managerial shareholding and firm performance appears to be mixed. Studies for example by Kesner (1987) on 250 ‘Fortune 500’ companies found that there is a significant positive relationship between the proportion of shares held by board members and firm performance in terms of profit margin and return on assets (ROA). The study found no relationship in other performance measures. Hudson et al (1992) on 779 listed firms in NYSE and AMEX found a positive relationship between the degree of insider ownership and performance as measured by Earnings Price Ratio (E/P). Singh and Davidson III (2003) in a study on 118 United States firms identified that managerial ownership is positively related to asset utilization. Barnhart and Rosenstein (1998) in United States found the curvilinear relationship between managerial ownership and firm performance. The study also identified that the institutional ownership and board composition are a substitution of managerial ownership and it has a great impact on board composition. Wiwattanakantang (2001) in a study on Thailand found that the managerial shareholding is associated with higher firm performance as measured by ROA.

However, studies by McConnell and Servaes (1990); Kole (1995) and Bhagat et al (1999) on the United States found that there is no consistent relationship between percentage of stock ownership by directors and firm performance. Similarly studies by Craswell et al (1997) on Australia; Claessens and Djankov (1998) on Czech Republic and Farooque et al (2007a,b) on Bangladesh found that there is a non-linear relationship between inside ownership by managers and corporate performance implying that the managerial ownership does not enhance performance.

Barnhart et al, (1994) argued that the managerial ownership and firm performance are endogenously related. It implies that the managerial ownership influences firm performance at certain level and it may also vary across firms. This is confirmed on empirical studies for example by Demsetz and Lehn (1985) on 511
United States firms by estimating a piecewise linear relationship between Tobin’s Q and firm performance. It is found that the estimated piecewise regression is positive for managerial shareholding between 0%-5%, negative between 5%-25% and positive for more than 25%. Morck et al (1988) studied 371 ‘Fortune 500’ firms in the United States and found that there is a non-linear, inverse U shaped relationship between managerial ownership and firm performance, as measured by their Tobin's Q. The study identified that the Tobin’s Q first increases (within 0%-5% shareholding range), implying that there is a positive relationship, then declines (within 5%-25% shareholding range), implying that there is a negative relationship and finally increases (more than 15% shareholding range), implying that there is a positive relationship. McConnell and Servaes (1990) in a study on 2,266 (1,173+1,093) firms listed on New York Stock Exchange (NYSE) and American Stock Exchange (AMEX), found a significant curvilinear relationship between Tobin’s Q and fraction of common stock owned by corporate insiders. That study identifies that ownership by insiders is positively related in the range of approximately 40%-50% shareholding and negatively related beyond 50% shareholding. Lichtenberg and Pushner (1994) in a study on Japan found that the equity ownership by the insiders is only efficient in the ranges of 5%-15%. There is a negative shift in the distribution of productivity in the range of 0.25%-1% and above 15%.

Griffith (1999) examined the CEO ownership and firm value of Fortune 500 companies. The study identified that the firm performance (as measured by Tobin’s Q) rises in the ranges of 0 -15% of CEO ownership, decreases as CEO ownership increases to 50% and starts to rise beyond 50%. Firm value is also found not to be a function of management ownership when CEO ownership is separated, indicating that CEO ownership does have a dominating effect on firm value. Short and Keasey (1999) brought evidence of managerial shareholding in United Kingdom and firm performance on the basis of return on equity (ROE) and Tobin’s Q. That study suggests that the firm performance (as measured by ROE) is positively related to the managerial ownership in the range of 0%-15.58%, negatively related in the range of 15.58%-41.84% and positively related again beyond 41.84%. However, the firm performance as measured by Tobin’s Q is positively related in the range of 0%-12.99%; negatively related in the range of 12.99%-41.99% and positively related again beyond 41.99%. The negative effect is only identified in the range of 25%-50% ownership. Han and Suk (1998) in the United States found that the excessive insider ownership hurts performance, probably
due to the managerial entrenchments. Lins (2003) found that the firm with a managerial control in the range of 5%-20% is associated with lower firm value, when the management group is also a largest blockholder. Managerial control in the range of 5%-20% does not affect firm value in the presence of non-managerial blockholders. However, studies by Rose (2005) on Danish listed firms revealed that the increased managerial ownership does not influence the firm performance. In general these studies in the developed market contexts imply that the managerial entrenchments occur at lower level of ownership.

4.3.2 Institutional Ownership

Institutional ownership is another form of concentrated ownership that may influence firm performance. Xu and Wang (1999) in their study on China argued for the importance of large institutional investors in corporate governance, when they identified that the state ownership is inefficient and there are problems of overly dispersed ownership structure.

Empirical evidence on institutional shareholding and firm performance is also found to be mixed. Studies for example by Han and Suk (1998) in the U. S. found that institutional share ownership is positively related to firm performance, indicating that institutional owners are active in monitoring management. McConnell and Servaes (1990) in a study on 2,266 (1,173+1,093) U. S. firms found a significant positive relationship between Tobin’s Q and the fraction of shares owned by institutional investors. Köke and Renneboog (2002) on 1,074 German firms and 502 United Kingdom firms identified that the institutional ownership by financial institutions is associated with higher productivity growth for German firms, but there is no evidence of productivity growth for United Kingdom firms. Lichtenberg and Pushner (1994) in a study on Japan suggest that the equity ownership by financial institution effectively minimizes the laps of productivity. Kaplan and Minton (1994) found that institutional shareholdings in the form of banks are important monitors in Japan and they have the ability to replace the managers in the poorly performed firms. Gorton and Schmid (1999) on Austrian Cooperative banks did not find any relationship between the institutional shareholding and firm performance. However, the study by Gorton and Schmid (2000) on Germany found that the ownership by banks significantly improves firm performance. Khanna and Palepu (1999) and Sarkar and Sarkar (2000) on Indian
firms investigated whether the blockholding in the form of banks and/or lending institutions improve firm performance. Khanna and Palepu (1999) revealed that the domestic financial institutions are ineffective monitors; there are low firm performance by domestic institutional investors and high performance by foreign institutional investors. However, the study by Sarkar and Sarkar (2000) reveals that the institutional investors have no influence on firm value.

The study by Claessens et al (1998; 1999) on 9 East Asian countries found a negative relationship between the ownership by other corporation and firm performance, positive relationship with the state ownership and no relationship between institutional ownership and firm performance.

### 4.3.3 Foreign Ownership

Foreign ownership for example were studied by Claessens and Djankov (1999a; 1999b) on the privatized firms in Czech Republic and identified that the foreign ownership and ownership by non-bank investment funds are more profitable and have higher labor productivity. Khanna and Palepu (1999) and Chhibber and Majumdar (1999) examined how foreign ownership characteristics affect the Indian firm’s profitability and found that the foreign ownership of Indian firms is correlated with the firms’ valuation, as measured by a market-to-book ratio. Baek et al (2004) found that the firms with higher concentration by unaffiliated foreign investors experienced a smaller reduction in their share prices during the Korean financial crisis in 1997.

### 4.4 Board of Directors

Board is a primary internal governance mechanism that may influence firm performance. There are comparatively large numbers of studies on board in the economics, finance, and management and even in laws. Studies mainly examine the corporate board based on the assumption that the board attributes such as, the composition, the structure, characteristics and process may directly influence the firm performance. The findings are mixed or non-conclusive (Zahra and Pearce II, 1989; Dalton and Daily 1999; Maassen, 2002).

The information in regard to the board characteristics and board process are absent in Bangladesh corporate sector. Therefore, this study examines the two dominant attributes of the board such as ‘board composition’ and ‘board structure’
which may influence the firm performance. Therefore, discussion of relevant literature on ‘board composition’ and ‘board structure’ is made in the following paragraphs.

4.4.1 Board Composition

The board composition refers to the ratio of non-executive (outside independent) directors and executive directors (including the chief executive officer) on the board as a means of monitoring the management. Following the popularity of outside dominated board since 1960, it became the most widely discussed research issue linking whether the outside independent directors may add any value (Kesner et al, 1986; Petra, 2005) and influence the firm economic performance (Hermalin and Weisbach, 2003).

Several studies attempts to identify if the board composition (outside independent directors) may influence firm performance. Studies for example by Kaplan and Reishus (1990), Brickley et al (1994), Beasley (1996); Byrd and Hickman (1992) found a positive impact of appointing outside independent directors into the board. Kesner et al (1986) found that, although independent director are not involved in illegal acts, adding outside independent directors can not lessen a firms illegal acts. Fernandes (2005) documented that the firms with non-executive directors have less agency problems and have a better alignment of shareholders and managers interest. Rosenstein and Wyatt (1990) show that the firm stock price goes up when an additional outside director is appointed. Denis and Sarin (1999) in a study using a time-series analysis over 10-year period found that the changes in ownership and board structure are correlated with one another. Changes in ownership and board structure are strongly related to top executive turnover, prior stock price performance, and corporate control threats. Cotter et al (1997) studied the role of independent outside directors during takeover attempts by tender offer. It is found that independent outside directors enhance target shareholder gains from tender offers and a majority of independent directors are more likely to use resistance strategies to enhance shareholders wealth.

The empirical evidence of outside independent directors and firm performance is mixed. Some studies, such as, Schellenger et al (1989), Daily and Dalton (1992), Tian and Lau (2001) and Luan and Tang (2007), found that having more outside independent directors on the board improves firm financial performance supporting the agency theory. Some other studies, such as Chaganti et al (1985), Baysinger and Butler

Due to high degree of diversity of the results on the earlier studies on board composition and firm performance, Dalton and Daily (1999), viewed these results as 'vexing', 'contradictory', 'mixed' and 'inconsistent'. Baysinger and Butler (1985) argued that these differences are due to differences in various factors, such as corporate law, managerial talent, capital markets and the internal capital structure of the firm. Further, Zahra and Pearce II (1989) pointed several reasons for such inconsistencies and these are summarized by Finkelstein and Hambrick (1996, p 239), as (1) not considering the contextual factors, such as life cycle and corporate strategy, (2) not effectively considering as how board members interact to make decision, (3) considering one or two attributes in univariate analysis, etc. Finkelstein and Hambrick (1996) further argue that despite such variances, board may indirectly influence the firm's performance by quality of monitoring.

4.4.2 Structural Independence of the Board

Corporate governance literature examined whether the board structure (structural independence of the board or CEO non-duality) may enhance the firm performance. Similar to the board composition, the evidence on the board leadership structure and firm performance is mixed and non-conclusive.

structure (CEO duality) and firm economic performance supporting the agency theory. Rather the bankrupt firms are likely to have CEO duality (Daily and Dalton, 1994b) and the agency problems are higher when the CEO is also the board Chair (Yermack, 1996). Some studies (such as, Chaganti et al, 1985; Daily and Dalton, 1992), could not find conclusive evidence on CEO duality and firm performance. Elsayed (2007) made a study on Egyptian listed firms and revealed that the CEO duality does not influence the firm performance. However, when he included an interaction term between CEO duality, the impact of CEO duality on corporate performance found to vary across industries. The study concluded that the CEO duality is good for some firms, while it is opposite for other firms. Kholeif (2008) conducted similar study on 50 most active Egyptian listed firms. It is revealed that the companies with large boards and low top management ownership corporate performance is negatively affected by CEO duality and positively affected by institutional ownership.

4.5 Management and Executives Compensation


Brickley et al (1985) found that the introduction of long range managerial compensation plan increases the shareholders wealth. Conyon and Peck (1998) in a study on large publicly traded companies in the United Kingdom found that the top management pay and corporate performance are more aligned in companies with outside dominated boards and remuneration committees. Kaplan (1994a) in a study on the Japanese and U. S. companies identified that the top executive compensation in
both the countries are positively correlated with stock performance and earnings losses. Zhou (1999) while examining the pay-performance sensitivity in 365 Canadian and 675 U. S. firms documented that the pay-performance sensitivity with direct pay and stock ownership is smaller in Canadian and U. S. firms, but that difference decreases with increase in firm size. Crepsi et al (2002, cited in Denis and McConnell, 2003) identified that executive compensation goes high following the increases in industry-adjusted stock price performance. The study also concluded that the fortune of Japanese executives are more sensitive to low income but less sensitive to stock returns than those of United States executives. Kato and Kubo (2006) found that CEO’s cash compensation and bonus is related to firm performance. Frye (2004) documented that there is a positive relationship between the Tobin’s Q and equity based employee compensation. However, there is no relationship between the equity based compensation from retirement plans and firm performance.


Empirical evidence on the ownership structure and executive pay is also mixed. The study by Boyd (1994) and Core et al (1999) suggest that the managerial compensation is lower than other officers, with the stock ownership by the directors; whereas the study by Holderness and Sheehan (1988) suggests that the managerial compensation is higher than other officers in the firms with the stock ownership by the managers. Mangel and Singh (1993) found that institutional investors limit the CEOs unrelated compensation, but the presence of 5% equity ownership has no significant impact.

Some studies attempted to identify whether the CEO pay is influenced by firm size. Studies for example by and Cichello (2005) on U. S.; Merhebi et al (2006) on Australia; Zhou (2000) on Canada; Fernandes (2005) on Portugal found that there is a significant impact of firm size on CEO pay and firm performance. Relationship
between the board size and CEO compensation for example was examined by Randoy and Nielsen (2002), where they found a positive relationship between board size and compensation.

### 4.6 Corporate Capital Structure

The academic studies identified that corporate capital structure in the form of debt contract may reduce the agency cost or may act as a governance mechanism. Studies also identified that the capital structure in the form of debt and equity has great influence on firm performance. This is achieved through higher debt levels leading to controlling ownership (Zhang, 1998; Heinrich, 2000).

Studies for example by Campello (2006) argue that the debt can both hurt and boost the firm performance. Debt has negative impact on firm’s sales growth in industries in which rivals are unlevered during the recession, but not in boom; debt finance should play a more dominant role in countries in which the firms are closely held (Berglöf, 1991); increased leverage may soften the agency problem generated by dispersed ownership and may mitigate the agency problems by preventing the managers from investing in negative net present value (NPV) projects (Jensen and Meckling, 1976; Shleifer and Vishny, 1997; Harvey et al, 2004).

Empirical evidence on capital structure and firm performance are also mixed. Studies for example by Krishnan and Moyer (1997) on 81 corporations in Hong Kong, Malaysia and Singapore found that the debt (in the form of Total Debt to Market Value of Equity and Long Term Debt to Market Value of Equity) has a significant negative impact on firm performance (ROE). Zeitun and Tian (2007b) in a study on Jordan found that there is a positive relationship between capital structure and firm performance. Studies by Abor (2007) on Ghanaian firms found that there is a positive association between the corporate capital structure and board size, board composition and CEO duality. Similarly, Kyereboah-Coleman (2007) found that highly leveraged Ghanaian Micro Finance (MFI) institutions are performing better. Gaud et al (2005) found that the firm’s growth and profitability is negatively related to leverage. Majumdar and Chhibber (1999) on 1000 Indian firms found that there is a significant negative relationship between capital structure and firm performance. Gleason et al (2000) using data from 14 European countries found that firm capital structure has a significant negative impact on performance measures, such as return on assets (ROA),
growth on sales (Gsales), and pretax income, implying that the high level of debt may decrease firm performance. Further, Berger et al (1997) found that the leverage influences the managerial entrenchment and entrenched managers seek to avoid debt.

Berger and Bonoaccorsi di Patti (2006) found that the high leverage or a low equity/asset ratio reduces the agency cost of outside equity and increases the firm value by constraining or encouraging managers to act more in the interest of the shareholders. Debt is also shown to be useful for offsetting the problem of over-investment when the firm is controlled by a professional manager who owns little or no equity of the firm (Jensen, 1986; Stulz, 1990).

4.7 Empirical Studies on Corporate Governance

Table 8 summarizes the empirical research on corporate governance discussed above. The theoretical foundations of most of the studies are either agency or stewardship theory. These studies will help in identifying the gap in the existing literature and will be helpful in developing the hypotheses.
Table 8: Summary of empirical findings on corporate governance and firm performance literature

(1) Does the concentrated ownership lead to higher firm performance?

<table>
<thead>
<tr>
<th>Title</th>
<th>Author</th>
<th>Year</th>
<th>Sample Size and Period</th>
<th>Corporate Governance Variable</th>
<th>Corporate Performance Variable</th>
<th>Findings</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does Ownership affect a Firm’s Performance and Default Risk in Jordan?</td>
<td>Zeitun and Tian</td>
<td>2007</td>
<td>59 Jordanian Companies</td>
<td>Ownership Structure</td>
<td>ROE, ROA, Tobin’s Q and MBVR</td>
<td>Ownership structure has significant effect of firms performance</td>
<td>Yes</td>
</tr>
<tr>
<td>Corporate Ownership Structure and Firm Performance: Evidence from Greek Firms</td>
<td>Kopopoulou and Lazaretou</td>
<td>2007</td>
<td>175 Greek listed firms</td>
<td>Ownership Structure</td>
<td>Tobin’s Q</td>
<td>More concentrated ownership structure positively relates to higher firm profitability</td>
<td>Yes</td>
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<td>Title</td>
<td>Author</td>
<td>Year</td>
<td>Sample Size and Period</td>
<td>Corporate Governance Variable</td>
<td>Corporate Performance Variable</td>
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<tr>
<td>Managerial Ownership and Firm Performance in Listed Danish Firms: In Search of the Missing Link</td>
<td>Rose</td>
<td>2005</td>
<td>425 Danish listed firms during the period of during the period of 1998-2001</td>
<td>Managerial Ownership</td>
<td>Firm Performance (Tobin’s Q)</td>
<td>Increased managerial ownership does not influence the firm performance.</td>
<td>No</td>
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<tr>
<td>Ownership Structure, Corporate Governance and Firm Value: Evidence from East Asian Financial Crisis.</td>
<td>Lemmons and Lins</td>
<td>2003</td>
<td>800 Firms in East Asia</td>
<td>Ownership Structure</td>
<td>Tobin’s Q</td>
<td>Significant relationship with ownership structure</td>
<td>Yes</td>
</tr>
<tr>
<td>Corporate Governance and the Returns on Investment</td>
<td>Gugler, Mueller and Yurtoglu</td>
<td>2003</td>
<td>More than 19,000 companies from 61 countries</td>
<td>Ownership Structure</td>
<td>ROI</td>
<td>Countries with English origin legal system dominating capital market improves performance</td>
<td>Yes</td>
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<tr>
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<td>Corporate Performance Variable</td>
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<td>Ownership</td>
<td>Environmental Performance</td>
<td>10,102 firms of</td>
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<td>Earnhart and Liel</td>
<td>Effects of Ownership and Financial Status on Corporate Performance</td>
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<tr>
<td>Structure</td>
<td></td>
<td>Czech Republic during the period 1993-1998</td>
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<td></td>
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<td>1,708 small U.S.</td>
<td>2000</td>
<td>Ang, Cole and Lin</td>
<td>Agency cost and Ownership Structure</td>
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<td>corporations from the NSBF</td>
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<td>1,272 Companies in India during the period of 1994-95</td>
<td>2000</td>
<td>Sarkar and Sarkar</td>
<td>Large Shareholder Activism in Corporate Governance in Developing countries: Evidence from India.</td>
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<td></td>
<td></td>
<td>706 Czech firms over the period of 1992-1997</td>
<td>1999</td>
<td>Claessens and Djanov</td>
<td>Concentrated Ownership and Corporate Performance in Czech Republic</td>
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<td>Corporate Governance Variable</td>
<td>Corporate Performance Variable</td>
<td>Sample Size and Period</td>
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<tr>
<td>Foreign Ownership</td>
<td>Firm</td>
<td>1,000 Indian Firms listed on Bombay Stock Exchange</td>
<td>1999</td>
<td>Chhibber and Majumdar</td>
<td>Foreign Ownership and Property Rights: Control, and The Performance of Firms in Indian Industry.</td>
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<tr>
<td>Ownership</td>
<td>Performance</td>
<td>Ownership Concentration</td>
<td>Ownership Concentration</td>
<td>Ownership Concentration</td>
<td>Ownership Structure, Corporate Governance and Firm’s Performance in Thailand’s Corporate Structure, Financing and Governance Structure: Impact on Firms’ Competitiveness</td>
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<tr>
<td>Ownership</td>
<td>Market to Book Value Ratio (MBR)</td>
<td>Ownership</td>
<td>Leverage</td>
<td>Ownership</td>
<td>Ownership Structure, Corporate Governance, Evidence from Czech Republic.</td>
<td></td>
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<tr>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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</table>

Conclusion: Yes
<table>
<thead>
<tr>
<th>Corporate Governance in Developing Countries: A Case Study of Bangladesh</th>
<th>Chapter 4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Conclusion</strong>&lt;br&gt;Yes</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Findings</strong>&lt;br&gt;Positive relationship</td>
<td>Stock price increases are larger</td>
</tr>
<tr>
<td><strong>Corporate Performance Variable</strong>&lt;br&gt;Accounting return and market to book ratio</td>
<td>Stock Price</td>
</tr>
<tr>
<td><strong>Corporate Governance Variable</strong>&lt;br&gt;External Blockholders</td>
<td>Blockholding</td>
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<tr>
<td><strong>Sample Size and Period</strong>&lt;br&gt;92 U.S. firms during the period 1984-1986</td>
<td>106 Block holders of 97 NYSE and AMEX listed corporations</td>
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<tr>
<td><strong>Year</strong>&lt;br&gt;1995</td>
<td>1991</td>
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<tr>
<td><strong>Author</strong>&lt;br&gt;Shome and Singh</td>
<td>Barclay and Holderness</td>
</tr>
<tr>
<td><strong>Title</strong>&lt;br&gt;Firm Value and External Block Holdings&lt;br&gt;Negotiated Block Traders and Corporate Control&lt;br&gt;The Role of Majority Shareholders in Publicly Held Corporations: An Exploratory Analysis&lt;br&gt;The Structure of Corporate Ownership: Causes and Consequences</td>
<td>Blockholdings</td>
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</tbody>
</table>
(2) Does the director and/or managerial ownership lead to higher firm performance?

<table>
<thead>
<tr>
<th>Title</th>
<th>Author</th>
<th>Year</th>
<th>Sample Size and Period</th>
<th>Corporate Governance Variable</th>
<th>Corporate Performance Variable</th>
<th>Findings</th>
<th>Conclusion</th>
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</thead>
<tbody>
<tr>
<td>A Simultaneous Equations Approach to Analyzing the Relation between Ownership Structure and Performance in Bangladesh</td>
<td>Farooque, Zijl, Dunstan, and Karim</td>
<td>2007</td>
<td>660 Bangladeshi firm years</td>
<td>Board Ownership</td>
<td>Tobin’s Q or ROE</td>
<td>Significant negative effect on board’s ownership</td>
<td>No</td>
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<tr>
<td>Controlling Shareholders and Corporate Value-Evidence from Thailand</td>
<td>Wiwattanakantang</td>
<td>2001</td>
<td>270 Thai firms during the period of 1996</td>
<td>Managerial Ownership</td>
<td>Performance (ROA)</td>
<td>Positively related at certain ranges</td>
<td>Yes</td>
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<tr>
<td>Board Composition, Managerial Ownership, and Firm Performance: An Empirical Analysis</td>
<td>Barnhart and Rosenstein</td>
<td>1998</td>
<td>1990 Standard and Poor</td>
<td>Board Composition, Managerial Ownership</td>
<td>Performance (Tobin’s Q)</td>
<td>Curvilinear relationship between managerial ownership, board composition and performance</td>
<td>Yes/No</td>
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<td>Title</td>
<td>Author</td>
<td>Year</td>
<td>Sample Size and Period</td>
<td>Corporate Governance Variable</td>
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<td>The Effect of Ownership Structure and Firm Performance - Additional Evidence</td>
<td>Han and Suk</td>
<td>1998</td>
<td>301 U. S. firms during the period of 1988-1992</td>
<td>Managerial Ownership</td>
<td>Performance (Stock return)</td>
<td>Positively related at certain level and after that it decreases</td>
<td>Yes/No</td>
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<td>Ownership Structure and Corporate Performance - Australian Evidence</td>
<td>Craswell, Taylor and Saywell</td>
<td>1997</td>
<td>349 Australian firms during the period of 1986 and 1989</td>
<td>Managerial Ownership</td>
<td>Performance</td>
<td>No significant relationship</td>
<td>No</td>
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<tr>
<td>Measuring Managerial Equity Ownership: A Comparison of Sources of Ownership Data</td>
<td>Kole</td>
<td>1995</td>
<td>1,200 Publicly held U. S. firm for 1980</td>
<td>Managerial Ownership</td>
<td>Performance</td>
<td>No relationship</td>
<td>No</td>
</tr>
<tr>
<td>Title</td>
<td>Author</td>
<td>Year</td>
<td>Sample Size and Period</td>
<td>Corporate Governance Variable</td>
<td>Corporate Performance Variable</td>
<td>Findings</td>
<td>Conclusion</td>
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<tr>
<td>Further Evidence of the Relationship between Ownership and Performance</td>
<td>Hudson, Jahera Jr. and Lloyd</td>
<td>1992</td>
<td>779 listed firms in NYSE and AMEX</td>
<td>Managerial Ownership</td>
<td>Performance (Price Earnings Ratio)</td>
<td>Positively related</td>
<td>Yes</td>
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<tr>
<td>Management Ownership and Market Valuation</td>
<td>Morck, Shleifer and Vishny</td>
<td>1988</td>
<td>371 Fortune 500 firms in 1980</td>
<td>Board Member Ownership</td>
<td>Tobin's Q</td>
<td>Piecewise linear relationship</td>
<td>Yes</td>
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<tr>
<td>Directors Stock Ownership and Organizational Performance: An Investigation of Fortune 500 Companies</td>
<td>Kesner</td>
<td>1987</td>
<td>250 Fortune 500 Companies during the period of 1983</td>
<td>Director's Ownership</td>
<td>Firm performance (Profit margin, ROE, ROA etc.)</td>
<td>Positive relationship with profit margin and ROA. No relationship for other performance measures.</td>
<td>Yes/No</td>
</tr>
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</table>
(3) Does the institutional ownership lead to higher firm performance?

<table>
<thead>
<tr>
<th>Title</th>
<th>Author</th>
<th>Year</th>
<th>Sample Size and Period</th>
<th>Corporate Governance Variable</th>
<th>Corporate Performance Variable</th>
<th>Findings</th>
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<tbody>
<tr>
<td>Corporate Governance, Ownership Dispersion and Efficiency: Empirical Evidence from Austrian Cooperative Banking</td>
<td>Gorton and Schmid</td>
<td>1999</td>
<td>73 Austrian Cooperative Banks over the period of 1987-1990</td>
<td>Ownership Composition (Blockholding by banks)</td>
<td>Firms Performance (ROA)</td>
<td>Firms performance declines as the degree of separation and control increases</td>
</tr>
<tr>
<td>Emerging Market Business Groups, Foreign Investors, and Corporate Governance</td>
<td>Khanna and Palepu</td>
<td>1999</td>
<td>Data from early 1990s from Indian Firms</td>
<td>Domestic and foreign institutional investors</td>
<td>Firm Performance (Tobin’s Q)</td>
<td>Low performance by domestic institutional investors and high performance by foreign institutional investors</td>
</tr>
<tr>
<td>Title</td>
<td>Author</td>
<td>Year</td>
<td>Sample Size and Period</td>
<td>Corporate Governance Variable</td>
<td>Corporate Performance Variable</td>
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<tr>
<td>The Effect of Ownership Structure and Firm Performance—Additional Evidence</td>
<td>Han and Suk</td>
<td>1998</td>
<td>301 U.S. firms during the period of 1988-1992</td>
<td>Institutional Ownership</td>
<td>Performance (Stock return)</td>
<td>Positively related to the institutional ownership</td>
</tr>
<tr>
<td>Diversification and Efficiency of Investment by East Asian Corporation</td>
<td>Claessens, Djankov, Fan and Lang</td>
<td>1998</td>
<td>10,000 firms in nine East Asian countries during the period of 1991-1996</td>
<td>Ownership by corporation, government and institutional investors</td>
<td>Firm Performance</td>
<td>Negative relationship with the ownership by corporation, positive relationship with the government ownership and no relationship with institutional ownership</td>
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<tr>
<td>Title</td>
<td>Corporate Governance Variable</td>
<td>Corporate Performance Variable</td>
<td>Sample Size and Period</td>
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<td>Author</td>
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<tr>
<td>Additional Evidence on Equity Ownership and Corporate Value</td>
<td>Institutional Investors (Blockholding)</td>
<td>Tobin's Q</td>
<td>1,173 U.S. firms for 1976 and 1,093 firms for 1986</td>
<td>1990</td>
<td>McConnell and Servaes</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Curvilinear relationship</td>
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</table>
(4) Does the board composition (the proportion of executive and non-executive independent directors) influence the firm performance?

<table>
<thead>
<tr>
<th>Title</th>
<th>Author</th>
<th>Year</th>
<th>Sample Size and Period</th>
<th>Corporate Governance Variable</th>
<th>Corporate Performance Variable</th>
<th>Findings</th>
<th>Conclusion</th>
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<tbody>
<tr>
<td>Outside Directors, Ownership Structure and Firm Profitability in Korea</td>
<td>Cho and Kim</td>
<td>2007</td>
<td>347 Korean firms during the period of 1999</td>
<td>Independent Director</td>
<td>ROA</td>
<td>Weak positive impact on firm performance</td>
<td>No</td>
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<tr>
<td>Where is Independent Director Efficacy?</td>
<td>Luan and Tang</td>
<td>2007</td>
<td>259 Taiwanese firms during the period of 1997-2002</td>
<td>Board Composition (Independent Director)</td>
<td>ROE</td>
<td>Independent director significantly influences the firm performance</td>
<td>Yes</td>
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<tr>
<td>Intertemporal Endogeneity in Board Composition and Financial Performance</td>
<td>Davidson III and Rowe</td>
<td>2004</td>
<td>130 Funds</td>
<td>Board Composition</td>
<td>Various financial performance measures</td>
<td>No stronger evidence that prior financial performance impacts board composition</td>
<td>No</td>
</tr>
<tr>
<td>Title</td>
<td>Author</td>
<td>Year</td>
<td>Sample Size and Period</td>
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<td>Board Composition, Leadership Structure and Performance of Chinese Shareholding Companies</td>
<td>Tian and Lau</td>
<td>2001</td>
<td>105 listed firms in Shanghai Stock Exchange</td>
<td>Outside director and CEO duality</td>
<td>ROA and ROE</td>
<td>Both the board composition and leadership structure influence the performance</td>
<td>Yes</td>
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<tr>
<td>What’s Wrong Having Friend in the Board</td>
<td>Dalton and Daily</td>
<td>1999</td>
<td>40 years data from 159 studies</td>
<td>Board Composition (Outside Directors)</td>
<td>Financial Performance</td>
<td>No relationship</td>
<td>No</td>
</tr>
<tr>
<td>An Empirical Analysis of the Relation Between the Board of Director Composition and Financial Statement Fraud</td>
<td>Beasley</td>
<td>1996</td>
<td>150 Publicly traded U. S. firms during the period 1980-1981</td>
<td>Outside/independent member on the board</td>
<td>Financial statement fraud</td>
<td>Significantly reduces the financial statement fraud</td>
<td>Yes</td>
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<tr>
<td>Board composition, Non-Executive Directors’ Characteristics and Corporate Financial Performance</td>
<td>Grace, Ireland and Dunstan</td>
<td>1995</td>
<td>86 Australian firms during the period 1991-1993</td>
<td>Non-Executive Directors</td>
<td>Company Performance (EPS, PER etc)</td>
<td>No association</td>
<td>No</td>
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<td>Conclusion</td>
<td>Findings</td>
<td>Corporate Performance Variable</td>
<td>Corporate Governance Variable</td>
<td>Sample Size and Period</td>
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<tr>
<td>No relationship</td>
<td>No relationship</td>
<td>Firm Performance (Tobin’s Q)</td>
<td>Board Composition</td>
<td>142 NYSE listed firms</td>
<td>1991</td>
<td>Hermlin and Weisbach</td>
<td>The Effects of Board Composition and Director Incentives on Firm Performance</td>
</tr>
<tr>
<td>Yes</td>
<td>Dividend reduction is followed by reduction of outside directors</td>
<td>Corporate Performance</td>
<td>Outside Directors</td>
<td>101 U.S. firms during the period 1980-1983</td>
<td>1990</td>
<td>Kaplan and Reishus</td>
<td>Outside Directorship and Corporate Performance</td>
</tr>
<tr>
<td>No relationship</td>
<td>No relationship</td>
<td>Performance</td>
<td>Outside Directors</td>
<td>127 pairs of U.S. firms during the period 1979</td>
<td>1989</td>
<td>Fosberg</td>
<td>Outside Directors and Managerial Monitoring</td>
</tr>
<tr>
<td>Yes</td>
<td>Direct relationship</td>
<td>Financial Performance (Risk adjusted market return)</td>
<td>Outside Directorship</td>
<td>750 Firms</td>
<td>1989</td>
<td>Schellenger, Wood and Tashkori</td>
<td>Board of Director Composition, Shareholder Wealth, and Dividend Policy</td>
</tr>
<tr>
<td>Title</td>
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<td>The Implications of Board of Directors' Composition for Corporate Strategy and Performance</td>
<td>Zahra and Stanton</td>
<td>1988</td>
<td>100 randomly selected firms from Fortune 500 for the period of 1980</td>
<td>Board Composition (Outside Directors)</td>
<td>Financial, Strategic and Environmental Performance</td>
<td>Detrimental impact on financial performance</td>
<td>No</td>
</tr>
<tr>
<td>Board Composition and Shareholders Wealth: An Empirical Assessment</td>
<td>Rechner and Dalton</td>
<td>1986</td>
<td>30 randomly selected Fortune 500 companies for the year 1980-1982</td>
<td>Board Composition (Outside Directors)</td>
<td>Organizational Performance (Closing Share Price)</td>
<td>No relationship</td>
<td>No</td>
</tr>
<tr>
<td>Corporate Governance and the Board of Directors: Performance Effects in Board Composition</td>
<td>Baysinger and Butler</td>
<td>1985</td>
<td>266 Major U. S. corporations during the period 1970-80</td>
<td>Board Composition</td>
<td>Relative financial performance*</td>
<td>Increase in independent directors does not improve the performance.</td>
<td>No</td>
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</tbody>
</table>

* Calculated by dividing the firm's return on equity by the average return on equity for all firms in its primary industry
(5) Does the CEO non-duality or independent leadership structure lead to the better firm performance?

<table>
<thead>
<tr>
<th>Title</th>
<th>Author</th>
<th>Year</th>
<th>Sample Size and Period</th>
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<th>Corporate Performance Variable</th>
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<th>Conclusion</th>
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</thead>
<tbody>
<tr>
<td>Should the CEO also be Chair of the Board? An Empirical Examination of Family Controlled Public Firms</td>
<td>Braun and Sharma</td>
<td>2007</td>
<td>150 largest U. S. family firms (66 publicly traded and 84 private)</td>
<td>CEO duality</td>
<td>Firm Performance</td>
<td>Duality itself does not influence the firm performance</td>
<td>No</td>
</tr>
<tr>
<td>Does CEO Duality Really affect Corporate Performance</td>
<td>Elsayed</td>
<td>2007</td>
<td>92 Egyptian Public Listed Firms</td>
<td>CEO duality (ROA and Tobin’s Q)</td>
<td>Firm Performance</td>
<td>CEO duality on corporate performance varies across industries.</td>
<td>Yes/No</td>
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<tr>
<td>Corporate Governance, Leadership Structure and CEO Compensation: Evidence from Taiwan</td>
<td>Lin</td>
<td>2005</td>
<td>485 listed manufacturing firms in Taiwan</td>
<td>CEO duality</td>
<td>Firm Performance</td>
<td>Duality enhance firm performance</td>
<td>Yes</td>
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<tr>
<td>Board Composition, CEO Duality and Performance among Malaysian Listed Companies</td>
<td>Abdullah</td>
<td>2004</td>
<td>Different number of Malaysian companies for the period of 1994-1996</td>
<td>Board Composition and CEO duality</td>
<td>Firm Performance</td>
<td>No relationship</td>
<td>No</td>
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<tr>
<td>Author</td>
<td>Judge, Naoumova and Koutzev</td>
<td>Dalton, Daily, Ellstrand and Johnson</td>
<td>Boyd</td>
<td>Daly and Dalton</td>
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<tr>
<td>Sample Size and Period</td>
<td>116 Russian Managers</td>
<td>159 samples for board composition and leadership structure</td>
<td>69 samples for CEO non-duality</td>
<td>192 U.S. firms</td>
<td>100 U.S. firms</td>
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<td>Corporate Governance Variable</td>
<td>CEO duality</td>
<td>Financial Performance (ROE)</td>
<td>Performance (ROI)</td>
<td>Board composition and CEO duality</td>
<td>Board composition and CEO duality</td>
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<td>Firm Performance</td>
<td>No relationship</td>
<td>No significant relationship</td>
<td>Significant relationship between board composition, CEO duality and Performance</td>
<td>Performance</td>
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<td>Findings</td>
<td>Negative relationship between duality and performance</td>
<td>No relationship</td>
<td>No significant relationship</td>
<td>Significant relationship between board composition, CEO duality and Performance</td>
<td>Performance</td>
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Chapter 4
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<th>Corporate Performance Variable</th>
<th>Findings</th>
<th>Conclusion</th>
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<tbody>
<tr>
<td>CEO Duality and Organizational Performance: A Longitudinal Analysis</td>
<td>Rechner and Dalton</td>
<td>1991</td>
<td>250 <em>Fortune</em> 500 firms</td>
<td>CEO duality</td>
<td>Corporate Performance Variable</td>
<td>Independent Chairman and CEO structured firms outperformed the CEO duality firms.</td>
<td>Yes</td>
</tr>
<tr>
<td>Stewardship Theory or Agency Theory: CEO Governance and Shareholder</td>
<td>Donaldson and Davis</td>
<td>1991</td>
<td>337 U. S. Corporations</td>
<td>CEO duality</td>
<td>Corporate Performance Variable</td>
<td>ROE improved by combining, rather than by separating, the CEO and Chairperson</td>
<td>No</td>
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<tr>
<td>The Impact of CEO as Board Chairperson on Corporate Performance:</td>
<td>Rechner and Dalton</td>
<td>1989</td>
<td><em>Fortune</em> 500 companies from 1978-1983</td>
<td>CEO duality</td>
<td>Risk adjusted abnormal return on common stock</td>
<td>There is no significant relationship</td>
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<td>Managerial Domination of Boards of Directors and Financial</td>
<td>Molz</td>
<td>1988</td>
<td>50 <em>Fortune</em> 500 firms during the period of 1983</td>
<td>Managerial Dominated Board (CEO duality)</td>
<td>Firm Performance Variable</td>
<td>No superior financial performance</td>
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<td>CEO and Board Chairman, A Quantitative Study of Dual vs. Unitary</td>
<td>Berg and Smith</td>
<td>1978</td>
<td>50 <em>Fortune</em> 200 firms during the year 1976</td>
<td>CEO duality</td>
<td>Firm Profitability</td>
<td>No conclusive findings that CEO duality is better for shareholders</td>
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<td>Board Leadership</td>
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<td>CEO's and Director Compensation</td>
<td>CEO's salary</td>
<td>CEO Pay</td>
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<td>Sample Size and Period</td>
<td>1,163-1,441 U. S. firms</td>
<td>10 year panel data on 51 Japanese firms from 1985-1995</td>
<td>549 Chinese companies during the period of 1998-2000 or 647 firm-year</td>
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<td>Author</td>
<td>Brick, Palmon and Wald</td>
<td>Kato and Kubo</td>
<td>Firth, Fung and Rui</td>
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<tr>
<td>Title</td>
<td>Compensation, Evidence of Cronyism and Firm Performance</td>
<td>Performance in Japan: Evidence from New Panel Data on Individual CEO Pay</td>
<td>Compensation and CEO Compensation in China</td>
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<td>Ownership, Corporate Governance and Top Management Pay in Hong Kong</td>
<td>Cheng, and Firth</td>
<td>2005</td>
<td>2,016 Hong Kong firm years</td>
<td>CEO Pay</td>
<td>Institutional shareholders and non-executive directors</td>
<td>Board composition influence the performance but Institutional shareholders do not</td>
<td>Yes/No</td>
</tr>
<tr>
<td>Company Performance, Corporate Governance, and CEO Compensation in Norway and Sweden</td>
<td>Randoy and Nielsen</td>
<td>2002</td>
<td>120 Norwegian firms and 104 Swedish firms</td>
<td>CEO Pay</td>
<td>Board Size, Firm Performance and CEO Tenure</td>
<td>Significant relationship between board size and compensation no relationship between compensation and performance</td>
<td>Yes/No</td>
</tr>
<tr>
<td>Title</td>
<td>Author</td>
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<td>Executive Compensation and Firm Performance in Italy</td>
<td>Brunello, Graziano and Parigi</td>
<td>2001</td>
<td>107 Italian Private Firms</td>
<td>Executive Compensation</td>
<td>Firm Performance</td>
<td>Higher pay performance sensitivity</td>
<td>Yes</td>
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<tr>
<td>Corporate Governance, Chief Executive Officer Compensation and Firm Performance</td>
<td>Core, Holthausen and Larcker</td>
<td>1999</td>
<td>495 observations of 205 U.S. firms</td>
<td>CEO Compensation</td>
<td>Firm Size, Prior Performance</td>
<td>Related to firm size, prior performance</td>
<td>Yes</td>
</tr>
<tr>
<td>Title</td>
<td>Author</td>
<td>Year</td>
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<tr>
<td>Corporate Governance and Executive Compensation</td>
<td>Conyon</td>
<td>1997</td>
<td>200 large U.K. companies during the period of 1988 - 1993</td>
<td>Director Compensation</td>
<td>Shareholders Return</td>
<td>Positive relationship</td>
<td>Yes</td>
</tr>
<tr>
<td>Executive Compensation and Principal-Agent Theory</td>
<td>Garen</td>
<td>1994</td>
<td>415 U.S. Corporations</td>
<td>CEO Pay</td>
<td>Corporate Performance</td>
<td>Principal-agent consideration plays a role</td>
<td>Yes</td>
</tr>
<tr>
<td>The Disappearing Relationship Between Directors Pay and Corporate Performance</td>
<td>Gregg, Machin and Szymanski</td>
<td>1993</td>
<td>300 large U.K. companies over the 1980s and early 1990s.</td>
<td>CEO Pay</td>
<td>Return to Shareholders</td>
<td>Pay performance are weakly related</td>
<td>No</td>
</tr>
<tr>
<td>Ownership Structure, Board Relationship and CEO Compensation in Large US Corporations</td>
<td>Mangel and Singh</td>
<td>1993</td>
<td>100 largest industrial firms in 1983 as determined by Fortune 100</td>
<td>CEO Pay</td>
<td>Ownership Structure</td>
<td>Institutional investors limit the CEOs unrelated compensation</td>
<td>Yes</td>
</tr>
<tr>
<td>Title</td>
<td>Author</td>
<td>Year</td>
<td>Sample Size and Period</td>
<td>Corporate Governance Variable</td>
<td>Corporate Performance Variable</td>
<td>Findings</td>
<td>Conclusion</td>
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</tr>
<tr>
<td>Top Executive Pay and Performance</td>
<td>Main</td>
<td>1991</td>
<td>241 Britain's largest industrial companies executives pay in 1985</td>
<td>Top Executive Pay</td>
<td>Firm Performance</td>
<td>Positive effects of incentive alignment between the executive’s and shareholders interest.</td>
<td>Yes</td>
</tr>
<tr>
<td>Performance Pay and Top Management Incentive</td>
<td>Jensen and Murphy</td>
<td>1990</td>
<td>430 U. S. Corporations</td>
<td>CEO Pay</td>
<td>Firm Performance</td>
<td>No relationship</td>
<td>No</td>
</tr>
<tr>
<td>Organizational Differences in Managerial</td>
<td>Gerhart and Milovich</td>
<td>1990</td>
<td>14,000 top and middle level managers of 200 firms</td>
<td>Base and Contingency Pay</td>
<td>Financial Performance</td>
<td>Contingency, but base pay is associated with financial performance</td>
<td>Yes/No</td>
</tr>
<tr>
<td>Compensation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Board of Directors, Top Management</td>
<td>Kerr and Bettis</td>
<td>1987</td>
<td><em>Fortune 1000</em> (512 CEOs)</td>
<td>CEO Pay</td>
<td>Performance (abnormal return and overall market movements)</td>
<td>Neither variation in abnormal returns nor overall market movements influences compensation to top executives</td>
<td>No</td>
</tr>
<tr>
<td>Title</td>
<td>Corporate Performance and Managerial Remuneration: An Empirical Analysis</td>
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<tr>
<td>Year</td>
<td>1985</td>
<td></td>
<td></td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>Author</td>
<td>Murphy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sample Size and Period</td>
<td>73 Large U.S. manufacturing firms</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corporate Governance Variable</td>
<td>Corporate Performance (Shareholders Realized Return)</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Corporate Performance Variable</td>
<td>Managerial Remuneration</td>
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<td></td>
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<tr>
<td>Findings</td>
<td>Strong relationship</td>
<td></td>
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<tr>
<td>Conclusion</td>
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</tbody>
</table>

Corporate Governance in Developing Countries: A Case Study of Bangladesh

Chapter 4

Page 161
(7) Does the capital structure or the leverage resolve the shareholders agency conflicts?

<table>
<thead>
<tr>
<th>Title</th>
<th>Author</th>
<th>Year</th>
<th>Sample Size and Period</th>
<th>Corporate Governance Variable</th>
<th>Corporate Performance Variable</th>
<th>Findings</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital Structure, Shareholder Rights and Corporate Governance</td>
<td>Jiraporn and Gleason</td>
<td>2007</td>
<td>4,638 U. S. firm-year</td>
<td>Leverage</td>
<td>Shareholders right, agency problems</td>
<td>Leverage helps alleviate agency problems</td>
<td>Yes</td>
</tr>
<tr>
<td>The Impact of Capital Structure on the Performance of Microfinance Institutions</td>
<td>Kyereboah-Coleman</td>
<td>2007</td>
<td>52 Ghanaian Micro Finance Institution (MFI) for the period of 1995-2004</td>
<td>Leverage</td>
<td>Firm Performance</td>
<td>Highly leveraged MFI performs better</td>
<td>Yes</td>
</tr>
<tr>
<td>The Effect of Capital Structure When the Expected Agency Costs are Extreme</td>
<td>Harvey, Lins and Roper</td>
<td>2004</td>
<td>1,014 non financial firm from 18 emerging market</td>
<td>Leverage</td>
<td>Tobin’s Q</td>
<td>Positive</td>
<td>Yes</td>
</tr>
<tr>
<td>Title</td>
<td>Author</td>
<td>Year</td>
<td>Sample Size and Period</td>
<td>Corporate Governance Variable</td>
<td>Corporate Performance Variable</td>
<td>Findings</td>
<td>Conclusion</td>
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<tr>
<td>Capital Structure and Product Market Interactions: Evidence from Business Cycles</td>
<td>Campello</td>
<td>2003</td>
<td>128,133 firm quarters</td>
<td>Leverage</td>
<td>Relative to industry sales growth</td>
<td>Negative impact on sales growth</td>
<td>No</td>
</tr>
<tr>
<td>Corporate Governance and Capital Structure Decisions of Chinese Listed Firms</td>
<td>Wen, Rwegasira and Bilderbeek</td>
<td>2002</td>
<td>180 observations of 60 Chinese firms for the period of 1996 - 1998</td>
<td>Leverage</td>
<td>Corporate Board</td>
<td>Lower leverage with higher percentage of outside directors or the tenure of the CEO is longer</td>
<td>Yes</td>
</tr>
<tr>
<td>Capital Structure and Performance: Evidence from a Transition Economy on an Aspect of Corporate Governance</td>
<td>Majumdar and Chhibber</td>
<td>1999</td>
<td>Over 1,000 Indian Firms</td>
<td>Capital Structure</td>
<td>Firm Performance</td>
<td>Significant negative relationship</td>
<td>No</td>
</tr>
<tr>
<td>Title</td>
<td>Author</td>
<td>Year</td>
<td>Sample Size and Period</td>
<td>Corporate Governance Variable</td>
<td>Corporate Performance Variable</td>
<td>Findings</td>
<td>Conclusion</td>
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</tr>
<tr>
<td>Ownership Concentration, Risk Aversion and the Effect of Financial Structure on Investment Decision</td>
<td>Zhang</td>
<td>1998</td>
<td>-</td>
<td>Leverage</td>
<td>Ownership Concentration</td>
<td>Leverage improves the ownership concentration and investment efficiency</td>
<td>Yes</td>
</tr>
<tr>
<td>Performance, Capital Structure and Home Country: An Analysis of Asian Corporation</td>
<td>Krishnan and Moyer</td>
<td>1997</td>
<td>81 firms from Hong Kong, Malaysia and Singapore</td>
<td>Ratio of Total Debt to Market Value of Equity and Ratio of Long Term Debt to Market Value of Equity</td>
<td>Return on Equity (ROE)</td>
<td>Significant negative impact of debt on ROE</td>
<td>No</td>
</tr>
</tbody>
</table>
4.8 Limitations of Earlier Studies


Secondly, a lot of the earlier studies used either a single performance measure or only accounting performance measures, such as return on investment or return on assets (such as, Gerhart and Milovich, 1990; Rechner and Dalton, 1991; Boyd, 1994; Gorton and Schmid, 1999; Lin, 2005; Brick et al, 2006; Kato and Kubo, 2006), return on equity (Berg and Smith, 1978; Kesner, 1987; Donaldson and Davis, 1991; Fosberg, 1989; Tian and Lau, 2001; Lin, 2005; Luan and Tang, 2007), return on sales (such as, Demsetz and Lehn, 1985; Claessens and Djankov, 1999a; Boubakri et al, 2005), productivity growth (such as, Lichtenberg and Pushner, 1994; Han and Suk, 1998; Claessens and Djankov, 1999; Köke and Renneboog, 2002), relative financial performance (RFP)\textsuperscript{37} (such as, Baysinger and Butler, 1985), environmental performance (Earnhart, and Lizal, 2002), Earnings per Share or Price Earnings Ratio (Hudson et al, 1992; Grace et al, 1995) and Closing Stock Price (Rechner and Dalton, 1986; Gregg et al, 1993; Han and Suk, 1998), MBVR (such as, Shome and Singh, 1995; Xu and Wang, 1999). The traditional measures of financial performance may not ensure performance in the today’s newly structured organizations (Chow et al, 1997).

\textsuperscript{37} RFP, is calculated by Baysinger and Butler (1985) by dividing the firm’s return on equity by the average return on equity for all the firms in the primary industry, including those not in the sample.
Accounting profit is subject to manipulation (Capon et al, 1996, p 89) and sometimes reported within the management guidelines (Chakravarthy, 1986; Deegan, 2006). Moreover, as the accounting practice may vary within a legal and cultural context, there may be sufficient provisions of reporting a transaction in its legal form ignoring the substance of the transaction.

Thirdly, some earlier studies are conducted within single year data (such as, Baysinger and Butler, 1985; McConnell and Servaes, 1990; Craswell et al, 1997; Cho and Kim, 2007), which may not be accepted for conclusive evidence as Fosberg (1989) claimed that the single year can not be a basis of judgment. Similarly in some studies (Rechner and Dalton, 1986) dependent and independent variable are not taken from the same period. Some studies are conducted for smaller sample (such as, Molz, 1988; Zeitun and Tian, 2007a).

Fourthly, a number of studies (such as, Chaganti et al, 1985; Rechner and Dalton, 1991; Abdullah, 2004) used the univariate analysis, such as correlation analysis. Fifthly, the earlier studies could not provide the conclusive evidence on the corporate governance and firm performance. There is a diversity of results in these studies which justifies the further study. The diversity in the earlier study may be explained due to the differences in theoretical perspectives, differences in selected research methodologies, sample size etc. Since there are lacks of consensus, it is imperative to do the further study in a different institutional context, examining whether the particular governance mechanism may enhance the firm performance.

Sixthly, the earlier studies typically considered the single governance instruments, ignoring the combinations or set of governance instruments as a means of resolving the agency problems and enhancing firm performance. Finally, some studies are conducted within limited scope. For example, the study by Brunello et al (2001) conducted within the banking sector.

The limitations of earlier studies imply that earlier studies have failed to provide conclusive evidence and also failed to reach a consensus on a particular theory. This study attempts to overcome all the limitations and differs from the existing literature in a number of ways. Firstly, this study provides the evidence of corporate governance in a developing country. Secondly, this study considers multiple performance measures, both the accounting and market based by considering the panel data for eight years (discussed in chapter 5). Thirdly, this study is conducted to further test the issues on which there is no conclusive evidence.
4.9 Chapter Summary and Conclusion

This chapter provides a comprehensive review and summary of the earlier studies on corporate governance, since a reasonable body of research on corporate governance exists. While doing so firstly, the relevance of agency theory in literature review is discussed. Secondly, a review of earlier studies on various corporate governance mechanisms, such as ownership structure, board practices, managerial compensation and corporate debt policy is made. Thirdly, a summary of earlier studies is presented. Finally, a critique of earlier studies and a concluding remark is made. From this review it is concluded that the earlier studies have several limitations and failed to reach a consensus on a theory.
Chapter 5

Research Design, Data, Hypotheses and Methodology

"If we knew what it was we were doing, it would not be called research, would it?" Albert Einstein (1879-1955)

5.1 Introduction

This thesis examines whether the corporate governance mechanisms influence the firm economic performance in Bangladesh. This chapter outlines the research design, data set, hypotheses, methodology and method. The detail organization of this chapter is as follows. Firstly, this chapter explains the research paradigm in part 5.2. It is revealed that there is a relative dominance of functionalist paradigm in research (Gioia and Pitre, 1990; Dillard, 1991). Secondly, the research questions developed in Chapter 1 are formulated to the several testable hypotheses, such as ownership structure and firm performance hypotheses, board composition and leadership structure hypothesis, executive compensation and firm performance hypotheses and capital structure and firm performance hypothesis. These are presented in part 5.4 of this chapter. Thirdly, the part 5.5 through 5.8 of this chapter explains the study period, data set and step by step construction of sample. It also explains the sources of data and difficulties in collecting the data in conducting such a study in the developing countries context, such as Bangladesh. Fourthly, 5.9 through 5.13 of this chapter explain all of the variables related to this analysis which are used in developing the models. Finally, the models for statistical analyses and details of the analyses are outlined in part 5.14. While developing a model for statistical test, the justification of considering a variable is explained. Discussion and conclusion is made in the final section.

5.2 Research Paradigm

Theory building is an essential part of the research. A number of studies are devoted in explaining theory. A ‘theory is the coherent description of observed or explained phenomena’ and theory building is ‘the process or cycle by which such representations are generated, tested and refined’ (Gioia and Pitre, 1990). Burrell and Morgan (1979) mapped the academic theories in four key paradigms, such as,
functionalist, interpretive, radical humanist, and radical structuralist (figure 8). The Burrell and Morgan (1979) four paradigms are founded upon mutually exclusive views of the social world and these are based on different assumptions about the nature of social science, using a subjective-objective axis and a nature of the society of regulation-radical change, which yields a $2\times2$ matrix.

Figure 8: Burrell and Morgan (1979) four paradigms in organizational theory and research

![Diagram of Burrell and Morgan's four paradigms]

Source: Burrell and Morgan (1979, pp 29-30).

A 'Radical Humanist' paradigm assumes that reality is socially created and sustained. It tends to view society as 'anti-human' (Ardalan, 2000). The 'Radical Structuralist' paradigm assumes that reality is objective and concrete. It uses scientific methods to find the order that prevails in the phenomena (Ardalan, 2000). Interpretive paradigm believes that 'no universally rules of finance and financial management exists' (Ardalan, 2000). This paradigm assumes that the scientific knowledge is socially constructed and theory building tends to be more inductive in nature (Gioia and Pitre, 1990).

While accounting and finance researchers continued to work on an inductive-deductive cycle, a different approach became popular in the early 1960s and 1970s known as functionalist paradigm (Gaffikin, 1988; Gaffikin, 2005). The functionalist paradigm assumes that the society has a concrete existence and follows a certain order.
So it is characterized by an objectivist view that can produce true explanatory and predictive knowledge of reality. That is, the functionalist paradigm seeks to examine the regularities that lead to generalizations and universal principles (Gioia and Pitre, 1990; Dillard, 1991; Ardalan, 2000). This approach seeks knowledge based on a common set of philosophical assumptions, the empirical world, the relations between theory and practice and examines the regularities that lead to generalizations and universal principles (Chua, 1986). It assumes that the scientific theories can be assessed objectively by reference to empirical evidence and the deductive approach is used in theory building, starting with reviewing of existing literature and operating out of prior theories about organizational structure. A hypothesis is specified for the organizational world and these are tested for hypothesis driven data via statistical analyses. Hypotheses are derived by selecting specific variables as likely causes of some designated effect. Data are collected with instruments and procedures designed according to the hypothesis formulated. Analyses are mainly quantitative; therefore, hypotheses are tested via statistical analysis (Gioia and Pitre, 1990). This paradigm shift is described by Gaffikin (2005; 2006), as neo-empiricism, which emerged from a conservative business school (in particular University of Chicago Business School) environment in the USA. Watts (1995) described that such paradigm shift,

........is associated with changes in U.S. business schools in the late 1960s and early 1970s. .................Hypothesis forming and testing were viewed as essential for good research (p 299).

Burrell and Morgan (1979) further described that, different ontologies, epistemologies and method of human nature are likely to incline social scientists towards different methodologies. Given the Burrell and Morgan (1979) multi-paradigm perspective it would be useful for theory building to be viewed not as a search for the truth, but as more of a search for comprehensiveness stemming from different views. According to Gioia and Pitre (1990), multi paradigm approaches offer the possibility of creating fresh insights because they start from different ontological and epistemological assumptions and can produce different informative theoretical views.

Chua (1986), Dillard (1991) and Ardalan (2000) interpreted the ‘Philosophical Assumptions’ underlying Radical Humanist and Functionalist Paradigm, with respect to Ontology, Epistemology and Human Nature and Methodology, which is shown in table 9. It is therefore, useful in understanding a set of research paradigm relating to
ontology, epistemology, human nature and methodological approach (Burrell and Morgan, 1979; Hopper and Powell 1985).

Table 9: Philosophical assumptions in accounting

<table>
<thead>
<tr>
<th>Radical Humanist</th>
<th>Philosophical Assumptions</th>
<th>Functionalist</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominalism</td>
<td>Ontology</td>
<td>Realism</td>
</tr>
<tr>
<td>Anti-positivism</td>
<td>Epistemology</td>
<td>Positivism</td>
</tr>
<tr>
<td>Voluntarism</td>
<td>Human Nature</td>
<td>Determinism</td>
</tr>
<tr>
<td>Ideographic</td>
<td>Methodology</td>
<td>Nomothetic</td>
</tr>
</tbody>
</table>

Source: Adapted from Chua (1986, p 603) and Dillard (1991, p 11)

“Ontology is a conception of what exists” (Gaffikin, 1988, p 31). It is concerned with the nature of reality (Hopper and Powell, 1985; Dillard, 1991, p 11). The term is borrowed from philosophy, where ontology is described as a systematic account of existence. In the words of Burrell and Morgan (1979), ‘it is the phenomenon under investigation’. That is whether the reality is external to the individual. Encyclopedia Britannica defines ontology as “the theory or study of being, i.e., the basic characteristics of all reality.” In other words, it is the philosophical study of what is. Ardalan (2000) defines Ontology as the ‘very essence of phenomena under investigation’.

Epistemology, on the other hand, is generally described as the theory or study of knowledge - how we know what is. It is the process of knowing (Dillard, 1991). Burrell and Morgan (1979) defines epistemology as the ‘nature of knowledge - how one might go about understanding the world and communicating such knowledge to others’. So in other words, “ontology/epistemology” can be described as “what we know and how we know it”.

Although it is argued that multi-paradigm approaches offer the possibility of creating fresh insights, there are different ontological and epistemological assumptions of theory and one single theory may not be able to explain the nature of reality in all of its complexities and multiple perspective is necessary for any comprehensive view. However, ‘while different kinds of theories in mainstream academic finance appear to exist, they are founded only on the functionalist paradigm’ (Ardalan, 2000). Such dominance (shown in figure 9) is sometimes described as the mainstream
accounting/finance research which is grounded in a common set of ‘philosophical assumptions’ (Chua, 1986).

The third set of assumptions is the human nature which is described by Burrell and Morgan (1979) as ‘the relationship between human beings and their environment’. The fourth set of assumptions is the methodology, which in the words of Burrell and Morgan (1979) is the direct implication of above. It is Burrell and Morgan’s (1979) ‘way in which one attempts to investigate and obtain knowledge about the social world’; the way in which the investigation is carried out (Dillard, 1991). Methodology explains the systematic protocol and techniques in gaining knowledge (Dillard, 1991).

Figure 9: Representation of the dominance of functionalist paradigm in organizational theory and research

Although there are many paradigmatic differences between qualitative and quantitative research, there are commonalties in mainstream academic accounting/finance (Johnson and Onwueguzie, 2004) and a number of earlier research works are conducted within these set of philosophical theories. For example both the qualitative and quantitative researches use empirical observations to address research questions (Johnson and Onwueguzie, 2004).
This type of study examines whether corporate governance mechanisms influence the firm economic performance. In particular it examines the people’s behavior/actions to the firm performance. Although some theory can not be generalized, the logical issues were discussed in Chapter 3. Due to commonalities in theories the theory on this study will be based on the functionalist paradigm. As such hypotheses are developed in this chapter and the analyses are carried out through a quantitative approach. In other words epistemological foundation of this study is empiricism. Data used in this study are available from the sources mentioned in this thesis. The methodology in this study is drawn from the previous studies in the field of accounting and finance, particularly corporate governance.

5.3 Research Methodology and Method

Most researchers use methodology when they describe their method of analysis (Frankfurter, 2002). Although the term research methodology and method are interchangeably used in a particular field of inquiry, a distinction needs to be made between these two terms. The word methodology came from a Greek word 'logos' which means 'logic of'. The word methodology implies the underlying logic of method (Bakker, 2009). Methodology is a broader term and refers to more than a simple set of methods. It is the philosophical assumptions for a method. It explains the systematic protocol and techniques in gaining knowledge (Dillard, 1991); it is committed to employing the method of the physical science (Gaffikin, 2005). It also includes the collection of theories, concepts or ideas, and critiques of an individual method. It describes the particular research choices, such as qualitative and quantitative. However, it does not refer to the specific analysis techniques.

The method is the hypothetico-deductive methodology (Gaffikin, 2005); or is the particular choice of methodology. Hypothesis development and collecting data are part of method. It also describes the specific method or tools are used to gather data, such as a field survey, questionnaire survey, interview (open or closed), reports and records and observation (Bakker, 2009). It also refers to the specific analysis techniques. The philosophical assumptions (methodology) of this study are explained above and subsequent part of this study explains the research method, such as hypotheses development, collection of data and analysis techniques.
5.4 Hypotheses

This study aims at examining if the corporate governance mechanisms influence the firm performance in a specific institutional setting such as, Bangladesh. It particularly examines if the specific ownership arrangement, such as the sponsor/director ownership, institutional ownership, blockholding and outsider may influence the firm performance. It also examines if the board composition and leadership structure influence the firm performance; if the managerial compensation enhances firm performance and last of all whether the capital structure acts as a governance mechanism. The research questions developed in Chapter 1 are gradually formulated into the testable hypotheses in accordance with the theory developed in earlier chapters linking the corporate governance mechanisms and firm performance. The following paragraphs will help in formulating the hypotheses.

5.4.1 Ownership Structure and Firm Performance Hypotheses

The first research question is, whether the ownership structure may influence the firm economic performance. It is viewed that the corporation is a place where a group of scattered people will put their money for a common interest and such interest will be overseen by professional managers. It is also known as the Berle and Means (1932) model of corporation. These types of corporate ownership are mostly common in the United States, Canada, Australia, New Zealand and continental Europe. In these countries, the shareholders rights are protected by laws and regulation. It is argued that the dispersed ownership in the corporations allows more professionalism in the management or professional managers will be hired on behalf of the scattered shareholders. However, there are potential problems in the dispersed ownership such as hostile takeovers, hostile share transactions, mergers and acquisitions etc. Moreover, the scandals and collapses of the world class companies such as, Enron, WorldCom proved that this form of ownership is ineffective.

The concentrated ownership emerged due to the deficiency of the dispersed ownership, which is most common in some developing countries (La Porta et al, 1998) as well as in some developed countries (La Porta, Lopez-de-Silanes and Shleifer, 1999). Such ownership in the form of banks, families and sometimes state, is regarded as the central function of corporate control in some countries (Franks and Mayer, 1990). Concentrated shareholding has an incentive to increase the efficiency, as they
have the significant interest in the firm and it is the most effective monitoring to resolve the agency conflicts (Huddart, 1993; Admati et al, 1994; Prowse, 1994); it is an efficient governance mechanism for countries in which investor’s protection is weak (La Porta et al, 1999b). A concentrated shareholding when they have substantial cash flow right has the strong incentive to monitor managers, in addition to control (Jensen and Meckling, 1976).

The descriptive statistics in table 15 reveals that there is a substantial amount of stock ownership by the sponsor and directors of the listed firms in Bangladesh. Sponsors and directors also hold several positions in the board. Therefore, the agency problem may be less in these firms as the property rights are largely restricted to internal decision makers. Further, such substantial amount of company stock ownership by directors and managers are a powerful link between shareholders’ wealth and executive wealth (Jensen and Murphy, 1990a). It may align the interest of the managers and shareholders and thereby corporate performance (Jensen and Meckling, 1976; Jensen, 1993). However, the independence of the board may be compromised with ownership control in the board.

Borsch-Supan and Koke (2002) while examining the ownership structure and firm performance argued that there is a “reverse causality” in ownership structure and firm performance. Similarly, Kole (1996) observed that causality between the ownership structure and firm performance operates in reverse direction. Therefore, to examine the relationship between director’s stock ownership and firm performance, the relevant hypothesis can be stated as,

**Hypothesis 1a:** There is a significant relationship between the percentage of shares owned by the directors/ sponsors and firm performance.

As argued in Chapter 3, blockholding is not just the concentrated ownership; with the specific skills, wealth and expertise, blockholders have strong incentive to monitor the management (Barclay and Holderness, 1991; Gibson, 2003). Firms monitored by outside blockholders are substitute for incentive pay for executives (Kraft and Niederprüm, 1999). Blockholders are more likely to have a statistically significant effect on firm performance in countries other than United States (Denis and McConnell, 2003). Therefore, the following hypothesis is stated,
Hypothesis 1b: There is a significant relationship between the percentage of shares owned by the blockholders and firm performance.

As argued in Chapter 3, institutional shareholding is another form of concentrated ownership in reducing the principal-agent conflict and improving the firm efficiency. Due to having commitment to the return on investment related product, they also have a professional interest in developing the firm’s corporate governance (Nandelstadh and Rosenberg, 2003). Some institutional investors have identified as a key factor in determining the performance in the emerging market as they may prefer to work inside the firms to change its policies (Baysinger and Butler, 1985, p 107; Gibson, 2003). Institutional shareholders play a greater role in monitoring, enforcing governance standards and influencing corporations in which they invest (Ingley and van der Walt, 2004). Institutional investors have the incentive and ability to exercise the power and control over management in maximizing a firm’s efficiency. Therefore, the following hypothesis is stated,

Hypothesis 1c: There is a significant relationship between the percentage of shares owned by the institutions and firm performance.

Considering all the above hypotheses, the outsider stock ownership and firm performance hypothesis can be stated as follows,

Hypothesis 1d: There is a significant relationship between the percentage of shares owned by the outsiders and firm performance.

5.4.2 Board Composition and Firm Performance Hypothesis

The second research question is, whether the board composition in the form of representation of outside independent directors may influence the firm economic performance in Bangladesh. The outside independent directors are good monitors as they are not the part of the management (Jensen and Meckling, 1976; Fama, 1980; Beasley, 1996). The outside independent directors have advance pragmatic qualifications, expertise and experience and thereby can effectively influence the board’s decision and ultimately can add value to the firm (Fields and Keys, 2003). Therefore, the following hypothesis can be stated,
Hypothesis 2: There is a significant relationship between the board composition (proportion of outside independent directors) and firm performance.

5.4.3 Board Leadership Structure and Firm Performance Hypothesis

The third research question is, whether the CEO non-duality or splitting the role of Chairperson and CEO may lead to a better firm performance. The CEO duality reduces the checks and balances by the board. The CEO may not want a capable board as the capable board may challenge his/her power and authority (Zahra, 1990); the CEO can not represent the shareholders and the management at the same time (Rechner and Dalton, 1991). To avoid these conflicts of interests, agency theorists argued for the structural independence, which requires the positions CEO and Chairperson to be filled by two different individuals. Therefore, the following hypothesis can be stated,

Hypothesis 3: CEO non-duality is positively related to firm performance.

5.4.4 Executive Compensation and Firm Performance Hypotheses

The fourth research question is whether the executive compensation may resolve the agency problem and thereby increase the firm performance in Bangladesh. Executive compensation is a very important internal governance mechanism. If the executives are not well paid, the objectives of the management may not be aligned with that of shareholders as argued by the agency theorists. As a means of conflicts resolution between the managers and the shareholders, introducing incentives pay may be effective and it may induce the managers to operate in the interest of the shareholders. However, it is very hard to identify the degree of executive pay that will align the interest of the executive with those of the shareholders.

If the CEO does not have significant share ownership in the firm, there will be a greater agency problem (Core et al, 1999). Thus, they may try to diversify their risk as they have invested their undiversified human capital (managerial talent) in a single firm (Godfrey et al, 2006). Therefore, the CEO’s professional expertise or market may ask for greater compensation and it will be CEO’s significant interest in the firm. Kraft and Niederprüm (1999, p 20) argue that “the level of compensation and the pay-performance sensitivity are expected to be higher in firms with a broadly diversified ownership”. In order to examine the relationship between the ownership structure and executives pay, the following hypothesis is stated,
Hypothesis 4a: There is a significant relationship between ownership structure and executives’ pay.

Firm size is expected to influence the executive pay. Large firm have the capacity to pay more and a competitive market may allocate talented people to higher level positions in larger firms (Brunello et al, 2001). There is a task complexity and the executive may be required to perform the multiple functions in large firms (Berg and Smith, 1978). Large firms also hire the better performing CEOs to maximize the firm’s productivity (Merhebi et al, 2006). In order to examine the association between CEO pay and firm size, the following hypothesis can be stated,

Hypothesis 4b: There is a significant relationship between the executives pay and firm size.

Denis and McConnell (2003) argued that the greatest interest of the compensation issue in the corporate governance literature is the sensitivity of executive pay and firm performance and such research is also concerned with aligning the interest of the executive with those of company’s shareholders. The pay-performance sensitivity is consistent with the idea that the highly performed CEOs will be paid higher. However, there is a lack of consensus in this issue and it is largely non-conclusive. “....the continued interest in the topic seems to be the lack of any strong, obvious association between CEO pay and firm performance (Main et al, 1995, p 294). It is often complained that despite the high degree of CEO and executive’s compensation, there is a declining firm performance (Jensen and Murphy, 1990a; 1990b) and the changes in executive compensation do not reflect the changes in corporate performance (Jensen and Murphy, 1990a). Therefore, the pay and performance sensitivity may be further studied and the following hypothesis can be stated,

Hypothesis 4c: There is a sensitivity between executives pay and firm performance.

5.4.5 Capital Structure and Firm Performance Hypotheses

The fifth research question is whether the capital structure may reduce the shareholders’ agency conflict and enhance the firm performance. In this study the
several debt ratios (hereinafter referred as the debt) are used as reliable proxies for the capital structure. As noted in Chapter 3, debt may resolve the shareholders and managers agency conflict in several ways. Due to ‘claim-dilution’ problem, the existing debtholders will try to restrict the level of firm’s borrowing, resisting the firm to invest in a risky project, which will ultimately be helpful to improve the investment efficiency of the firm. Due to Jensen (1986, p 324) ‘control hypothesis’ interest obligation of debt may reduce the agency cost of ‘free cash flow’ by reducing the cash flow available for spending at the discretion of managers as the larger level of debt commits managers to pay a certain cash flow to the outsiders. Further, Jensen and Meckling (1976) argued that leverage\(^{38}\) can be used as an instrument to govern the agency conflict between management and a dispersed group of owners or leverage may soften the agency problem generated by dispersed ownership. Therefore, this study also views that the corporate capital structure in the form of debt and equity or a combination of ownership and debt claims may be an alternative governance mechanism to reduce the shareholder-debtholder agency conflicts. More specifically debt may resolve the shareholders’ agency cost which may arise due to agency conflict. Therefore, the relevant hypothesis can be stated as,

**Hypothesis 5a:** A firm’s capital structure may reduce the shareholders’ agency cost.

An issue further arose in corporate governance literature (such as, Majumdar and Chhibber, 1999; Berger and Bonoaccorsdi Patti, 2006) which suggest that the choice of capital structure affects the agency cost and thereby firm performance. Therefore, the relevant hypothesis can be stated as,

**Hypothesis 5b:** A firm’s capital structure may influence its performance.

### 5.4.6 Summary of the Hypotheses

The hypotheses developed above can be summarized in table 10 below. These hypotheses are tested by using statistical analyses in Chapter 6.

---

\(^{38}\) Leverage is the relative proportion of debt and equity in financing the corporation.
### Table 10: Summary of the Hypotheses

<table>
<thead>
<tr>
<th>Ownership Structure</th>
<th>Hypothesis 1a: There is a significant relationship between the percentage of shares owned by the directors/ sponsors and firm performance.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ownership Structure (Directors/Sponsor Ownership)</td>
<td></td>
</tr>
<tr>
<td>Ownership Structure (Blockholding)</td>
<td>Hypothesis 1b: There is a significant relationship between the percentage of shares owned by the blockholders and firm performance.</td>
</tr>
<tr>
<td>Ownership Structure (Institutional Ownership)</td>
<td>Hypothesis 1c: There is a significant relationship between the percentage of shares owned by the institutions and firm performance.</td>
</tr>
<tr>
<td>Ownership Structure (Outside Ownership)</td>
<td>Hypothesis 1d: There is a significant relationship between the percentage of shares owned by the outsiders and firm performance.</td>
</tr>
<tr>
<td>Monitoring (Board Composition)</td>
<td>Hypothesis 2: There is a significant relationship between the board composition (proportion of outside independent directors) and firm performance.</td>
</tr>
<tr>
<td>Monitoring (Leadership Structure)</td>
<td>Hypothesis 3: CEO non-duality is positively related to firm performance.</td>
</tr>
<tr>
<td>Compensation</td>
<td>Hypothesis 4a: There is a significant relationship between ownership structure and executives pay.</td>
</tr>
<tr>
<td></td>
<td>Hypothesis 4b: There is a significant relationship between the executives pay and firm size.</td>
</tr>
<tr>
<td></td>
<td>Hypothesis 4c: There is a sensitivity between executives pay and firm performance.</td>
</tr>
<tr>
<td>Capital Structure</td>
<td>Hypothesis 5a: A firm’s capital structure may reduce the shareholders agency cost</td>
</tr>
<tr>
<td></td>
<td>Hypothesis 5b: A firm’s capital structure may influence its performance.</td>
</tr>
</tbody>
</table>

#### 5.5 Study Period, Data Set

One of the objectives of this study is to examine if the corporate governance mechanisms influence the firm economic performance in Bangladesh. While doing so this study considers the selected companies listed in the Dhaka Stock Exchange, Bangladesh for the period of 1999-2007. Although an attempt was made to consider the ten years data for the period of 1996-2007, the data before 1999 could not be collected, despite a lot of efforts; therefore, only eight (8) years data for the period of 1999-2007
are considered. The eight (8) years sample is considered to be justified as the single year can not be a basis of judgment (Fosberg, 1989).

5.6 Construction of the Sample

This study considers the cross sectional data or panel data. Therefore, the data are collected from different firms for different years from a sample 104 listed companies at Dhaka Stock Exchange. This part of the study explains the sample construction procedure.

There were 259 listed companies in Dhaka Stock Exchange as in June 2007. Of the 259 listed companies, firms which were not listed for entire study period were excluded, because the measurement of performance for some specific period or for a fractional year may not be judged and performance results may be biased. Then the financial institutions were excluded. The researchers such as McConnell and Servaes (1990), Shivdasani and Yermack (1999), Campbell and Keys (2002), Lemmon and Lins (2003) and Rose (2005) excluded the financial institution in their study, since financial institutions are completely different from non-financial institutions and the accounting standards for income and profit for the financial institution are significantly different from those in the other sectors. The firms which have a lack of data and the firms which stocks were not traded in the stock exchange for a few years have also been excluded. Then the state owned enterprises were excluded from the sample, since there are relatively small firms in the government sector and this study does not consider government sector. Last of all, the firms which are enlisted during the period of 1996-1999, (in order to make a firm age at least for five years) were also excluded; resulting in a sample size of 104 firms (representing the 40.15% of the total listed companies). Based on the availability of annual reports a total 774 observations (firm years) were made. These are the firms which were listed in the Dhaka Stock Exchange for at least eight (8) years or during the period of 1999-2007. As the Annual Reports of a few firms for the year ending 30th June 2007 was not published at the time of data analyses, some data for 2007 is missing. The sample can be considered the representative of population as the sample size is relatively large. Table 11 shows the step by step construction of samples. The sample consists of all the companies listed with the Dhaka Stock Exchange.
Table 11: Sample selection procedure

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of companies listed in Dhaka Stock Exchange in a respective year (Note 1)</td>
<td>219</td>
<td>224</td>
<td>238</td>
<td>241</td>
<td>248</td>
<td>239</td>
<td>256</td>
<td>259</td>
<td>1,924</td>
</tr>
<tr>
<td>Company not listed during the whole period (That is, newly listed during that period)</td>
<td>12</td>
<td>11</td>
<td>15</td>
<td>14</td>
<td>10</td>
<td>5</td>
<td>19</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td><strong>Deduct:</strong></td>
<td>12</td>
<td>23</td>
<td>38</td>
<td>52</td>
<td>62</td>
<td>67</td>
<td>86</td>
<td>95</td>
<td>435</td>
</tr>
<tr>
<td>Cumulative of the new listed</td>
<td>207</td>
<td>201</td>
<td>200</td>
<td>189</td>
<td>186</td>
<td>172</td>
<td>170</td>
<td>164</td>
<td>1,489</td>
</tr>
<tr>
<td>Balance of the companies</td>
<td>3</td>
<td>6</td>
<td>1</td>
<td>11</td>
<td>3</td>
<td>14</td>
<td>2</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Companies de-listed (enlisted again)</td>
<td>43</td>
<td>37</td>
<td>36</td>
<td>25</td>
<td>22</td>
<td>8</td>
<td>6</td>
<td>0</td>
<td>177</td>
</tr>
<tr>
<td><strong>Deduct:</strong></td>
<td>164</td>
<td>164</td>
<td>164</td>
<td>164</td>
<td>164</td>
<td>164</td>
<td>164</td>
<td>164</td>
<td>1,312</td>
</tr>
<tr>
<td>Cumulative of the de-listed (current year already deducted)</td>
<td>21</td>
<td>21</td>
<td>21</td>
<td>21</td>
<td>21</td>
<td>21</td>
<td>21</td>
<td>21</td>
<td>168</td>
</tr>
<tr>
<td>Companies listed in various period between 1998-1999 (excluding the financial and government owned companies) (Note 2)</td>
<td>21</td>
<td>21</td>
<td>21</td>
<td>21</td>
<td>21</td>
<td>21</td>
<td>21</td>
<td>21</td>
<td>168</td>
</tr>
</tbody>
</table>
Table 11-Cont’d: Sample selection procedure

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Deduct: Financial Services Company (Such as Bank, Insurance Company etc. excluding the current year’s listed, those already deducted above)</td>
<td>23</td>
<td>23</td>
<td>23</td>
<td>23</td>
<td>23</td>
<td>23</td>
<td>23</td>
<td>23</td>
<td>184</td>
</tr>
<tr>
<td>Deduct: Firms with the lack of sufficient data, (excluding those already deducted above)</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>48</td>
</tr>
<tr>
<td>Deduct: Government Owned Company</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>80</td>
</tr>
<tr>
<td>The sample company size</td>
<td>104</td>
<td>104</td>
<td>104</td>
<td>104</td>
<td>104</td>
<td>104</td>
<td>104</td>
<td>104</td>
<td>832</td>
</tr>
<tr>
<td>Really available</td>
<td>101</td>
<td>103</td>
<td>104</td>
<td>104</td>
<td>104</td>
<td>98</td>
<td>88</td>
<td>72</td>
<td>774</td>
</tr>
</tbody>
</table>

Notes:

1. The number of listed companies at the year ending 30th June of a respective year, available from SECB (2000 through SECB, 2004; 2005b; 2005c; 2006b; 2006c; 2007) and Dhaka Stock Exchange web page. Although there are few inconsistencies on the information, attempt was made to reconcile such inconsistencies.

2. This is done to make firm age at least 5 years. However, four (4) firms have an age of 4 and one firm has an age of one (1) year during 1999-2000, as these firms market capitalization was found to be significant.

3. A number of companies did not convene the AGM and the Annual Reports for 2006-2007 were not available.
5.7 Description of the Sample

The sample constructed above covered 104 firms from various industries. The sample also includes the firms with various ownership forms, such as directors/managers, institutions and outsiders. There is no foreign ownership in the sample, because such ownership is new in Bangladesh and these were not existed for the whole study period. This sample represents 40.15% of the total listed firms as on 30th June 2007. So this sample can be considered as adequate and the representative of the population.

The table 12 below describes the industry classification and market capitalization of the sample.

Table 12: Industry classification and market capitalization of the sample

<table>
<thead>
<tr>
<th>Sector</th>
<th>Number of Sample Firms</th>
<th>Market Capitalization*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cement</td>
<td>3</td>
<td>9,564</td>
</tr>
<tr>
<td>Ceramic</td>
<td>1</td>
<td>545</td>
</tr>
<tr>
<td>Engineering</td>
<td>14</td>
<td>12,615</td>
</tr>
<tr>
<td>Food and Allied</td>
<td>18</td>
<td>15,821</td>
</tr>
<tr>
<td>Fuel and Power</td>
<td>2</td>
<td>4,495</td>
</tr>
<tr>
<td>Jute</td>
<td>3</td>
<td>221</td>
</tr>
<tr>
<td>Paper and Printing</td>
<td>4</td>
<td>72</td>
</tr>
<tr>
<td>Pharmaceuticals and Chemicals</td>
<td>18</td>
<td>87,825</td>
</tr>
<tr>
<td>Service and Real Estate</td>
<td>2</td>
<td>5,505</td>
</tr>
<tr>
<td>Tannery</td>
<td>4</td>
<td>8,190</td>
</tr>
<tr>
<td>Textile</td>
<td>31</td>
<td>14,696</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>4</td>
<td>15,225</td>
</tr>
<tr>
<td>Total</td>
<td>104</td>
<td>174,774</td>
</tr>
</tbody>
</table>

* The data as on 11th June 2009; expressed in million Taka.

The industry classification of the sample is also shown in figure 10 representing 3% Cement, 1% Ceramic, 13% Engineering, 17% Food and Allied, 2% Fuel and Power, 3% Jute, 4% Paper and Printing, 17% Pharmaceuticals and Chemicals, 2% Service and Real Estate, 4% Tannery, 30% Textile and 4% Miscellaneous Industries.
5.8 Sources of Data

It is not quite easy to collect the data from the developing countries, such as Bangladesh. The data were gathered from the following identified sources:

1. The audited financial report was the basis for obtaining the company’s accounting information, such as total assets, total liabilities and equities, net sales, net income, operating income operating expenses, executive’s pay, etc.

2. Company’s share ownership data was collected from the Dhaka Stock Exchange web page (at www.dsebd.org) and from the ‘Monthly Review’ of Dhaka Stock Exchange.

3. Market value of the closing share price was also collected from Dhaka Stock Exchange web page (at www.dsebd.org) and from the ‘Monthly Review’ of Dhaka Stock Exchange.

4. A field trip was conducted between the periods of 15th October -10th November 2006 and 15th November 2007-5th January 2008. A number of company Annual Reports were collected from the kerb-side vendors. Moreover, the Dhaka Stock Exchange Library was extensively used to locate the Annual Reports, which could not be collected from the kerb-side vendors. However, this researcher had to leave Bangladesh keeping in mind the uncertainties of data collection due to political unrest all over the country. Later the soft (digitalized) copies of all the required ‘Company Annual Report’ was collected from Dhaka Stock Exchange, Bangladesh in May 2007.
5. Attempt was made to collect data (which are not disclosed by some companies in their Annual Report) on company’s management, the board structure and CEO Pay by doing a questionnaire survey (attached in Appendix 2). However, the response rate was very low; only one firm returned the filled questionnaire so far. It was concluded that the firms are not willing to disclose such information.

5.9 Variable Definitions

This study examines the corporate governance mechanisms and firm performance in a developing country by considering Bangladesh as a case study. For empirical investigation, a number of hypotheses have been stated. A number of variables are defined throughout this chapter. These are explained below.

5.10 Dependent Variable: Firm Performance

Mehra (2004, p 3) described corporate governance “as a blend of laws, policy and practice aimed to maximize shareholders returns”. Therefore, understanding the various aspects of performance and identifying the relevant measures is an important issue in studying corporate governance. The issue of firm performance measurement is a challenging issue to the researchers. There is a considerable debate and there is no consensus on what constitute appropriate measures of firm performance (Daily and Dalton, 1993; Johnson et al, 1996). The trend therefore, has been toward multiple indicators of firm performance (Daily and Dalton, 1993). Ghalayini and Noble (1996) identified two phases of performance measurement. The first phase started in the late 1980s and went through the 1980s. This phase is commonly known as financial performance measures-what they said as the ‘traditional performance measurement’ or accounting based performance measures. The second phase started in the late 1980s as a result of changes in the world market. This is referred to as the market based performance measure.

5.10.1 Accounting Based Performance Measurement

Accounting measurers are profit margin or Return on Sales, Return on Assets (ROA), Return on Equity (ROE), Earnings per Share (EPS) or Price Earnings Ratio. Return on Asset (ROA) is the net profit before interest and taxes (EBIT) scaled by book
value of year end total assets. Return on Equity (ROE) is the net profit before interest and taxes (EBIT) scaled by the book value of equity. Sloan (2001), argued that accounting information provides an important source of independently verified information about the performance of the managers in alleviating the agency problems and therefore, the accounting and corporate governance are inexorably mixed.

A number of studies (such as, Kesner, 1987; Molz, 1988; Zahra and Stanton, 1988; Boubakri et al, 2005) are conducted on the basis of traditional performance measurement, such as profit margin or return on sales (net income to sales), the return on assets (net income to assets), and the return on equity (such as, Berg and Smith, 1978; Fosberg, 1989; Donaldson and Davis, 1991; Rechner and Dalton, 1991; Campbell and Keys, 2002; Boubakri et al, 2005), productivity growth (such as, Lichtenberg and Pushner, 1994; Han and Suk, 1998; Claessens and Djankov, 1999b; Köke and Renneboog, 2002), relative financial performance (such as, Baysinger and Butler, 1985), environmental performance (such as, Earnhart and Lizal, 2002), earnings per share (EPS) or Price Earnings Ratio (such as, Hudson et al, 1992; Grace et al, 1995) and Closing Stock Price (such as, Rechner and Dalton, 1986; Han and Suk, 1998), total return to investors as the basis of performance measurement.

5.10.2 Market-Based Performance Measurement

Wiwattanakantang (2001, p 334) argues that not all of the agency costs are reflected in accounting performance measures. Moreover, the traditional financial accounting measures may give misleading signals for innovation (Kaplan and Norton, 1992). Therefore, stock market performance may be used and a number of studies (such as, Kesner, 1987; Holderness and Sheehan, 1988; Morck et al, 1988; McConnell and Servaes, 1990; Hermalin and Weisbach, 1991; Claessens, Djankov and Pohl, 1996; Khanna and Palepu, 1999; Xu and Wang, 1999; Sarkar and Sarkar, 2000; Demsetz and Villalonga, 2001; Gugler et al, 2003; Zeitun and Tian, 2007a,b; Farooque et al, 2007a,b) used the mix of stock market and accounting performance (for example Tobin's Q and/or Market to Book Value Ratio). Some other researchers (for example Simerly et al, 2000), advocated the Market Value Added (MVA), which is the difference between the debt and equity investors have contributed to a company and the total market value of the firm (in fact it is the net present value), as the basis for performance measurement.
In order to apply stock market performance of the firm, the stock prices have to reflect the true value of the firm (Lindenberg and Ross, 1981). Therefore, the stock market performance may not be effective in some developing and emerging economies as the capital market in those countries is not well developed and inefficient and it may be very hard to get data (Lindenberg and Ross, 1981; Khanna and Palepu, 1999; Joh, 2003). Some of the non-accounting based performances are complicated, and non-comparable. The market based performance measures are also criticized as it may not be an ‘efficient contracting parameter’ or “it is driven by many factors beyond the control of firm executives” (Bacidore et al, 1997, p 11). The market based indicators may also not be suitable particularly in the context of developing economies, where the minority protection is weak. In the words of Claessens and Djankov (1999b),

The use of stock market performance may lead to ‘downward bias in the relationship between ownership and firm’s valuation’ in a country where the minority protection is weak (p 502).

5.10.3 Limitations of Accounting Based Performance Measurement

Although each of the measures has its strengths and weaknesses, some performance measurement techniques are too narrow and some are very complicated. For example, the return on equity and return on sales will not produce the true view, since accounting profit is subject to manipulation and traditional measures of financial performance may not ensure performance in the today’s newly structured organizations (for example, Capon et al, 1996, p 89; Chow et al, 1997; Simerly and Li, 2000). Accounting profits are sometimes reported within the management guidelines and managers may tend to a particular accounting method to enhance the performance (Chakravarthy, 1986; Deegan, 2005); managers may intentionally tend to use the accounting numbers to manipulate the accounting profits (Healy, 1985; Wiwattanakantang, 2001) and then may be biased associated with some accounting standards in relation to some expenses, such as depreciation (Wiwattanakantang, 2001); accounting profit can be very high even in the presence of agency cost (Nicholson and Kiel, 2007).

5.10.4 Performance Measurement in this Study

Keeping the inconsistencies of the previous studies in mind and consistent with Daily and Dalton (1993) and Johnson et al (1996), this study considers both the
accounting and market based performance as the use of multiple measures provide a well rounded picture of the firm (Kesner, 1987). Therefore, this study uses the Return on Assets (ROA), Return on Equity (ROE) and Tobin’s Q\(^{39}\) as a reliable proxy for a firm performance. This study also uses another measure such as the Market to Book Value Ratio (MBVR) to measure company performance. It is argued that MBVR is empirically a cleaner measure and has been used as an alternative to Tobin's Q for developing country studies (such as, Barnhart et al, 1994; Xu and Wang, 1999; Lemmons and Lins, 2003), and is more aligned to the objective of the shareholders.

Consistent with earlier studies (such as, Booth et al, 2001; Yammeesri and Lodh, 2004; Brick et al, 2006; Yammeesri et al, 2006; Rashid and Lodh, 2008), Return on Assets (ROA) is calculated as the Earnings before Interest and Taxes (EBIT) scaled by the book value of total assets. Return on Equity (ROE) is calculated as the Earnings before Interest and Taxes (EBIT) scaled by the book value of equity and reserves. Reserves includes retained earnings, revaluation reserve, tax holiday reserve, dividend equalization funds and any special reserve; excluding non-performance reserves, such as capital reserve and share premiums.

Tobin’s Q, is the ratio of the market value of the firm to the replacement cost of their assets. Consistent with Agrawal and Knoeber (1996), it is measured as the market value of equity plus face value of debt (total liabilities) relative to the book value of total assets, which is shown below,

\[
\text{Tobin’s Q} = \frac{\text{Market Value of the Equity} + \text{Book Value of Debt} + \text{Book Value of Preferred Stock}}{\text{Book Value of Assets}}
\]

MBVR is calculated as the number of equity shares outstanding times the closing share price on the last day of the financial year scaled by book value of equity and reserves. More specifically,

\[
\text{MVBR} = \frac{\text{Market Value of the Equity}}{\text{Book Value of Equity} + \text{Reserves}}
\]

The market value of the equity is calculated as the number of shares outstanding multiplied by respective market price of shares.

\(^{39}\) It is argued that accounting performance measures and Tobin’s Q “should be regarded as complements rather than substitutes. Both contain information about market power and there is no compelling reason to think that either type of measure dominates the other” (Martin, 1993, p 516).
In summary this study used the ROA, ROE, MBVR and Tobin’s Q to measure the firm performance.

**Figure 11:** Mean comparative financial performance of the sample firms.

![Figure 11: Mean comparative financial performance of the sample firms.](image)

The figure 11 above represents the trends in accounting based firm performance (ROA and ROE) for all the firms in the sample. The figure 12 below represents the trends in market based firm performance (MBVR and Tobin's Q) for all the firms in the sample. Interestingly, both from the figure 11 and 12, it appears that the firm performance was gradually decreasing until 2003 and there is an upturn since 2003 for all firms and under all the performance measures.

**Figure 12:** Mean comparative market performance of the sample firms.

![Figure 12: Mean comparative market performance of the sample firms.](image)
5.11 Dependent Variable: Executive Pay

The listed firms in Bangladesh are not required to disclose the information about the compensation of individual directors and executives including the CEOs. The pilot survey of the companies ‘Annual Report’ reveals that only a few firms disclose the individual directors and executives pay; but none of the firm discloses the CEOs age, gender and experience. Therefore, the CEO compensation and other related data are not available for doing research in the context of Bangladesh. Although an attempt was made to conduct the questionnaire survey to collect such data (attached in Appendix 2), the response rate was very low. So far only one company filled and returned the questionnaire. Therefore, this does not attempt to examine the CEOs pay and firm performance. Rather, it examines the executive compensation and firm performance as the executive compensation data are available in company annual reports.

Therefore, this study considers the total top executive salaries (or the remuneration of executive directors, if reported) and executive staff welfare expense as the proxy measure of executive pay. Studies for example by Finkelstein and Hambrick (1989), Gregg, et al (1993), Byod (1994) and Conyon and Peck (1998), considered the top management salary, bonus, gratuity, provident fund contribution and other benefits and other miscellaneous earnings of a company’s paid executives in estimating executive pay.

The data of total administrative pay may provide the upward bias, however it will enable to study the pay-performance sensitivity. Researchers, such as Brunello et al, (2001), Kato et al (2005), Kato and Long (2005), Brick et al (2006) considered the total executive compensation in their study. Due to absence of a liquid capital market, the share options in the form of executive pay is absent in Bangladesh. Consistent with Core et al (1999); Brick et al (2006); Kato and Kubo (2006) and Firth et al (2006) a variable of PAY is considered as the natural logarithm of the total compensation.

5.12 Independent Variables: Governance Mechanisms

Independent variables are those variables which will influence the dependent variable such as performance. Independent variables in this study are considered to be the corporate governance variables, such as ownership structure, board composition and
board leadership structure, compensation and capital structure. These are explained in
the following paragraphs.

5.12.1 Ownership Variables

Ownership variable is the representation of the shareholders in a corporation. As
noted in Chapter 3 shareholding in the form of pyramidal or cross shareholding
structure is not very common in Bangladesh. Therefore, there is no guideline regarding
argues that the shareholders in a modern company can be classified into three
categories. These are the (a) significant shareholders, (b) institutional shareholders and
(c) individual shareholders. Listed companies in Bangladesh are not exception to this.
However, this study classifies the ownership structure into the founder or sponsor
ownership, blockholding, institutional ownership and outsiders. Consistent with
Demsetz and Lehn (1985), Morck et al, (1988), Short and Keasey (1999), Demsetz and
Villalonga (2001) and Lins (2003), this study defines the ownership concentration as
the percentage of shares held by three different ownership categories. Therefore, the
director/sponsor ownership in this study is considered to be the percentage of shares
held by directors/sponsors; institutional shareholding is the percentage of shares held
by institutions. Although there are some forms of government ownership. These are
excluded during the construction of samples as this study does not consider the
government owned entity. Outside ownership is considered to be the percentage of
shares owned by outsiders.

The ownership data remained relatively the same throughout the study period.
In summary ownership categories are defined in the following table.

Table 13: Ownership concentration in the sample

<table>
<thead>
<tr>
<th>Ownership Category</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Directors/Sponsors</td>
<td>Percentage of shares owned by directors/sponsors.</td>
</tr>
<tr>
<td>Ownership</td>
<td></td>
</tr>
<tr>
<td>Blockholding</td>
<td>Percentage of shares owned by three (3) largest blockholders.</td>
</tr>
<tr>
<td>Institutional Ownership</td>
<td>Percentage of shares owned by institution(s).</td>
</tr>
<tr>
<td>Outside Ownership</td>
<td>Percentage of shares owned by public other than the directors/sponsors and institutions.</td>
</tr>
</tbody>
</table>
A variable DIROWN is considered for the percentage of shares owned by sponsors/directors. A variable LBOWN1, LBOWN2, and LBOWN3 are considered for the percentage of shares owned by first, second, and third largest blockholders respectively. Consistent with Demsetz and Lehn (1985) and Boubakri et al. (2005), this study also uses the Herfindhal Index 3 (H3) of ownership concentration (as the sum of squared percentage of shares owned by the three largest blockholders). A variable INSTOWN is considered for the percentage of shares owned by institutions. A variable OUTOWN is considered for the percentage of shares owned by outsiders.

5.12.2 Board Composition

Traditionally the corporate boards in Bangladesh are a one-tier board. There is no supervisory board and both the executive and the non-executive directors perform duties together in one organizational layer. As discussed in Chapter 2, representatives of these concentrated owners hold the position in the company board and management, leading to poor monitoring and control. The ‘Corporate Governance Notification 2006’ requires that 1/10th or at least one independent director is to be appointed into the board. Therefore, a variable of board composition (BDCOM) in this study refers to the percentage of seat held by the outsiders or independent directors, who do not have any material interest into the firm (Rechner and Dalton, 1986; Zahra and Stanton, 1988) and who also meets the definition of independent directors as provided in the ‘Corporate Governance Notification 2006’ issued by Securities and Exchange Commission Bangladesh (provided in appendix 3).

5.12.3 CEO Duality

The CEO duality is the situation when the chair of the board and the CEO or Managing Director holds the same position. Consistent with the study by Boyd (1994), Daily and Dalton (1994b), Conyon and Peck (1998), Core et al. (1999), Abdullah (2004), the CEO duality variable is a binary and defined as a variable of CEOD, which is equal to be one (1) if the post is hold by same person as the CEO and Chairperson, otherwise zero (0).
5.12.4 Capital Structure

Capital structure or leverage is measured as the debt ratios. Studies by Prowse (1990); Agrawal and Knoeber (1996); Cho (1998); Graham et al (2004); Bebchuk et al (2005) and Khanna and Tice (2005) used the long term debt scaled by total assets/replacement cost of assets to calculate the leverage ratio. Farooque et al (2007b) used the total debt scaled by total assets to calculate the leverage ratio. This study considers four specific measures of debt, such as, Short Term Debt to Total Assets (STDTA), Long Term Debt to Total Assets (LTDTA), Total Debt to Total Assets (TDTA), and Total Debt to Total Equity (TDTE) as the debt ratio. The Short Term Debt to Total Assets (STDTA) is calculated by scaling short term debt (excluding accounts payable, payable for expenses and dividend payable etc.), by total assets. The Long Term Debt to Total Assets (LTDTA) is calculated by scaling long term debt by total assets. Similarly the Total Debt to Total Assets (TDTA) is calculated by scaling total debt by total assets. The Total Debt to Total Equity (TDTE) is calculated by scaling the book value of total debt by total book value of equity plus book value of reserve and surplus. More specifically the important debt ratios, such as Total Debt to Total Assets (TDTA) and Total Debt to Total Equity (TDTE) are calculated as follows:

\[ TDTA = \frac{\text{Total Debt} - \text{Accounts Payable} - \text{Liabilities for Expenses}}{\text{Total Assets}} \]

\[ TDTE = \frac{\text{Total Debt} - \text{Accounts Payable} - \text{Liabilities for Expenses}}{\text{Book Value of Equity} + \text{Book Value of Reserves and Surpluses}} \]

5.12.5 Agency Cost

The agency cost is generated in the efforts to manage the conflicting interests of both the parties in an agency relationship (Jensen, 2004) and it include the costs of restructuring, monitoring, and bonding a set of contracts among agents with conflicting interests, plus the residual loss incurred (Jensen and Meckling, 1976). Consistent with the studies by Ang et al (2000) and Singh and Davidson III (2003), the agency cost is measured as (a) the expense ratio and (b) the asset utilization ratio or assets turnover ratio. Expense ratio is the ratio of operating expenses (excluding financing expense and any non-recurring expense, such as loss on sale of assets) and annual sales and measures how effectively firm’s management controls operating costs. The asset utilization ratio is the ratio of annual sales and total assets and measures how
effectively firm’s assets are employed. In the words of Singh and Davidson III (2003), agency cost “measures management’s ability to employ assets efficiently” (pp 798-799). A low ‘expense ratio’ means that management is controlling the operating expenses and vice versa, whereas a low ‘asset utilization ratio’ means that management is using the assets in non-cash flow generating venture and vice versa. This is simple if the assets are utilized in the productive way, these will be generating more revenue and thereby cash flow. A variable of ER is considered to denote the ‘expense ratio’ and a variable of AUR is considered to denote the ‘asset utilization ratio’.

5.13 Control Variables

The control variables in this study are the (1) Board Size, (2) Firm Size, (3) Firm Age (4) Firm Growth, (5) Liquidity and (6) Tax.

5.13.1 Board Size

Board size has a number of implications for board functioning and thereby firm performance (such as, Chaganti et al, 1985, Yermack, 1996; Barnhart and Rosenstein, 1998; Raheja, 2005; Coles et al, 2008). “Larger boards were assumed to have directors with diverse educational and industrial backgrounds and skill and with multiple perspectives that improves the quality of action taken by the firm” (Zahra and Pearce II, 1989, p 311); larger board is capable to monitor management as CEO is unable to dominate larger board (Kula, 2005). A smaller board is manageable and plays a controlling function, whereas a larger board is non-manageable (Eisenberg et al, 1998); may have greater agency problems and may not be able to act effectively leaving management relatively free (Chaganti et al, 1985; Jensen, 1993; Hermalin and Weisbach, 2003). Consistent with Elsayed (2007) and many others, a variable BDSIZE is considered as the natural logarithms of total board members.

5.13.2 Firm Size

Earlier studies (such as, Morck et al, 1988; McConnell and Servaes 1990; Cho, 1998; Majumdar and Chhibber, 1999; Short and Keasey, 1999; Xu and Wang, 1999; Lins, 2003) used the firm size as a control variable. The firm size may influence the performance as the large firms have more capacity to generate internal funds (Short and Keasey, 1999); large firms have a greater variety of capabilities (Majumdar and
Chhibber, 1999); large firms may also have problems of coordination, which may negatively influence its performance (Williamson, 1967). Morck et al (1988); McConnell and Servaes (1990) and Short and Keasey (1999), used the replacement cost of assets as firm size. However, Cho (1998) argue that if the replacement costs of assets are measured with error, there will be spurious negative relationship between firm size and corporate value. This study considers the natural logarithm of total sales as firm size, SIZE1, as well as natural logarithm of total closing book value of assets as firm size, SIZE2.

5.13.3 Firm Age

Firm performance may also be influenced by firm age; the older firms are likely to be more efficient than younger firms (Ang et al, 2000). Therefore, consistent with Majumdar and Chhibber (1999) and Ang et al (2000), a variable of AGE is defined as the natural logarithm of the number of years firm have been listed on the stock exchange.

5.13.4 Firm Growth

Consistent with Morck et al (1988) and Short and Keasey (1999), this study considers a control variable growth, as measured in the percentage of annual change in sales. A variable of GROWTH is considered to denote the impact of growth on firm performance.

5.13.5 Liquidity

The firm which has high liquidity is less likely to become bankrupt or default. Consistent with Majumdar and Chhibber (1999), this study considers the liquidity as a control variable while examining the relationship between capital structure and firm performance. Therefore, a variable Current Ratio is considered as the reliable proxy of Liquidity (LIQ), which is calculated as,

\[ \text{Liquidity} = \frac{\text{Current Assets}}{\text{Current Liabilities}} \]
5.13.6 Tax

It is expected that the firm’s borrowing will impact on firm profitability in the form of tax savings on interest payment (Krishnan and Moyer, 1997). Therefore, while examining the capital structure and firm performance, this study considers the TAX as a control variable that may influence firm performance. Consistent with Booth et al, (2001), the effective average tax rate was used in this study as the ratio of total tax payment and operating income. “The advantage of the average tax rate is that it includes the impact of tax loss carry forwards and the use of corporations as a conduit for income flows” (Booth et al, 2001, p 99).

5.13.7 Summary of Variables

The variables defined above are interpreted in table 14. The subscript \( i \) and \( t \) represent the different firms and different years respectively. The summary statistics of the variables showing mean, median, and standard deviation are presented in table 15.

<table>
<thead>
<tr>
<th>Table 14: Variable definitions and measurements</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Panel A: Performance Variables</strong></td>
</tr>
<tr>
<td>(a) ROA(_{i,t})</td>
</tr>
<tr>
<td>(b) ROE(_{i,t})</td>
</tr>
<tr>
<td>(c) Tobin’s Q(_{i,t})</td>
</tr>
<tr>
<td>(d) MBVR(_{i,t})</td>
</tr>
</tbody>
</table>
### Panel B: Governance Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) DIROWN_{i,t}</td>
<td>It is the percentage of shares owned by sponsors/directors for firm ( i ) in time ( t ).</td>
</tr>
<tr>
<td>(b) DIROWN^2_{i,t}</td>
<td>It is the square root of percentage of shares owned by sponsors/directors for firm ( i ) in time ( t ).</td>
</tr>
<tr>
<td>(c) DIROWN^3_{i,t}</td>
<td>It is the cube root of percentage of shares owned by sponsors/directors for firm ( i ) in time ( t ).</td>
</tr>
<tr>
<td>(d) LBOWN_{i,t}</td>
<td>It is the percentage of shares owned by the largest blockholder for firm ( i ) in time ( t ).</td>
</tr>
<tr>
<td>(e) LBOWN^2_{i,t}</td>
<td>It is the square root of percentage of largest blockholder for firm ( i ) in time ( t ).</td>
</tr>
<tr>
<td>(f) LBOWN^3_{i,t}</td>
<td>It is the cube root of percentage of largest blockholder for firm ( i ) in time ( t ).</td>
</tr>
<tr>
<td>(g) LBOWN2_{i,t}</td>
<td>It is the percentage of shares owned by second largest blockholder for firm ( i ) in time ( t ).</td>
</tr>
<tr>
<td>(h) LBOWN3_{i,t}</td>
<td>It is the percentage of shares owned by the third largest blockholder for firm ( i ) in time ( t ).</td>
</tr>
<tr>
<td>(i) L3_{i,t}</td>
<td>It is the cumulative percentage of shares owned by three largest blockholders for firm ( i ) in time ( t ).</td>
</tr>
<tr>
<td>(j) H3_{i,t}</td>
<td>It is the Herfindhal Index of ownership concentration calculated as the sum of squared percentage of shares owned by the three largest blockholders for firm ( i ) in time ( t ).</td>
</tr>
<tr>
<td>(k) INSTOWN_{i,t}</td>
<td>It is the percentage of shares owned by institutional investors for firm ( i ) in time ( t ).</td>
</tr>
<tr>
<td>(l) INSTOWN^2_{i,t}</td>
<td>It is the square root of percentage of shares owned by institutional investors for firm ( i ) in time ( t ).</td>
</tr>
<tr>
<td>(m) INSTOWN^3_{i,t}</td>
<td>It is the cube root of percentage of shares owned by institutional investors for firm ( i ) in time ( t ).</td>
</tr>
<tr>
<td>(n) OUTOWN_{i,t}</td>
<td>It is the percentage of shares owned by outside investors for firm ( i ) in time ( t ).</td>
</tr>
<tr>
<td>(o) BDCOM&lt;sub&gt;i,t&lt;/sub&gt;</td>
<td>It is the board composition for firm ( i ) in time ( t ). It is calculated as the ratio of outside independent directors and total board members.</td>
</tr>
<tr>
<td>----------------------</td>
<td>--------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>(p) CEOD&lt;sub&gt;i,t&lt;/sub&gt;</td>
<td>A variable CEO duality for firm ( i ) in time ( t ). It is considered to be one (1) if the post CEO and board chair is hold by same person, otherwise zero (0).</td>
</tr>
<tr>
<td>(q) PAY&lt;sub&gt;i,t&lt;/sub&gt;</td>
<td>It is the natural logarithm of the total executive pay for firm ( i ) in time ( t ).</td>
</tr>
<tr>
<td>(r) ER&lt;sub&gt;i,t&lt;/sub&gt;</td>
<td>It is the expense ratio for firm ( i ) in time ( t ). It is calculated as the ratio of operating expenses and annual sales.</td>
</tr>
<tr>
<td>(s) AUR&lt;sub&gt;i,t&lt;/sub&gt;</td>
<td>It is the assets utilization ratio for firm ( i ) in time ( t ). It is calculated as the ratio of annual sales and total assets.</td>
</tr>
</tbody>
</table>

**Panel C: Other Variables**

<table>
<thead>
<tr>
<th>(a) BDSIZE&lt;sub&gt;i,t&lt;/sub&gt;</th>
<th>It is the natural logarithm of total board member for firm ( i ) in time ( t ).</th>
</tr>
</thead>
<tbody>
<tr>
<td>(b) STDTA&lt;sub&gt;i,t&lt;/sub&gt;</td>
<td>It is the ratio of short term debt to total assets for firm ( i ) in time ( t ).</td>
</tr>
<tr>
<td>(c) LTDTA&lt;sub&gt;i,t&lt;/sub&gt;</td>
<td>It is the ratio of long term debt to total assets for firm ( i ) in time ( t ).</td>
</tr>
<tr>
<td>(d) TDTA&lt;sub&gt;i,t&lt;/sub&gt;</td>
<td>It is the ratio of total debt to total assets for firm ( i ) in time ( t ).</td>
</tr>
<tr>
<td>(e) TDTE&lt;sub&gt;i,t&lt;/sub&gt;</td>
<td>It is the ratio of total debt to total equity for firm ( i ) in time ( t ).</td>
</tr>
<tr>
<td>(f) TAX&lt;sub&gt;i,t&lt;/sub&gt;</td>
<td>It is the tax rate for firm ( i ) in time ( t ). It is calculated as the ratio of total tax payment and earnings before interest and taxes (EBIT).</td>
</tr>
<tr>
<td>(g) LIQ&lt;sub&gt;i,t&lt;/sub&gt;</td>
<td>It is the current ratio for firm ( i ) in time ( t ). It is calculated as the ratio of current assets and current liabilities.</td>
</tr>
<tr>
<td>(h) SIZE&lt;sub&gt;1i,t&lt;/sub&gt;</td>
<td>It is the firm size for firm ( i ) in time ( t ). It is defined as the natural logarithm of sales.</td>
</tr>
<tr>
<td>(i) SIZE&lt;sub&gt;2i,t&lt;/sub&gt;</td>
<td>It is also the firm size for firm ( i ) in time ( t ). It is defined as the natural logarithm of total assets.</td>
</tr>
<tr>
<td>(j) AGE&lt;sub&gt;i,t&lt;/sub&gt;</td>
<td>It is the firm age for firm ( i ) in time ( t ). It is defined as the natural logarithm of the number of years firm have been listed on the stock exchange.</td>
</tr>
</tbody>
</table>
To minimize the errors and omission, the data were posted and verified for five times. The descriptive statistics of the variables are presented in table 15 below. It reveals that the average firm performance is 5.4 percent, ranging from -114.2 percent to 34.1 percent under ROA; average firm performance is 22.2 percent ranging from -787.5 percent to 2961.0 percent under ROE; average firm performance is 102.0 percent ranging from 2175.3 percent to 7,950.1 percent under MBVR; average firm performance is 91.1 percent ranging from 8.5 percent to 806.9 percent under Tobin’s Q. From this descriptive statistics it appears that the firm performance is very poor under accounting performance measures, whereas it looks like that firms are performing well under the market based performance measures.

The descriptive statistics of the sample confirms that there is a high degree of ownership concentration by the directors/sponsor and blockholders. The average directors/sponsors ownership is 44.80 percent which ranges from 0 to 97.60 percent. The average largest blockholding is 39.20 percent which ranges from 0 to 97.70 percent. The descriptive statistics indicates that the median largest blockholders (LBOWN) exceeds the Anglo-American, but remains well below the European standards of blockholding, ranging from 0 in United States and 54.53 percent in Italy (Becht and Röell, 1999).

The average institutional ownership is 17.80 percent which ranges from 0 to 57.00 percent. The average institutional ownership does not exceed the Anglo-American standards. In United Kingdom 60.00 percent of the shares in the listed companies are owned by local institutions and further 20.00 percent are owned by overseas institutions (Hampel Report, 1998; Farrar, 2005, p 339). In the United States, it is 50.00 percent for local institutions (Farrar, 2005, p 339). This percentage is 36.90 percent in Australia (Farrar, 2005, p 339). The average outside ownership is 35.0 percent which ranges from 0 to 99.8 percent. From these it appears that there is a relative domination in the ownership by the directors/sponsors.

The average board size is 1.74 ranging from minimum 3 directors to maximum 12 directors. The total debt to total assets (TDTA) ranges from 0 percent to 775.40
percent with an average of 53.50 percent, implying that almost more than 50 percent of the assets are financed by debt. The average expense ratio is 38.50 percent, ranging from 0 to 9,635.50 percent. It is implying that the firms are on an average controlling the operating expenses. The average asset utilization ratio is 77.00 percent, ranging from 0 to 716.7 percent. It is implying that the firms are effectively using its assets in cash flow generating venture. The average firm age in the sample is 12.57 years, ranging from 2 to 30 years. The average firm growth is the 10.30 percent, ranging from -100 percent to 1,205.90 percent. It implies that some firms are tending to be default, whereas some other firms are growing at very faster rate.
### Table 15: Descriptive Statistics of the Sample (N=774)

#### Panel A: Performance Measures

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>Median</th>
<th>Standard Deviation</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROA</td>
<td>0.054</td>
<td>0.059</td>
<td>0.093</td>
<td>-1.142</td>
<td>0.341</td>
<td>-3.807</td>
<td>43.735</td>
</tr>
<tr>
<td>ROE</td>
<td>0.222</td>
<td>0.186</td>
<td>1.618</td>
<td>-7.875</td>
<td>29.610</td>
<td>11.480</td>
<td>193.868</td>
</tr>
<tr>
<td>MBVR</td>
<td>1.020</td>
<td>0.703</td>
<td>4.236</td>
<td>-21.753</td>
<td>79.501</td>
<td>11.103</td>
<td>194.339</td>
</tr>
<tr>
<td>Tobin's Q</td>
<td>0.911</td>
<td>0.761</td>
<td>0.696</td>
<td>0.085</td>
<td>8.069</td>
<td>4.371</td>
<td>31.614</td>
</tr>
</tbody>
</table>

#### Panel B: Governance Variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>Median</th>
<th>Standard Deviation</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Directors/Sponsor Shareholding</td>
<td>0.448</td>
<td>0.000</td>
<td>0.160</td>
<td>0.000</td>
<td>0.976</td>
<td>0.106</td>
<td>0.093</td>
</tr>
<tr>
<td>Largest Blockholders (LBOWN)</td>
<td>0.392</td>
<td>0.375</td>
<td>0.213</td>
<td>0.000</td>
<td>0.977</td>
<td>0.277</td>
<td>-0.495</td>
</tr>
<tr>
<td>2nd Largest Blockholders (LBOWN2)</td>
<td>0.126</td>
<td>0.103</td>
<td>0.097</td>
<td>0.000</td>
<td>0.540</td>
<td>1.166</td>
<td>1.557</td>
</tr>
<tr>
<td>3rd Largest Blockholders (LBOWN3)</td>
<td>0.055</td>
<td>0.035</td>
<td>0.061</td>
<td>0.000</td>
<td>0.394</td>
<td>2.236</td>
<td>6.512</td>
</tr>
<tr>
<td>Largest Three Blockholders (L3)</td>
<td>0.574</td>
<td>0.594</td>
<td>0.230</td>
<td>0.000</td>
<td>1.075</td>
<td>-0.469</td>
<td>0.021</td>
</tr>
<tr>
<td>Herfindhal Index (H3)</td>
<td>0.231</td>
<td>0.186</td>
<td>0.184</td>
<td>0.000</td>
<td>0.954</td>
<td>1.147</td>
<td>1.227</td>
</tr>
<tr>
<td>Institutions Shareholding</td>
<td>0.178</td>
<td>0.160</td>
<td>0.156</td>
<td>0.000</td>
<td>0.570</td>
<td>0.462</td>
<td>-0.896</td>
</tr>
<tr>
<td>Outside Shareholding</td>
<td>0.350</td>
<td>0.350</td>
<td>0.172</td>
<td>0.000</td>
<td>0.998</td>
<td>0.159</td>
<td>-0.417</td>
</tr>
<tr>
<td>Panel C: Other Variables</td>
<td>Mean</td>
<td>Standard Deviation</td>
<td>Minimum</td>
<td>Maximum</td>
<td>Skewness</td>
<td>Kurtosis</td>
<td></td>
</tr>
<tr>
<td>--------------------------</td>
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<td>---------</td>
<td>---------</td>
<td>----------</td>
<td>----------</td>
<td></td>
</tr>
<tr>
<td>Board Composition</td>
<td>0.111</td>
<td>0.049</td>
<td>0.000</td>
<td>1.740</td>
<td>-0.457</td>
<td>-0.031</td>
<td></td>
</tr>
<tr>
<td>Board Size</td>
<td>1.792</td>
<td>0.302</td>
<td>1.361</td>
<td>1.550</td>
<td>-0.399</td>
<td>-0.046</td>
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<tr>
<td>PAY (Log)</td>
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<td>0.000</td>
<td>0.629</td>
<td>-0.046</td>
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</tr>
<tr>
<td>STDTA</td>
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<td>0.000</td>
<td>0.000</td>
<td>-0.046</td>
<td>-0.057</td>
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<tr>
<td>LTDTA</td>
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<td>0.000</td>
<td>0.000</td>
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<tr>
<td>TDTA</td>
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<td>0.005</td>
<td>0.995</td>
<td>-0.046</td>
<td>-0.057</td>
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<tr>
<td>TDE</td>
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<td>0.000</td>
<td>0.000</td>
<td>-0.046</td>
<td>-0.057</td>
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</tr>
<tr>
<td>Expense Ratio</td>
<td>0.770</td>
<td>1.061</td>
<td>0.615</td>
<td>1.319</td>
<td>0.733</td>
<td>1.900</td>
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<tr>
<td>Asset Utilization Ratio</td>
<td>2.545</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>-0.046</td>
<td>-0.057</td>
<td></td>
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<tr>
<td>Firm Age (Log)</td>
<td>5.939</td>
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<td>-0.046</td>
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<tr>
<td>SIZE1 (Log Assets)</td>
<td>5.268</td>
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<td>-0.057</td>
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<tr>
<td>SIZE2 (Log Sales)</td>
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<td>-0.046</td>
<td>-0.057</td>
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<tr>
<td>GROWTH</td>
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<td>0.000</td>
<td>0.000</td>
<td>-0.046</td>
<td>-0.057</td>
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</table>
5.14 Model Specifications for Empirical Analysis

The hypotheses are tested by using panel data in Two-Stage Least Square (2SLS) Regressions. The regression analysis examines the relationship among the corporate governance variables and firm performance. The details of the models for statistical analyses to test the hypotheses are explained in the following paragraphs.

5.14.1 Director Stock Ownership and Firm Performance Hypothesis

Following model is developed to test the directors/sponsors stock ownership and firm performance. This model is the modifications of the McConnell and Servaes (1990), Short and Keasey (1999).

\[ Y_{i,t} = \alpha + \beta_1 \text{DIROWN}_{i,t} + \beta_2 \text{TDTA}_{i,t} + \beta_3 \text{TDTE}_{i,t} + \beta_4 \text{AGE}_{i,t} + \beta_5 \text{SIZE1}_{i,t} + \beta_6 \text{SIZE2}_{i,t} + \beta_7 \text{GROWTH}_{i,t} + \epsilon_{i,t} \]

Where, \( Y_{i,t} \) is alternatively ROA_{i,t}, ROE_{i,t}, MBVR_{i,t} and Tobin’s \( Q_{i,t} \). \( \text{DIROWN}_{i,t} \) is the percentage of shares held by directors. \( \text{TDTA}_{i,t} \) and \( \text{TDTE}_{i,t} \) are the total debt to total assets and total debt to total equity respectively. As described in Chapter 2 and 3 debts has a significant influence in shaping the firm performance. Therefore, consistent with by McConnell and Servaes (1990), Agrawal and Knoeber (1996), Short and Keasey (1999), Xu and Wang (1999) the control variable debt is included to identify the influence of debt on ownership concentration and firm performance. \( \text{AGE}_{i,t} \) is the firm’s age, representing the number of years the firm is listed in the stock exchange. \( \text{SIZE1}_{i,t} \) and \( \text{SIZE2}_{i,t} \) are firm’s sizes representing the natural logarithm of firm’s total assets and natural logarithm of total net sales respectively. The firm size is an important variable affecting the firm performance (Demsetz and Lehn, 1985). Studies for example by McConnell and Servaes (1990) also included the control variable firm size to relate the ownership and performance. \( \text{GROWTH}_{i,t} \) is firm’s growth representing the changes in sales. \( \alpha \) is the intercept, \( \beta \) is the regression coefficient and \( \epsilon \) is the error term.

In order to examine the linearity of relationship between the director stock ownership and firm performance, the following model is developed. This model is also the modification of Short and Keasey (1999).

\[ Y_{i,t} = \alpha + \beta_1 \text{DIROWN}^1_{i,t} + \beta_2 \text{DIROWN}^2_{i,t} + \beta_3 \text{DIROWN}^3_{i,t} + \beta_4 \text{TDTA}_{i,t} + \beta_5 \text{TDTE}_{i,t} + \beta_6 \text{AGE}_{i,t} + \beta_7 \text{SIZE1}_{i,t} + \beta_8 \text{SIZE2}_{i,t} + \beta_9 \text{GROWTH}_{i,t} + \epsilon_{i,t} \]

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Where, \( Y_{i,t} \) is alternatively ROA\(_{i,t}\), ROE\(_{i,t}\), Tobin’s \( Q_{i,t} \) and MBVR\(_{i,t}\) respectively. DIROWN\(_{i,t}\) is the percentage of shares held by directors/sponsors; DIROWN\(^2\)\(_{i,t}\) is the square root of the percentage of shares held by the directors/sponsors and DIROWN\(^3\)\(_{i,t}\) is the cube root of percentage of shares held by directors/sponsors.

### 5.14.2 Blockholding and Firm Performance Hypothesis

Similar to director shareholding and firm performance model, the following model is developed to examine the relationship between the largest blockholders and firm performance. This model is also a modification of McConnell and Servaes (1990), Short and Keasey (1999).

\[
Y_{i,t} = \alpha + \beta_1 \text{LBOWN}_{i,t} + \beta_2 \text{TDTA}_{i,t} + \beta_3 \text{TDE}_{i,t} + \beta_4 \text{AGE}_{i,t} + \beta_5 \text{SIZE1}_{i,t} + \beta_6 \text{SIZE2}_{i,t} + \beta_7 \text{GROWTH}_{i,t} + \varepsilon_{i,t}
\]

Where, \( Y_{i,t} \) is alternatively ROA\(_{i,t}\), ROE\(_{i,t}\), MBVR\(_{i,t}\) and Tobin’s \( Q_{i,t} \). LBOWN\(_{i,t}\) is the percentage of shares held by largest blockholders. TDTA\(_{i,t}\) and TDE\(_{i,t}\) are the total debt to total assets and total debt to total equity respectively. AGE\(_{i,t}\) is firm’s age, representing the number of the year firm is listed in the stock exchange. SIZE1\(_{i,t}\) and SIZE2\(_{i,t}\) are firm’s sizes representing the natural logarithm of firm’s total assets and natural logarithm of total net sales respectively. GROWTH\(_{i,t}\) is firm’s growth representing the changes in sales. \( \alpha \) is the intercept, \( \beta \) is the regression coefficient and \( \varepsilon \) is the error term.

In order to examine the linearity of relationship between the blockholding and firm performance, the following model is also developed,

\[
Y_{i,t} = \alpha + \beta_1 \text{LBOWN}_{i,t} + \beta_2 \text{LBOWN}^2_{i,t} + \beta_3 \text{LBOWN}^3_{i,t} + \beta_4 \text{TDTA}_{i,t} + \beta_5 \text{TDE}_{i,t} + \beta_6 \text{AGE}_{i,t} + \beta_7 \text{SIZE1}_{i,t} + \beta_8 \text{SIZE2}_{i,t} + \beta_9 \text{GROWTH}_{i,t} + \varepsilon_{i,t}
\]

Where, \( Y_{i,t} \) is alternatively ROA\(_{i,t}\), ROE\(_{i,t}\), Tobin’s \( Q_{i,t} \) and MBVR\(_{i,t}\) respectively. LBOWN\(_{i,t}\) is the percentage of shares held by largest blockholders; LBOWN\(^2\)\(_{i,t}\) is the square root of the percentage of shares held by largest blockholders and LBOWN\(^3\)\(_{i,t}\) is the cube root of percentage of shares held by largest blockholders.

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5.14.3 Institutional Ownership and Firm Performance Hypothesis

Similar to director and blockholding model, the following model is developed to examine the relationship between the institutional ownership and firm performance. This model is also a modification of McConnell and Servaes (1990), Short and Keasey (1999).

\[ Y_{it} = \alpha + \beta_1 \text{INSTOWN}_{it} + \beta_2 \text{TDTA}_{it} + \beta_3 \text{TDTE}_{it} + \beta_4 \text{AGE}_{it} + \beta_5 \text{SIZE1}_{it} + \beta_6 \text{SIZE2}_{it} + \beta_7 \text{GROWTH}_{it} + \varepsilon_{it} \]

Where, \( Y_{it} \) is alternatively \( \text{ROA}_{it} \), \( \text{ROE}_{it} \), \( \text{MBVR}_{it} \) and Tobin’s \( Q_{it} \). \( \text{INSTOWN}_{it} \) is the percentage of shares held by institutions. \( \text{TDTA}_{it} \) and \( \text{TDTE}_{it} \) are the total debt to total assets and total debt to total equity respectively. \( \text{AGE}_{it} \) is firm’s age, representing the number of the year firm is listed in the stock exchanges. \( \text{SIZE1}_{it} \) and \( \text{SIZE2}_{it} \) are firm’s sizes representing the natural logarithm of firm’s total assets and natural logarithm of total net sales respectively. \( \text{GROWTH}_{it} \) is the firm’s growth representing the changes in sales. \( \alpha \) is the intercept, \( \beta \) is the regression coefficient and \( \varepsilon \) is the error term.

In order to examine the linearity of relationship between the institutional ownership and firm performance, the following model is developed.

\[ Y_{it} = \alpha + \beta_1 \text{INSTOWN}_{it} + \beta_2 \text{INSTOWN}^2_{it} + \beta_3 \text{INSTOWN}^3_{it} + \beta_4 \text{TDTA}_{it} + \beta_5 \text{TDTE}_{it} + \beta_6 \text{AGE}_{it} + \beta_7 \text{SIZE1}_{it} + \beta_8 \text{SIZE2}_{it} + \beta_9 \text{GROWTH}_{it} + \varepsilon_{it} \]

Where, \( Y_{it} \) is alternatively \( \text{ROA}_{it} \), \( \text{ROE}_{it} \), Tobin’s \( Q_{it} \) and MBVR \( i,t \) respectively. \( \text{INSTOWN}_{it} \) is the percentage of shares held by institutions; \( \text{INSTOWN}^2_{it} \) is the square root of the percentage of shares held by institutions and \( \text{INSTOWN}^3_{it} \) is the cube root of percentage of shares held by institutions.

5.14.4 Outsider Stock Ownership and Firm Performance Hypothesis

Similar to other models, the following model is developed to examine the relationship between the outside ownership and firm performance. This model is also a modification of McConnell and Servaes (1990), Short and Keasey (1999).

\[ Y_{it} = \alpha + \beta_1 \text{OUTOWN}_{it} + \beta_2 \text{TDTA}_{it} + \beta_3 \text{TDTE}_{it} + \beta_4 \text{AGE}_{it} + \beta_5 \text{SIZE1}_{it} + \beta_6 \text{SIZE2}_{it} + \beta_7 \text{GROWTH}_{it} + \varepsilon_{it} \]

Where, \( Y_{it} \) is alternatively \( \text{ROA}_{it} \), \( \text{ROE}_{it} \), MBVR \( i,t \) and Tobin’s \( Q_{it} \). \( \text{OUTOWN}_{it} \) is the percentage of shares held by outsiders. \( \text{TDTA}_{it} \) and \( \text{TDTE}_{it} \) are the
total debt to total assets and total debt to total equity respectively. \( \text{AGE}_{i,t} \) is firm’s age, representing the number of the year firm is listed in the stock exchange. \( \text{SIZE1}_{i,t} \) and \( \text{SIZE2}_{i,t} \) are firm’s sizes representing the natural logarithm of firm’s total assets and natural logarithm of total net sales respectively. \( \text{GROWTH}_{i,t} \) is firm’s growth representing the changes in sales. \( \alpha \) is the intercept, \( \beta \) is the regression coefficient and \( \epsilon \) is the error term. The linearity between the outside ownership and firm performance is not examined.

### 5.14.5 Board Composition and Firm Performance Hypothesis

In order to examine the relationship between board composition and firm performance, the following model is developed.

\[
Y_{i,t} = \alpha + \beta_1 \text{BDCOMM}_{i,t} + \beta_2 \text{CEOD}_{i,t} + \beta_3 \text{BDSIZE}_{i,t} + \beta_4 \text{AGE}_{i,t} + \beta_5 \text{SIZE1}_{i,t} + \beta_6 \text{SIZE2}_{i,t} + \\
\beta_7 \text{GROWTH}_{i,t} + \epsilon_{i,t}
\]

Where, \( Y_{i,t} \) is alternatively ROA\(_{i,t} \), ROE\(_{i,t} \), MBVR\(_{i,t} \) and Tobin’s Q\(_{i,t} \). \( \text{BDCOMM}_{i,t} \) is the board composition, \( \text{CEOD}_{i,t} \) is the CEO duality, \( \text{BDSIZE}_{i,t} \) is the board size, \( \text{AGE}_{i,t} \) is the firm’s age. \( \text{SIZE1}_{i,t} \) and \( \text{SIZE2}_{i,t} \) is the firm’s size, \( \text{GROWTH}_{i,t} \) is the firm’s growth representing the changes in sales. \( \alpha \) is the intercept, \( \beta \) is the regression coefficient and \( \epsilon \) is the error term.

### 5.14.6 CEO Duality and Firm Performance Hypothesis

In order to examine the relationship between CEO duality and firm performance, the following model is developed. This is the modification of the model used by Elsayed (2007).

\[
Y_{i,t} = \alpha + \beta_1 \text{CEOD}_{i,t} + \beta_2 \text{BDSIZE}_{i,t} + \beta_3 \text{DIROWN}_{i,t} + \beta_4 \text{INSTOWN}_{i,t} + \beta_5 \text{TDTA}_{i,t} + \\
\beta_6 \text{TDTEm}_{i,t} + \beta_7 \text{AGE}_{i,t} + \beta_8 \text{SIZE1}_{i,t} + \beta_9 \text{SIZE2}_{i,t} + \epsilon_{i,t}
\]

Where, \( Y_{i,t} \) is alternatively ROA\(_{i,t} \), ROE\(_{i,t} \), MBVR\(_{i,t} \) and Tobin’s Q\(_{i,t} \). \( \text{CEOD}_{i,t} \) is the CEO duality, \( \text{BDSIZE}_{i,t} \) is the board size. In most of the companies in Bangladesh, the CEOs are the representative of the concentrated shareholders, family members of the controlling shareholders. Their qualification and expertise does not always prevail in appointing them into the firm. CEO duality with the presence of management
ownership may align the interest of CEO with that of shareholders (Barnhart and Rosenstein, 1998; Kholeif, 2008). Further, institutional investors can control and decisions and actions taken by CEO and limit the power of CEO when the positions of CEO and Chairperson are combined (Kholeif, 2008). Therefore, consistent with Kula (2005), Elsayed (2007) and Kholeif (2008), this study also considers directors (DIROWN) and institutions (INSTOWN) ownership as the control variable to identify the impact of ownership on board leadership structure and firm performance. DIROWN_{i,t} and INSTOWN_{i,t} are considered as the percentage of shares owned by directors/sponsors and institutions respectively. TDTA_{i,t} is the total debt to total assets and TDTE_{i,t} is the total debt to total equity, AGE_{i,t} is the firm’s age, SIZE1_{i,t} and SIZE2_{i,t} is the firm’s size. α is the intercept, β is the regression coefficient and ε is the error term.

5.14.7 Executive Pay and Ownership Structure, Firm Size Hypothesis

In order to examine the relationship between the ownership structure, firm size and executive pay, the following model is developed,

\[
\log(\text{PAY}_{i,t}) = \alpha + \beta_1 \text{DIROWN}_{i,t} + \beta_2 \text{LBOWN}_{i,t} + \beta_3 \text{INSTOWN}_{i,t} + \beta_4 TDTA_{i,t} + \beta_5 TDTE_{i,t} + \beta_6 \text{AGE}_{i,t} + \beta_7 \text{SIZE1}_{i,t} + \beta_8 \text{SIZE2}_{i,t} + \beta_9 \text{GROWTH}_{i,t} + \epsilon_{i,t}
\]

Where, \(\log(\text{PAY}_{i,t})\) is the natural logarithm of executive pay. If the CEO/executive does not have significant share ownership in the firm there will be a greater agency problem (Core et al, 1999). The effective owners’ involvement may be alternative to professional managers. Therefore, the variables DIROWN_{i,t}, LBOWN_{i,t}, and INSTOWN_{i} are added. Due to Jensen (1986; 1989) free cash flow theory, companies with high debt ratio has an interest payment commitment and therefore are less able to pay excess executive compensation. Therefore, this study considers the control variables, such as TDTA_{i,t} and TDTE_{i,t} in determining the executive pay. AGE_{i,t} is firm’s age, representing the number of the year firm is listed in the stock exchange. Firm size is an important determinant in executive compensation and larger firms have greater ability to pay higher compensation and have greater need of higher quality managerial talent (such as, Murphy 1985, p 12; Gerhart and Milovich, 1990; Conyon, 1997; Core et al, 1999; Zhou, 2000; Cichello, 2005; Firth et al, 2006; Merhebi et al, 2006). Therefore, this study considers the SIZE1_{i,t} and SIZE2_{i,t} as firm’s size.
representing the natural logarithm of firm’s total assets and natural logarithm of total net sales respectively. GROWTH\textsubscript{it} is the firm’s growth representing the changes in sales. \(\alpha\) is the intercept, \(\beta\) is the regression coefficient and \(\varepsilon\) is the error term.

### 5.14.8 Executive Pay and Firm Performance Hypothesis

In order to examine the pay-performance sensitivity, the following model is developed,

\[
Y_{i,t} = \alpha + \beta_1 \log \text{PAY}_{i,t} + \beta_2 \text{BDCOM}_{i,t} + \beta_3 \text{BDSIZE}_{i,t} + \beta_4 \text{AGE}_{i,t} + \beta_5 \text{SIZE1}_{i,t} + \beta_6 \text{SIZE2}_{i,t} + \beta_7 \text{GROWTH}_{i,t} + \varepsilon_{i,t}
\]

Where, \(Y_{i,t}\) is alternatively ROA\textsubscript{it}, ROE\textsubscript{it}, MBVR\textsubscript{it} and Tobin’s \(Q\textsubscript{it}\). \(\log \text{PAY}_{i,t}\) is the natural logarithm of executive pay. BDCOM\textsubscript{it} is the board composition and BDSIZE\textsubscript{it} is the board size as the CEOs influence over the board are related to the CEO pay and the CEO’s pay are higher where the board is ineffective (Sridharan, 1996; Elhagrasye \textit{et al}, 1999; Ueng \textit{et al}, 2000; Randoy and Nielsen, 2002; Cahan \textit{et al}, 2005; Cheng and Firth, 2005; Ghosh and Sirmans, 2005; Lin, 2005). \text{SIZE1}_{i,t} and \text{SIZE2}_{i,t} are the firm’s sizes representing the natural logarithm of firm’s total assets and natural logarithm of total net sales respectively. \text{AGE}_{i,t} is the firm’s age and \text{GROWTH}_{i,t} is the firm’s growth in sales. \(\alpha\) is the intercept, \(\beta\) is the regression coefficient and \(\varepsilon\) is the error term.

### 5.14.9 Capital Structure and Agency Cost Hypothesis

In order to examine the relationship between the corporate capital structure and the agency cost, the following model is developed,

\[
L_{R_{i,t}} = \alpha + \beta_1 \text{ER}_{i,t} + \beta_2 \text{AUR}_{i,t} + \beta_3 \text{AGE}_{i,t} + \beta_4 \text{SIZE1}_{i,t} + \beta_5 \text{SIZE2}_{i,t} + \beta_6 \text{GROWTH}_{i,t} + \varepsilon_{i,t}
\]

Where, \(L_{R_{i,t}}\) is alternatively STDTA\textsubscript{i,t}, LTDTA\textsubscript{i,t}, TDTA\textsubscript{i,t} and TDTE\textsubscript{i,t}. \(\text{ER}_{i,t}\) is the ‘Expense Ratio’ and \(\text{AUR}_{i,t}\) is the ‘Asset Utilization Ratio’. \(\text{AGE}_{i,t}\) is firm’s age, representing the number of the year firm is listed in the stock exchange. \text{SIZE1}_{i,t} and \text{SIZE2}_{i,t} are the firm’s sizes representing the natural logarithm of firm’s total assets and natural logarithm of total net sales respectively. \text{GROWTH}_{i,t} is the firm’s growth representing the changes in firm’s sales. \(\alpha\) is the intercept, \(\beta\) is the regression coefficient and \(\varepsilon\) is the error term.
5.14.10 Capital Structure and Firm Performance Hypothesis

In order to examine the relationship between the corporate capital structure and firm performance, the following model is developed,

\[ Y_{i,t} = \alpha + \beta_1 LR_{i,t} + \beta_2 TAX_{i,t} + \beta_3 LIQ_{i,t} + \beta_4 AGE_{i,t} + \beta_5 SIZE_1_{i,t} + \beta_6 SIZE_2_{i,t} + \beta_7 GROWTH_{i,t} + \epsilon_{i,t} \]

Where, \( Y_{i,t} \) is alternatively ROA\(_{i,t}\), ROE\(_{i,t}\), MBVR\(_{i,t}\) and Tobin’s Q\(_{i,t}\). LR\(_{i,t}\) is alternatively STDTA\(_{i,t}\), LTDTA\(_{i,t}\), TDTA\(_{i,t}\) and TDTE\(_{i,t}\). TAX\(_{i,t}\) is the tax rate. The firm borrowing may have positive impact on tax payment and thereby profitability. Consistent with Majumdar and Chhibber (1999, p 296), a variable LIQ\(_{i,t}\) is considered for liquidity of the firm or the ability to manage the working capital, “since the ability to manage working capital and acquire a greater quantity of cash balances relative to current liabilities reflects superior skills”. SIZE\(_1_{i,t}\) and SIZE\(_2_{i,t}\) are the firm’s sizes representing the natural logarithm of firm’s total assets and natural logarithm of total net sales respectively. AGE\(_{i,t}\) is the firm’s age and GROWTH\(_{i,t}\) is the firm’s growth in sales. \( \alpha \) is the intercept, \( \beta \) is the regression coefficient and \( \epsilon \) is the error term.

5.14.11 Summary of the Related Analyses

The analyses are conducted by using 2-Stage Least Square Regression (2SLS) Analysis and by using ‘The Statistical Package for Social Science’ (SPSS) version 15. The summary of the related analyses are presented in table 16 in the next page.
Table 16: Summary of the Hypotheses and Related Analyses

<table>
<thead>
<tr>
<th>Hypothesis 1a</th>
<th>Hypotheses</th>
<th>Independent Variable</th>
<th>Dependent Variable</th>
<th>Analysis</th>
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<tr>
<td></td>
<td>There is a significant relationship between the percentage of shares owned by the directors/ sponsors and firm performance.</td>
<td>Director Ownership</td>
<td>ROA, ROE, MBVR and Tobin’s Q</td>
<td>Two-Stage Least Square (2SLS) Regressions</td>
</tr>
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<td>Hypothesis 1b</td>
<td>Blockholding</td>
<td>Blockholding</td>
<td>ROA, ROE, MBVR and Tobin’s Q</td>
<td>Two-Stage Least Square (2SLS) Regressions</td>
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<td>Hypothesis 1c</td>
<td>Institutional Ownership</td>
<td>Institutional Ownership</td>
<td>ROA, ROE, MBVR and Tobin’s Q</td>
<td>Two-Stage Least Square (2SLS) Regressions</td>
</tr>
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<td>Hypothesis 1d</td>
<td>Outside Ownership</td>
<td>Outside Ownership</td>
<td>ROA, ROE, MBVR and Tobin’s Q</td>
<td>Two-Stage Least Square (2SLS) Regressions</td>
</tr>
<tr>
<td>Hypothesis 2</td>
<td>Board Composition</td>
<td>Board Composition</td>
<td>ROA, ROE, MBVR and Tobin’s Q</td>
<td>Two-Stage Least Square (2SLS) Regressions</td>
</tr>
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<td>Hypothesis 3</td>
<td>CEO duality</td>
<td>CEO duality</td>
<td>ROA, ROE, MBVR and Tobin’s Q</td>
<td>Two-Stage Least Square (2SLS) Regressions</td>
</tr>
<tr>
<td>Hypothesis</td>
<td>Hypothesis</td>
<td>Independent Variable</td>
<td>Dependent Variable</td>
<td>Analysis</td>
</tr>
<tr>
<td>------------</td>
<td>------------</td>
<td>----------------------</td>
<td>--------------------</td>
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</tr>
<tr>
<td>Hypothesis 4a</td>
<td>There is a significant relationship between ownership structure and executives pay.</td>
<td>Ownership Structure</td>
<td>Executive Pay</td>
<td>Two-Stage Least Square (2SLS) Regressions</td>
</tr>
<tr>
<td>Hypothesis 4b</td>
<td>There is a significant relationship between executives pay and firm size.</td>
<td>Executive Pay</td>
<td>Firm Size</td>
<td>Two-Stage Least Square (2SLS) Regressions</td>
</tr>
<tr>
<td>Hypothesis 4c</td>
<td>There is a sensitivity between executives pay and firm’s performance.</td>
<td>Executive Pay</td>
<td>ROA, ROE, MBVR and Tobin’s Q</td>
<td>Two-Stage Least Square (2SLS) Regressions</td>
</tr>
<tr>
<td>Hypothesis 5a</td>
<td>A firm’s capital structure may reduce the shareholders agency cost.</td>
<td>Expense Ratio and Asset Utilization Ratio</td>
<td>Leverage Ratio</td>
<td>Two-Stage Least Square (2SLS) Regressions</td>
</tr>
<tr>
<td>Hypothesis 5b</td>
<td>A firm’s capital structure may influence its performance.</td>
<td>Leverage Ratio</td>
<td>ROA, ROE, MBVR and Tobin’s Q</td>
<td>Two-Stage Least Square (2SLS) Regressions</td>
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</table>
5.15 Chapter Summary and Conclusion

This chapter presents the research design, data, hypotheses, research methodology and method. It started with explaining the research paradigm and justification of choosing the research method. The research questions developed in Chapter 1 are formulated into several testable hypotheses in this chapter. Later it provided the details of the study period, data set; also explained the sample construction process; described the industry classification and market capitalization of the sample. It also explained the sources of data and difficulties in collecting the data in conducting such a study in the developing countries context. This chapter explained all the variables related to the study which is used in developing the analytical models. At last this chapter specifies the models for statistical analyses and outlined the details of the analyses. While developing a model for statistical test, the justification of considering a variable is also explained.
Chapter 6  Empirical Analysis

6.1 Introduction

As mentioned earlier, in addition to providing an insight of corporate governance in Bangladesh, by using the firm level data this study examines whether the various corporate mechanisms influence the firm economic performance. While doing so this study attempts to frame a theoretical model of corporate governance in Bangladesh that may promote accountability. To perform the empirical analysis, this study conducts various statistical tests. In earlier chapter (Chapter 5) the research questions are developed into testable hypotheses; explained the study period, data set and step by step construction of samples; explained the sources of data and difficulties in collecting the data in conducting such a study in the developing countries context. The earlier chapter (Chapter 5) also explained all the variables related to this study, specified the models for statistical analysis and outlined the details of the analysis.

This chapter provides the detail of the statistical test; the detail of the analysis between the various governance arrangement and firm performance from the model developed in the earlier chapter and interprets the results. The detailed organization of this chapter is as follows.

Firstly, the assumptions of the statistical analysis including the assumptions for univariate and multivariate analysis are described. Secondly, the effects of various ownership structures on firm performance are examined. While doing so, the directors and sponsors stock ownership and firm performance are examined under both univariate and multivariate analysis. The linearity of the relationship between the directors/sponsors stock ownership and firm performance are also examined. It enables identification of the inflection points (performance associated with various ownership turning point). Similarly, the blockholding and firm performance, institutional ownership and firm performance, and outside ownership and firm performance are examined. Thirdly, an analysis of board composition and performance; the analysis of structural independence of the board and firm performance are presented. Fourthly, the executive pay and the firm performance are examined. While doing so, the effects of executive pay and ownership structure and executive pay and firm size are presented.
Finally, the effects of capital structure and agency cost and the capital structure and firm performance are presented. The conclusion and recommendations based on this analysis are presented in Chapter 7.

6.2. Assumptions of the Statistical Analysis

In this chapter various statistical methods are employed to test the hypothesis. Before conducting the statistical analysis, assumptions of the statistical test needs to be satisfied. The following two paragraphs explain how this study meets the assumptions of the statistical test both for the univariate and multivariate analysis.

6.2.1 Univariate Analysis

Coakes and Steed (2001) outlined some assumptions of univariate analysis (such as \( t \)-test) that are required to be met prior to analysis. Therefore, before conducting the statistical test, these assumptions are evaluated.

1. **Scale of Measurement**: This assumption requires that the data be at the interval or ratio level of measurement. The variables in this study are measured using a ratio level of measurement. Therefore this assumption is met.

2. **Random Sampling**: This assumption requires that the observations should be randomly made from the population of interest. This study covers almost all the non-financial companies (or almost 40.15% of the total listed companies); therefore it can be argued that this assumption is not violated.

3. **Normality**: This assumption requires that observations should be normally distributed in the population. However, Coakes and Steed (2001) argue that the violations of this assumption are of little concern, when the sample size is large (greater than 30). As this study is considering a relatively large number of panel data, it can be argued that the assumption of normality is not seriously violated. The normality of the data is checked by using the skewness and kurtosis; it is found that there are minimum violations of normality. Further the P-P plots of the dependent variables (in the appendix 4) showed the 45 degree line, implying that the normality assumption is not violated.

4. **Homogeneity of Variables**: This assumption requires that the groups should come from populations with equal variances. Although this study did not use the Levene's test for equality of variance between groups, similar to normality it
can be argued that the result of this study is not heavily dependent on the 'homogeneity of variables' assumption as this study involves large number of similar samples. Therefore, it can be argued that the 'homogeneity of variables' assumption is not seriously violated.

While conducting the analysis, the data were initially screened by exploring the data under 'The Statistical Package for Social Science' (SPSS). It is identified that none of the assumptions of the statistical test are violated.

### 6.2.2 Multivariate Analysis

In addition to the assumptions of linearity and normality discussed above, the multivariate analysis must meet two more assumptions, such as independence, multicolinearity, homoscedasticity (Kleinbaum *et al.*, 1998; Coakes and Steed, 2001) and Endogeneity (Rashid and Lodh, 2008). These are discussed below.

1. **Independence in Groups**: This assumption requires that dependent variables are statistically independent of one another (Kleinbaum *et al.*, 1998). This study covers the wide ranges of firms (which are unrelated) for various years and it can be argued that this assumption is met.

2. **Multicolinearity**: Multicolinearity refers to high correlations among the independent variables or it is a condition when the independent variables are significantly correlated with one another. When the high degree of correlation is found among the independent variables, these variables must be removed. It is argued that multicolinearity does not exist if the correlations between two independent variables found to be less than 0.75 (Rashid and Lodh, 2008). In this study, to verify if there is multicolinearity among the independent variables, the Pearson’s correlation (2-tailed) test is conducted and shown in table 17. It is revealed that no ‘two independent variables’ has a correlations above 0.75 except SIZE1 and SIZE2. These variables are showing a correlation of 0.80 among them. Berry and Feldman (1985, p 41) argue that the consequence of multicolinearity depends on the purposes for which regression coefficients are being estimated. The correlation matrixes from all the regression analysis in this study reveal that there are no strong correlations among the independent variables including SIZE1 and SIZE2 and these are very small (less than 0.75).
Table 17: Multicollinearity test (Pearson’s correlations among the independent variables)

<table>
<thead>
<tr>
<th></th>
<th>DIROWN</th>
<th>INSTOWN</th>
<th>OUTOWN</th>
<th>BDCOMP</th>
<th>BDSIZE</th>
<th>CEO</th>
<th>PAY</th>
<th>ER</th>
<th>AUR</th>
<th>TDTA</th>
<th>TDTE</th>
<th>TAX</th>
<th>Liquidity</th>
<th>AGE</th>
<th>SIZE1</th>
<th>SIZE2</th>
<th>GROWTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIROWN</td>
<td>1.000</td>
<td>-0.357**</td>
<td>-0.505**</td>
<td>0.069</td>
<td>0.057</td>
<td>0.142**</td>
<td>-0.042</td>
<td>0.006</td>
<td>0.217**</td>
<td>-0.044</td>
<td>0.025</td>
<td>0.148**</td>
<td>0.056</td>
<td>0.155**</td>
<td>-0.102**</td>
<td>-0.024</td>
<td>-0.029</td>
</tr>
<tr>
<td>INSTOWN</td>
<td>-0.357**</td>
<td>1.000</td>
<td>-0.525**</td>
<td>0.049</td>
<td>0.028</td>
<td>-0.135**</td>
<td>-0.002</td>
<td>-0.007</td>
<td>0.021</td>
<td>-0.057</td>
<td>-0.002</td>
<td>-0.001</td>
<td>-0.011</td>
<td>-0.063</td>
<td>0.041</td>
<td>0.042</td>
<td>0.065</td>
</tr>
<tr>
<td>OUTOWN</td>
<td>-0.505**</td>
<td>-0.525**</td>
<td>1.000</td>
<td>-0.115**</td>
<td>-0.168**</td>
<td>-0.079**</td>
<td>-0.054</td>
<td>0.009</td>
<td>-0.218**</td>
<td>0.130**</td>
<td>0.033</td>
<td>-0.047</td>
<td>-0.093**</td>
<td>-0.039</td>
<td>-0.102**</td>
<td>-0.049</td>
<td></td>
</tr>
<tr>
<td>BDCOMP</td>
<td>0.069</td>
<td>0.049</td>
<td>-0.115**</td>
<td>1.000</td>
<td>0.177**</td>
<td>-0.056</td>
<td>0.124**</td>
<td>-0.017</td>
<td>0.134**</td>
<td>0.014</td>
<td>-0.007</td>
<td>0.036</td>
<td>-0.013</td>
<td>0.174**</td>
<td>0.121**</td>
<td>0.151**</td>
<td>0.057</td>
</tr>
<tr>
<td>BDSIZE</td>
<td>0.057</td>
<td>0.028</td>
<td>-0.168**</td>
<td>0.177**</td>
<td>1.000</td>
<td>-0.082**</td>
<td>0.122**</td>
<td>0.024</td>
<td>0.089**</td>
<td>0.057</td>
<td>0.076</td>
<td>-0.026</td>
<td>-0.027</td>
<td>0.133**</td>
<td>0.191**</td>
<td>0.192**</td>
<td>0.023</td>
</tr>
<tr>
<td>CEO</td>
<td>0.142**</td>
<td>-0.135**</td>
<td>0.079</td>
<td>-0.056</td>
<td>-0.082</td>
<td>1.000</td>
<td>-0.109**</td>
<td>0.038</td>
<td>0.070</td>
<td>0.068</td>
<td>0.027</td>
<td>0.044</td>
<td>0.061</td>
<td>-0.127**</td>
<td>-0.124**</td>
<td>-0.084**</td>
<td>0.020</td>
</tr>
<tr>
<td>PAY</td>
<td>-0.042</td>
<td>-0.002</td>
<td>-0.054</td>
<td>0.124**</td>
<td>-0.109**</td>
<td>1.000</td>
<td>-0.115**</td>
<td>0.238**</td>
<td>-0.266**</td>
<td>0.000</td>
<td>0.012</td>
<td>0.085**</td>
<td>0.144**</td>
<td>0.748**</td>
<td>0.773**</td>
<td>0.017</td>
<td></td>
</tr>
<tr>
<td>ER</td>
<td>0.006</td>
<td>-0.007</td>
<td>0.009</td>
<td>-0.017</td>
<td>0.024</td>
<td>0.038</td>
<td>-0.115**</td>
<td>1.000</td>
<td>-0.078**</td>
<td>0.131**</td>
<td>-0.012</td>
<td>-0.018</td>
<td>-0.036</td>
<td>0.003</td>
<td>-0.082**</td>
<td>-0.259**</td>
<td>-0.037</td>
</tr>
<tr>
<td>AUR</td>
<td>0.217**</td>
<td>0.021</td>
<td>-0.218**</td>
<td>0.134**</td>
<td>0.089**</td>
<td>0.070</td>
<td>0.238**</td>
<td>-0.078**</td>
<td>1.000</td>
<td>-0.055</td>
<td>-0.061</td>
<td>0.092**</td>
<td>0.134**</td>
<td>0.205**</td>
<td>-0.024</td>
<td>0.405**</td>
<td>0.047</td>
</tr>
<tr>
<td>TDTA</td>
<td>-0.044</td>
<td>-0.057</td>
<td>0.130**</td>
<td>0.014</td>
<td>0.057</td>
<td>0.068</td>
<td>-0.266**</td>
<td>0.131**</td>
<td>-0.055</td>
<td>1.000</td>
<td>0.023</td>
<td>-0.110**</td>
<td>-0.180**</td>
<td>-0.022</td>
<td>-0.374**</td>
<td>-0.334**</td>
<td>0.008</td>
</tr>
<tr>
<td>TDTE</td>
<td>0.025</td>
<td>-0.058</td>
<td>0.033</td>
<td>-0.007</td>
<td>0.076**</td>
<td>0.027</td>
<td>0.000</td>
<td>-0.012</td>
<td>-0.061</td>
<td>0.023</td>
<td>1.000</td>
<td>-0.021</td>
<td>-0.021</td>
<td>-0.030</td>
<td>0.004</td>
<td>-0.010</td>
<td>-0.017</td>
</tr>
<tr>
<td>TAX</td>
<td>0.148**</td>
<td>-0.002</td>
<td>-0.030</td>
<td>0.036</td>
<td>-0.026</td>
<td>0.044</td>
<td>0.012</td>
<td>-0.018</td>
<td>0.092**</td>
<td>-0.110**</td>
<td>-0.021</td>
<td>1.000</td>
<td>0.071</td>
<td>0.083**</td>
<td>-0.005</td>
<td>0.056</td>
<td>0.011</td>
</tr>
<tr>
<td>Liquidity</td>
<td>0.056</td>
<td>-0.011</td>
<td>-0.047</td>
<td>-0.013</td>
<td>-0.027</td>
<td>0.061</td>
<td>0.085**</td>
<td>-0.036</td>
<td>0.134**</td>
<td>-0.180**</td>
<td>-0.021</td>
<td>0.071</td>
<td>1.000</td>
<td>0.053</td>
<td>0.043</td>
<td>0.106**</td>
<td>-0.025</td>
</tr>
<tr>
<td>AGE</td>
<td>0.155**</td>
<td>-0.063</td>
<td>-0.093**</td>
<td>0.174**</td>
<td>0.133**</td>
<td>-0.127**</td>
<td>0.144**</td>
<td>0.003</td>
<td>0.205**</td>
<td>-0.022</td>
<td>-0.030</td>
<td>0.083**</td>
<td>0.053</td>
<td>1.000</td>
<td>-0.035</td>
<td>0.044</td>
<td>-0.065</td>
</tr>
<tr>
<td>SIZE1</td>
<td>-0.102**</td>
<td>0.041</td>
<td>-0.039</td>
<td>0.121**</td>
<td>0.191**</td>
<td>-0.124**</td>
<td>0.748**</td>
<td>-0.082**</td>
<td>-0.024</td>
<td>-0.374**</td>
<td>0.004</td>
<td>-0.005</td>
<td>0.043</td>
<td>-0.035</td>
<td>1.000</td>
<td>0.800**</td>
<td>-0.013</td>
</tr>
<tr>
<td>SIZE2</td>
<td>-0.024</td>
<td>0.042</td>
<td>-0.102**</td>
<td>0.151**</td>
<td>0.192**</td>
<td>-0.084**</td>
<td>0.773**</td>
<td>-0.259**</td>
<td>0.405**</td>
<td>-0.334**</td>
<td>-0.010</td>
<td>0.056</td>
<td>0.106**</td>
<td>0.044</td>
<td>0.800**</td>
<td>1.000</td>
<td>0.021</td>
</tr>
<tr>
<td>GROWTH</td>
<td>-0.029</td>
<td>0.065</td>
<td>-0.049</td>
<td>0.057</td>
<td>0.023</td>
<td>0.020</td>
<td>0.017</td>
<td>-0.037</td>
<td>0.047</td>
<td>0.008</td>
<td>-0.017</td>
<td>0.011</td>
<td>-0.025</td>
<td>-0.065</td>
<td>-0.013</td>
<td>0.021</td>
<td>1.000</td>
</tr>
</tbody>
</table>

** Significant at the 1% level (2-tailed).
* Significant at the 5% level (2-tailed).
Therefore, it can be concluded that the multicolinearity does not pose any problem to this study and thus this assumption is met.

3. Homoscedasticity: The assumption of homoscedasticity is that the residuals of the dependent variables are approximately equal. In other words the data points will spread uniformly across the regression line. If this condition is not met, a heteroscedasticity is indicated. The presence of heteroscedasticity means that the errors are drawn from different distributions for different values of the independent variables, which may cause the regressions to be invalid. The Normal Q-Q Plot of the dependent variables (which is shown in the appendix 5) indicates that the variances of the residuals are constant. Therefore, it can be argued that the homoscedasticity assumption is met.

4. Endogeneity: Endogeneity is an important factor, but not fatal in doing empirical corporate governance research (Denis, 2001). It may cause researchers to fail to find a relationship where it may actually exist. Therefore, the empirical test is to be carefully designed and carefully interpreted. In this study, no endogeneity problem occurred as 2SLS regression has been used and the instrumental control variables have automatically removed such a problem. Further, as in this study data for different years were pooled from different organizations; this problem is not applicable (Rashid and Lodh, 2008).

6.3 Ownership Structure and Firm Performance

One of the objectives of this study is to examine whether the various ownership concentrations influence the firm economic performance in Bangladesh. In this section the results of univariate and multivariate analysis of the ownership structure and firm performance are presented. The significant level of comparison of firm performance among various ownership concentrations is done by \( t \)-test as well as various regression analyses. Before doing formal analysis it would be very helpful in understanding the various explanatory analyses of the ownership structure.

Figure 13 represents the majority ownership by different ownership groups on sample 104 firms of which 60 firms have majority ownership by directors/ managers, comprising of 58 percent, 15 firms have the majority ownership by institutions comprising of 14 percent and 29 firms have majority ownership by outsiders
comprising of 28 percent. However, all of these firms appeared to be controlled by the directors/sponsors.

**Figure 13:** Representations of majority ownership by different ownership groups

From figures 14, 15, 16 and 17 below, it appears that firms with majority ownership by directors/sponsors has a consistency of performance in terms of accounting performance measures such as, ROA and ROE as well as market based performance measures, such as MBVR and Tobin's Q.

**Figure 14:** Firm performance in terms of ROA for different ownership groups

These firms (directors/sponsors owned) are also performing above the other ownership categories. Interestingly, there was a downturn of firm performances in 2003 under all the ownership concentrations and under all the performance measures. It was increasing in subsequent years and again has a decreasing trend in 2005 under all the ownership concentration and all the performance measures.
Figure 15: Firm performance in terms of ROE for different ownership groups

Figure 16: Firm performance in terms of MBVR for different ownership groups

Figure 17: Firm performance in terms of Tobin’s Q for different ownership groups
6.3.1 Univariate Analysis

The univariate analysis was employed to test if there are significant differences of performance among various ownership groups, including the firms with majority ownership by directors/sponsors, institutions and outsiders. Table 18 represents the significant level of the comparison of the mean value of firm performance (by using \( t \)-test) under different performance measures (such as, ROA, ROE, MBVR and Tobin's Q). These are all significant at 1% level. It is revealed that firms with majority ownership by directors/sponsors are over performing compared to all firms and other ownership concentration under all the performance measures. These are significant at 1% level of significance. Interestingly, firms with majority ownership by outsiders are performing worst under all the performance measures.

The overall univariate analysis suggests that the firms with majority ownership by director/sponsors are performing well compared to that of other ownership groups. However, as the univariate analysis may not provide conclusive evidence on ownership structure and firm performance, this study further conducts the multivariate analysis which may provide further evidence of ownership structure and firm performance in Bangladesh.

Table 18: Comparison of firm performance under different ownership concentration and under different performance measures. Standard deviations are reported in the parentheses.

<table>
<thead>
<tr>
<th>Ownership Types</th>
<th>(a) ROA</th>
<th>(b) ROE</th>
<th>(c) MBVR</th>
<th>(d) Tobin's Q</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Firms</td>
<td>0.0540</td>
<td>0.222</td>
<td>1.0196</td>
<td>0.911</td>
</tr>
<tr>
<td></td>
<td>(0.092)</td>
<td>(1.618)</td>
<td>(4.236)</td>
<td>(0.695)</td>
</tr>
<tr>
<td>Director / Sponsor</td>
<td>0.068</td>
<td>0.359</td>
<td>1.454</td>
<td>0.999</td>
</tr>
<tr>
<td>Owned</td>
<td>(0.096)</td>
<td>(1.993)</td>
<td>(5.229)</td>
<td>(0.707)</td>
</tr>
<tr>
<td>Institutional Owned</td>
<td>0.049</td>
<td>-0.026</td>
<td>0.232</td>
<td>0.848</td>
</tr>
<tr>
<td></td>
<td>(0.016)</td>
<td>(1.183)</td>
<td>(3.060)</td>
<td>(0.815)</td>
</tr>
<tr>
<td>Outside Ownership</td>
<td>0.027</td>
<td>0.059</td>
<td>0.507</td>
<td>0.757</td>
</tr>
<tr>
<td></td>
<td>(0.070)</td>
<td>(0.551)</td>
<td>(1.305)</td>
<td>(0.569)</td>
</tr>
</tbody>
</table>

*** at 1% level of significance.

6.3.2 Multivariate Analysis

This part of the study presents a multivariate analysis to examine the relationship between the various ownership categories and firm performance in the presence of other control variables, such as monitoring by the board, effects of firm’s
borrowing, firm size and growth. This study also examines whether the board composition, board leadership structure, executive compensation and corporate capital structure influence the firm performance in the presence of some control variables. As stated in paragraph 6.2.2 while conducting the multivariate analysis, no multicollinearity was found and no interdependence on independent variables was found.

In this section, firstly, the effect of directors/sponsors ownership and firm performance is examined by using 2-Stage Least Square (2SLS) regression analysis. Secondly, the effect of institutional ownership and firm performance is examined. Thirdly, the outside ownership and firm performance is examined. These are presented in subsequent paragraphs.

6.3.2.1 Directors/Sponsors Ownership and Firm Performance

This section presents the director/sponsors ownership and firm performance. To conduct the empirical analysis the model developed in Chapter 5 is regressed by using 2-Stage Least Square (2SLS) regression analysis. The regression results of the majority ownership by directors/sponsors and firm performance under different performance measures are presented in table 19.

The regression coefficients suggest that there is a positive relationship between the percentages of shares owned by directors/sponsors (DIROWN) and firm performance under various performance measures. These are significant at 1% and 10% level. The Adjusted R squared and F-statistic being significant indicates reasonable overall fit. The results also indicate that TDTA has significant negative explanatory power under ROA and MBVR performance measures; however, TDTA has significant positive explanatory power under Tobin's Q performance measure. TDTE has significant positive explanatory power in influencing the firm performance under ROE and MBVR. SIZE1 does not have any positive explanatory power in influencing the firm performance, rather SIZE1 has significant negative explanatory power under ROA and Tobin's Q. SIZE2 has significant positive explanatory power in influencing the firm performance under ROA, ROE and Tobin's Q; AGE has significant positive explanatory power in influencing the firm performance under MBVR and Tobin's Q. The GROWTH has no explanatory power in influencing firm performance, which refutes the economic theory that the firm with growth opportunity has positive impact on performance (Zeitun and Tian, 2007a).
Table 19: Directors/sponsors ownership and firm performance under different performance measures

This table presents the summary results of the percentage of directors/sponsors ownership and firm performance under different performance measures. Column (a), (b), (c) and (d) represent the various coefficients of various performance measures. The t-tests are presented in the parentheses.

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>(a) ROA</th>
<th>(b) ROE</th>
<th>(c) MBVR</th>
<th>(d) Tobin's Q</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>0.015 (0.742)</td>
<td>-0.128 (-0.439)</td>
<td>-2.022 (-2.292)**</td>
<td>-0.465 (-3.610)**</td>
</tr>
<tr>
<td>DIROWN</td>
<td>0.203 (7.259)**</td>
<td>0.041 (1.809)</td>
<td>0.096 (3.700)**</td>
<td>0.130 (5.621)**</td>
</tr>
<tr>
<td>TDTA</td>
<td>-0.499 (-16.827)**</td>
<td>-0.017 (-0.708)</td>
<td>-0.068 (-2.473)**</td>
<td>0.814 (33.274)**</td>
</tr>
<tr>
<td>TDTE</td>
<td>0 (-0.012)</td>
<td>0.818 (37.231)**</td>
<td>0.738 (29.061)**</td>
<td>-0.029 (-1.283)</td>
</tr>
<tr>
<td>AGE</td>
<td>-0.013 (-0.455)</td>
<td>-0.004 (-0.194)</td>
<td>0.056 (2.169)**</td>
<td>0.134 (5.813)**</td>
</tr>
<tr>
<td>SIZE1</td>
<td>-0.268 (-5.677)**</td>
<td>-0.035 (-0.916)</td>
<td>0.002 (0.038)</td>
<td>-0.070 (-1.785)</td>
</tr>
<tr>
<td>SIZE2</td>
<td>0.519 (11.249)**</td>
<td>0.072 (1.937)</td>
<td>0.041 (0.953)</td>
<td>0.171 (4.495)**</td>
</tr>
<tr>
<td>GROWTH</td>
<td>0.011 (0.391)</td>
<td>0.019 (0.864)</td>
<td>0.003 (0.098)</td>
<td>0.027 (1.197)</td>
</tr>
<tr>
<td>Adjusted R²</td>
<td>0.490</td>
<td>0.671</td>
<td>0.561</td>
<td>0.653</td>
</tr>
<tr>
<td>F-Statistic</td>
<td>94.802 (94.802)**</td>
<td>200.039 (200.039)**</td>
<td>122.206 (122.206)***</td>
<td>125.779 (125.779)**</td>
</tr>
</tbody>
</table>

* At 10% level of significance, ** at 5% level of significance and *** at 1% level of significance respectively.

The correlation matrix of the explanatory variables is presented in table 20. It is revealed that there are no strong correlations among them as the correlation coefficients are very small (less than 0.75).

Table 20: Directors/sponsors ownership and firm performance: Correlation matrix of the explanatory variables

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIROWN</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TDTA</td>
<td>0.080</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TDTE</td>
<td>-0.034</td>
<td>-0.027</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AGE</td>
<td>-0.140</td>
<td>0.018</td>
<td>0.033</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SIZE1</td>
<td>0.136</td>
<td>0.201</td>
<td>-0.025</td>
<td>0.101</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SIZE2</td>
<td>-0.079</td>
<td>0.051</td>
<td>0.019</td>
<td>-0.107</td>
<td>-0.777</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>GROWTH</td>
<td>0.025</td>
<td>-0.003</td>
<td>0.017</td>
<td>0.068</td>
<td>0.060</td>
<td>-0.064</td>
<td>1.000</td>
</tr>
</tbody>
</table>
This finding is consistent with earlier studies (such as, Kesner, 1987; Morck et al, 1988; Lichtenberg and Pushner, 1994; Barnhart and Rosenstein, 1998; Han and Suk, 1998; Short and Keasey, 1999) implying that director ownership increases the firm performance. However, this finding contradicts with earlier studies, such as Kole (1995), Craswell et al (1997). Based on the analysis, the hypothesis 1a is accepted.

6.3.2.2 Blockholding and Firm Performance

This section presents the blockholding and firm performance. To conduct the empirical analysis the model developed in Chapter 5 is regressed by using 2-Stage Least Square (2SLS) regression analysis. The correlation matrix of the explanatory variables is presented in table 21. The regression results of the largest blockholding and firm performance under different performance measures are presented in table 22.

Table 21: Largest blockholding (LB) and firm performance: Correlation matrix of the explanatory variables

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>LB</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TDTA</td>
<td>0.019</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TDTE</td>
<td>0.027</td>
<td>-0.024</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AGE</td>
<td>-0.119</td>
<td>0.027</td>
<td>0.025</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SIZE1</td>
<td>-0.123</td>
<td>0.188</td>
<td>-0.024</td>
<td>0.136</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SIZE2</td>
<td>-0.041</td>
<td>0.056</td>
<td>0.016</td>
<td>-0.114</td>
<td>-0.765</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>GROWTH</td>
<td>-0.003</td>
<td>-0.005</td>
<td>0.018</td>
<td>0.072</td>
<td>0.057</td>
<td>-0.062</td>
<td>1.000</td>
</tr>
</tbody>
</table>

The regression coefficients suggest that there is a positive relationship between the percentage of shares owned by blockholders and firm performance under all the performance measures. These are significant at 1% and 5% level. The Adjusted R squared and F-statistic being significant indicates reasonable overall fit. The results also indicate that TDTA has significant negative explanatory power under ROA and MBVR performance measures and significant positive explanatory power in influencing firm performance under Tobin’s Q performance measure. TDTE has significant positive explanatory power in influencing firm performance under ROE and MBVR performance measures. AGE has significant positive explanatory power in influencing the firm performance under MBVR and Tobin’s Q performance measures. SIZE1 has significant negative explanatory power in influencing firm performance under MBVR and Tobin’s Q performance measures. SIZE2 has significant positive explanatory power in influencing firm performance under MBVR and Tobin’s Q performance measures.
power under ROA, ROE and Tobin’s Q performance measures. The GROWTH has no explanatory power in influencing firm performance.

Table 22: Largest blockholding and firm performance under different performance measures

This table presents the summary results of the percentage largest blockholding and firm performance under different performance measures. Column (a), (b), (c) and (d) represent the various coefficients of various performance measures. The $t$-tests are presented in the parentheses.

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>(a)</th>
<th>(b)</th>
<th>(c)</th>
<th>(d)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>0.061</td>
<td>0.033</td>
<td>-1.029</td>
<td>-0.260</td>
</tr>
<tr>
<td></td>
<td>** (3.144)</td>
<td>(0.121)</td>
<td>(-1.238)</td>
<td>(-2.263)</td>
</tr>
<tr>
<td>LBOWN</td>
<td>0.232</td>
<td>0.041</td>
<td>0.103</td>
<td>0.239</td>
</tr>
<tr>
<td></td>
<td>*** (8.203)</td>
<td>** (1.781)</td>
<td>*** (3.900)</td>
<td>*** (10.748)</td>
</tr>
<tr>
<td>TDTA</td>
<td>-0.511</td>
<td>-0.019</td>
<td>-0.074</td>
<td>0.807</td>
</tr>
<tr>
<td></td>
<td>*** (-17.474)</td>
<td>(-0.821)</td>
<td>** (-2.705)</td>
<td>*** (35.028)</td>
</tr>
<tr>
<td>TDTE</td>
<td>0.013</td>
<td>0.821</td>
<td>0.744</td>
<td>-0.018</td>
</tr>
<tr>
<td></td>
<td>(0.464)</td>
<td>*** (37.347)</td>
<td>*** (29.333)</td>
<td>(-0.859)</td>
</tr>
<tr>
<td>AGE</td>
<td>-0.011</td>
<td>-0.003</td>
<td>0.058</td>
<td>0.124</td>
</tr>
<tr>
<td></td>
<td>(-0.405)</td>
<td>(-0.151)</td>
<td>** (2.235)</td>
<td>*** (5.723)</td>
</tr>
<tr>
<td>SIZE1</td>
<td>-0.362</td>
<td>-0.052</td>
<td>-0.041</td>
<td>-0.148</td>
</tr>
<tr>
<td></td>
<td>** (-7.751)</td>
<td>(-1.383)</td>
<td>(-0.946)</td>
<td>*** (-4.021)</td>
</tr>
<tr>
<td>SIZE2</td>
<td>0.530</td>
<td>0.074</td>
<td>0.047</td>
<td>0.172</td>
</tr>
<tr>
<td></td>
<td>*** (11.631)</td>
<td>** (2.011)</td>
<td>** (1.089)</td>
<td>*** (4.797)</td>
</tr>
<tr>
<td>GROWTH</td>
<td>0.005</td>
<td>0.018</td>
<td>0.000</td>
<td>0.023</td>
</tr>
<tr>
<td></td>
<td>(0.187)</td>
<td>(0.814)</td>
<td>(-0.006)</td>
<td>(1.086)</td>
</tr>
<tr>
<td>Adjusted R²</td>
<td>0.500</td>
<td>0.671</td>
<td>0.562</td>
<td>0.690</td>
</tr>
<tr>
<td>F-Statistic</td>
<td>98.637</td>
<td>199.995</td>
<td>126.269</td>
<td>218.040</td>
</tr>
</tbody>
</table>

* At 10% level of significance, ** at 5% level of significance and *** at 1% level of significance respectively.

The correlation matrix of the explanatory variables suggests that there are no strong correlations among them as the correlation coefficients are very small (less than 0.75 or negative).
This part of the study further examines the effect of largest three blockholding (L3) and Herfindhal Index 3 (H3) of blockholding and firm performance. The regression coefficients of L3 and H3 are presented in table 25. The regression coefficients suggest that there is a positive relationship between the blockholding and firm performance. These are also significant at 1% and 5% level under ROA, MBVR and Tobin’s Q. The Adjusted R squared and F-statistic being significant indicates reasonable overall fit. The significant positive relationship between Herfindhal Index 3 (H3) and performance indicates that there could be a linear relationship between blockholding and firm performance (Zeitun and Tian, 2007a).

The correlation matrixes of the explanatory variables are presented in table 23 and table 24. It is revealed that there are no strong correlations among them as the correlation coefficients are very small (less than 0.75 or negative).

Table 23: Largest 3 (L3) of blockholding and firm performance: Correlation matrix of the explanatory variables

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>L3</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>TDTA</td>
<td>-0.006</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>TDTE</td>
<td>0.058</td>
<td>-0.025</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>AGE</td>
<td>-0.057</td>
<td>0.030</td>
<td>0.025</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>SIZE1</td>
<td>-0.105</td>
<td>0.192</td>
<td>-0.027</td>
<td>0.128</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>SIZE2</td>
<td>-0.019</td>
<td>0.057</td>
<td>0.016</td>
<td>-0.118</td>
<td>-0.770</td>
<td>1.000</td>
</tr>
<tr>
<td>7</td>
<td>GROWTH</td>
<td>-0.045</td>
<td>-0.005</td>
<td>0.016</td>
<td>0.075</td>
<td>0.061</td>
<td>-0.061</td>
</tr>
</tbody>
</table>

Table 24: Herfindhal Index 3 (H3) of blockholding and firm performance: Correlation matrix of the explanatory variables

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>H3</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>TDTA</td>
<td>0.022</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>TDTE</td>
<td>0.023</td>
<td>-0.024</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>AGE</td>
<td>-0.135</td>
<td>0.027</td>
<td>0.025</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>SIZE1</td>
<td>-0.096</td>
<td>0.189</td>
<td>-0.023</td>
<td>0.134</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>SIZE2</td>
<td>-0.022</td>
<td>0.057</td>
<td>0.016</td>
<td>-0.116</td>
<td>-0.770</td>
<td>1.000</td>
</tr>
<tr>
<td>7</td>
<td>GROWTH</td>
<td>-0.015</td>
<td>-0.005</td>
<td>0.018</td>
<td>0.074</td>
<td>0.058</td>
<td>-0.061</td>
</tr>
</tbody>
</table>

This finding is consistent with earlier studies (such as, Barclay and Holderness, 1991; Shome and Singh, 1995; Gorton and Schmid, 2000; Sarkar and Sarkar, 2000) implying that blockholding increases the firm performance. However, this finding contradicts to earlier studies, such as Gorton and Schmid (1999). It also implies that the presence of blockholding has a statistically significant effect on firm performance in emerging economies. Based on the analysis the hypothesis 1b is accepted.
Table 25: Largest Three Blockholding (L3) and Herfindhal Index 3 (H3) of blockholding and firm performance under different performance measures

This table presents the summary results of the cumulative percentage shareholding by largest three blockholders and Herfindhal Index 3 of ownership and firm performance under different performance measures. Column (a), (b), (c) and (d) represent the various coefficients of various performance measures. The t-tests are presented in the parentheses.

<table>
<thead>
<tr>
<th></th>
<th>Dependent Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ROA</td>
</tr>
<tr>
<td>Intercept</td>
<td>0.038</td>
</tr>
<tr>
<td></td>
<td>(1.916)</td>
</tr>
<tr>
<td>L3</td>
<td>0.218 ***</td>
</tr>
<tr>
<td></td>
<td>(7.848)</td>
</tr>
<tr>
<td>H3</td>
<td>-0.517 ***</td>
</tr>
<tr>
<td></td>
<td>(-17.616)</td>
</tr>
<tr>
<td>TDTA</td>
<td>0.019</td>
</tr>
<tr>
<td></td>
<td>(0.691)</td>
</tr>
<tr>
<td>TDTE</td>
<td>0.003</td>
</tr>
<tr>
<td></td>
<td>(0.124)</td>
</tr>
<tr>
<td>AGE</td>
<td>-0.353 ***</td>
</tr>
<tr>
<td></td>
<td>(-7.558)</td>
</tr>
<tr>
<td>SIZE1</td>
<td>0.539 ***</td>
</tr>
<tr>
<td></td>
<td>(11.778)</td>
</tr>
<tr>
<td>SIZE2</td>
<td>-0.004</td>
</tr>
<tr>
<td></td>
<td>(-0.147)</td>
</tr>
<tr>
<td>Adjusted R²</td>
<td>0.496</td>
</tr>
</tbody>
</table>

F-Statistic | 97.139 *** | 198.638 *** | 122.572 *** | 199.831 *** | 104.719 *** | 199.296 *** | 126.579 *** | 227.205 *** |

* At 10% level of significance, ** at 5% level of significance and *** at 1% level of significance respectively.
6.3.2.3 Institutional Ownership and Firm Performance

This section presents the institutional shareholding and firm performance. To conduct the empirical analysis the model developed in Chapter 5 is regressed by using 2-Stage Least Square (2SLS) regression analysis.

Table 26: Institutional ownership and firm performance under different performance measures

This table presents the summary results of the percentage of institutional shareholding and firm performance under different performance measures. Column (a), (b), (c) and (d) represent the various coefficients of various performance measures. The t-tests are presented in the parentheses.

<table>
<thead>
<tr>
<th></th>
<th>(a)</th>
<th>(b)</th>
<th>(c)</th>
<th>(d)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ROA</td>
<td>ROE</td>
<td>MBVR</td>
<td>Tobin’s Q</td>
</tr>
<tr>
<td>Intercept</td>
<td>0.069 **</td>
<td>0.089</td>
<td>-0.664</td>
<td>-0.200</td>
</tr>
<tr>
<td></td>
<td>(3.329)</td>
<td>(0.318)</td>
<td>(-0.777)</td>
<td>(-1.580)</td>
</tr>
<tr>
<td>INSTOWN</td>
<td>-0.024</td>
<td>-0.017</td>
<td>-0.043 **</td>
<td>-0.023</td>
</tr>
<tr>
<td></td>
<td>(-0.830)</td>
<td>(-0.778)</td>
<td>(-1.663)</td>
<td>(-0.993)</td>
</tr>
<tr>
<td>TDTA</td>
<td>-0.517 ***</td>
<td>-0.021</td>
<td>-0.078 **</td>
<td>0.801 ***</td>
</tr>
<tr>
<td></td>
<td>(-16.846)</td>
<td>(-0.889)</td>
<td>(-2.831)</td>
<td>(32.127)</td>
</tr>
<tr>
<td>TDTE</td>
<td>0.005</td>
<td>0.819 ***</td>
<td>0.739 ***</td>
<td>-0.026</td>
</tr>
<tr>
<td></td>
<td>(0.180)</td>
<td>(37.135)</td>
<td>(28.828)</td>
<td>(-1.123)</td>
</tr>
<tr>
<td>AGE</td>
<td>0.014</td>
<td>0.000</td>
<td>0.067 **</td>
<td>0.150 ***</td>
</tr>
<tr>
<td></td>
<td>(0.494)</td>
<td>(0.011)</td>
<td>(2.581)</td>
<td>(6.445)</td>
</tr>
<tr>
<td>SIZE1</td>
<td>-0.315 ***</td>
<td>-0.044</td>
<td>-0.021</td>
<td>-0.099 **</td>
</tr>
<tr>
<td></td>
<td>(-6.485)</td>
<td>(-1.172)</td>
<td>(-0.469)</td>
<td>(-2.520)</td>
</tr>
<tr>
<td>SIZE2</td>
<td>0.546 ***</td>
<td>0.077 **</td>
<td>0.054</td>
<td>0.188 ***</td>
</tr>
<tr>
<td></td>
<td>(11.435)</td>
<td>(2.091)</td>
<td>(1.258)</td>
<td>(4.857)</td>
</tr>
<tr>
<td>GROWTH</td>
<td>0.007</td>
<td>0.019</td>
<td>0.003</td>
<td>0.025</td>
</tr>
<tr>
<td></td>
<td>(0.249)</td>
<td>(0.862)</td>
<td>(0.104)</td>
<td>(1.089)</td>
</tr>
<tr>
<td>Adjusted R²</td>
<td>0.451</td>
<td>0.670</td>
<td>0.554</td>
<td>0.637</td>
</tr>
<tr>
<td>F-Statistic</td>
<td>81.145 ***</td>
<td>198.875 ***</td>
<td>122.256 ***</td>
<td>172.518 ***</td>
</tr>
</tbody>
</table>

* At 10% level of significance, ** at 5% level of significance and *** at 1% level of significance respectively.
The regression results of the blockholding and firm performance under different performance measures are presented in table 26. The regression coefficients suggest that there is no significant relationship between the percentage of shares owned by institutions and firm performance. Rather, there is a significant negative relationship between the institutional share ownership and firm performance under MBVR performance measure. The Adjusted R squared and F-statistic being significant indicates reasonable overall fit. The results also indicate that TDTA has significant negative explanatory power under ROA and MBVR performance measure and significant positive explanatory power under Tobin’s Q performance measure. TDTE has significant positive explanatory power in influencing the firm performance under ROE and MBVR performance measures; AGE has significant positive explanatory power in influencing the firm performance under MBVR and Tobin’s Q performance measures; SIZE1 has significant negative explanatory power in influencing firm performance under ROA and Tobin’s Q performance measures. SIZE2 has significant positive explanatory power in explaining firm performance under ROA, ROE and Tobin’s Q performance measures. The GROWTH has no explanatory power in influencing firm performance.

The correlation matrix of the explanatory variables is presented in table 27. It is revealed that there are no strong correlations among them as the correlation coefficients are very small (less than 0.75 or negative).

Table 27: Institutional ownership and firm performance: Correlation matrix of the explanatory variables

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 INSTOWN</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 TDTA</td>
<td>0.048</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 TDTE</td>
<td>0.058</td>
<td>-0.022</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 AGE</td>
<td>0.064</td>
<td>0.033</td>
<td>0.032</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 SIZE1</td>
<td>0.001</td>
<td>0.192</td>
<td>-0.021</td>
<td>0.123</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 SIZE2</td>
<td>-0.012</td>
<td>0.056</td>
<td>0.016</td>
<td>-0.120</td>
<td>-0.776</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>7 GROWTH</td>
<td>-0.060</td>
<td>-0.008</td>
<td>0.015</td>
<td>0.068</td>
<td>0.057</td>
<td>-0.061</td>
<td>1.000</td>
</tr>
</tbody>
</table>

This finding is consistent with earlier studies (such as, McConnell and Servaes, 1990; Gorton and Schmid, 1999) implying that institutional shareholding does not influence the firm performance. However, it is contradictory to earlier studies (such as, Lichtenberg and Pushner, 1994; Han and Suk, 1998). Based on this analysis the hypothesis 1c is rejected.
6.3.2.4 Outsider Stock Ownership and Firm Performance

This section presents the outsider stock ownership and firm performance findings. The model developed in Chapter 5 is regressed by using 2-Stage Least Square (2SLS) regression analysis. The regression results of the outside ownership and firm performance under different performance measures are presented in Table 28.

**Table 28: Outsider stock ownership and firm performance under different performance measures**

This table presents the summary results of the percentage of outside shareholding and firm performance under different performance measures. Column (a), (b), (c) and (d) represent the various coefficients of various performance measures. The t-tests are presented in the parentheses.

<table>
<thead>
<tr>
<th></th>
<th>(a)</th>
<th>(b)</th>
<th>(c)</th>
<th>(d)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>0.102***</td>
<td>0.119**</td>
<td>-0.274**</td>
<td>-0.012**</td>
</tr>
<tr>
<td></td>
<td>(4.889)</td>
<td>(0.414)</td>
<td>(-0.314)</td>
<td>(-0.091)</td>
</tr>
<tr>
<td>OUTOWN</td>
<td>-0.168***</td>
<td>-0.019**</td>
<td>-0.068**</td>
<td>-0.134**</td>
</tr>
<tr>
<td></td>
<td>(-5.963)</td>
<td>(-0.862)</td>
<td>(-2.629)</td>
<td>(-5.825)</td>
</tr>
<tr>
<td>TDTA</td>
<td>-0.495***</td>
<td>-0.018**</td>
<td>-0.068**</td>
<td>0.819**</td>
</tr>
<tr>
<td></td>
<td>(-16.435)</td>
<td>(-0.746)</td>
<td>(-2.436)</td>
<td>(33.441)</td>
</tr>
<tr>
<td>TDTE</td>
<td>0.011</td>
<td>0.820**</td>
<td>0.743***</td>
<td>-0.021***</td>
</tr>
<tr>
<td></td>
<td>(0.381)</td>
<td>(37.256)</td>
<td>(29.117)</td>
<td>(-0.949)</td>
</tr>
<tr>
<td>AGE</td>
<td>0.002</td>
<td>0.000</td>
<td>0.064**</td>
<td>0.141**</td>
</tr>
<tr>
<td></td>
<td>(0.076)</td>
<td>(-0.009)</td>
<td>(2.479)</td>
<td>(6.184)</td>
</tr>
<tr>
<td>SIZE1</td>
<td>-0.292***</td>
<td>-0.042**</td>
<td>-0.011**</td>
<td>-0.081**</td>
</tr>
<tr>
<td></td>
<td>(-6.151)</td>
<td>(-1.099)</td>
<td>(-0.257)</td>
<td>(-2.106)</td>
</tr>
<tr>
<td>SIZE2</td>
<td>0.519***</td>
<td>0.074**</td>
<td>0.042</td>
<td>0.167</td>
</tr>
<tr>
<td></td>
<td>(11.087)</td>
<td>(1.989)</td>
<td>(0.982)</td>
<td>(4.376)</td>
</tr>
<tr>
<td>GROWTH</td>
<td>-0.003(-0.095)</td>
<td>0.017(0.773)</td>
<td>-0.003(-0.128)</td>
<td>0.017(0.762)</td>
</tr>
<tr>
<td>Adjusted $R^2$</td>
<td>0.478</td>
<td>0.670</td>
<td>0.557</td>
<td>0.661</td>
</tr>
<tr>
<td>F-Statistic</td>
<td>90.302***</td>
<td>198.935***</td>
<td>123.593***</td>
<td>182.967***</td>
</tr>
</tbody>
</table>

* At 10% level of significance, ** at 5% level of significance and *** at 1% level of significance respectively.
The regression coefficients suggest that there is a significant negative relationship between the percentage of shares owned by institutions and firm performances under different performance measures. These are also significant at 1% and 5% level under different performance measures. The Adjusted R squared and F-statistic being significant indicates reasonable overall fit.

The results also indicate that TDTA has significant negative explanatory power under ROA and MBVR performance measures and positive explanatory power under Tobin’s Q performance measure. TDTE has significant positive explanatory power under ROE and MBVR performance measures and negative explanatory power under Tobin’s Q performance measure. SIZE1 has negative explanatory power under ROA and SIZE2 has significant positive explanatory power in influencing the firm performance under ROA and ROE. The GROWTH has no explanatory power in influencing firm performance.

The correlation matrix of the explanatory variables is presented in table 29. It is revealed that there are no strong correlations among them as the correlation coefficients are very small (less than 0.75 or negative).

Table 29: Outsider stock ownership and firm performance: Correlation matrix of the explanatory variables

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 OUTOWN</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 TDTA</td>
<td>-0.117</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 TDTE</td>
<td>-0.025</td>
<td>-0.021</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 AGE</td>
<td>0.081</td>
<td>0.020</td>
<td>0.026</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 SIZE1</td>
<td>-0.080</td>
<td>0.200</td>
<td>-0.019</td>
<td>0.116</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 SIZE2</td>
<td>0.096</td>
<td>0.045</td>
<td>0.014</td>
<td>-0.111</td>
<td>-0.778</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>7 GROWTH</td>
<td>0.050</td>
<td>-0.011</td>
<td>0.017</td>
<td>0.076</td>
<td>0.052</td>
<td>-0.057</td>
<td>1.000</td>
</tr>
</tbody>
</table>

This finding contradicts to the findings of insider ownership and firm performance (director/sponsors and blockholders) studies above, implying that outsider shareholding decreases the firm performance. Based on this analysis the hypothesis 1d is rejected.

6.4 Ownership Structure and Firm Performance: Examination of Linearity

Consistent with Short and Keasey (1999) and Yammeesri (2003), this part of the study presents the linearity of relationship between various ownership group and
firm performance. While doing so, this part of the study identifies the inflection (turning) points of performance associated with various ownership groups or in other words the maximum and minimum points of firm performance associated with various ownership groups. These are presented in the following few paragraphs.

6.4.1 Director/Sponsors Ownership and Firm Performance

Due to Jensen and Meckling (1976) and Jensen (1993) 'convergence of interest' hypothesis; the managerial shareholding may align the interest of the managers with that of shareholders and thereby enhance firm performance. The firm performance will be higher for a certain level of directors/managers ownership and after that it may decrease and there will be entrenchments by owners which will continue until firm performance increase again (Morck et al, 1988; Short and Keasey, 1999). Managerial entrenchment may be evident at certain level of ownership.

To examine the inflection (turning) points of performance associated with shares owned by directors/sponsors, consistent with Short and Keasey (1999) the variables DIROWN$^2$ and DIROWN$^3$ are added as the square and cube root of the percentage of the shares held by directors/sponsors, in addition to variable DIROWN. Consistent with Short and Keasey (1999) the estimated coefficient of DIROWN and DIROWN$^3$ are expected to be positive (considering the convergence of interest with its positive effect on the performance at lower and higher level of ownership) and DIROWN$^2$ is expected to be negative (considering the entrenchments with negative effects on the performance at medium level of ownership). Unexpectedly the regression coefficients in table 30 show that the DIROWN and DIROWN$^3$ are negative and DIROWN$^2$ is positive under all the performance measures.

The whole procedure of capturing the inflection points under ROA performance measure is exemplified below. The control variables are assumed to be constant and DIROWN, DIROWN$^2$ and DIROWN$^3$ are denoted by x, x$^2$ and x$^3$ respectively and performance measures are denoted by y. Therefore the equation for firm performance under ROA is derived as, $y = -0.345x + 1.375x^2 - 0.870x^3$. The turning points is found after differentiating the y, letting $\frac{dy}{dx} = 0$ and solving for x. From this equation x is obtained as 12.69% and 100% under ROA.
Table 30: Director/ sponsors ownership and firm performance under different performance measures

This table presents the summary results of the directors/sponsors ownership and firm performance under various performance measures. Column (a), (b), (c) and (d) represent the various coefficients of various performance measures. The t-tests are presented in the parentheses.

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>(a) ROA</th>
<th>(b) ROE</th>
<th>(c) MBVR</th>
<th>(d) Tobin's Q</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>0.054</td>
<td>0.233</td>
<td>0.619</td>
<td>0.349</td>
</tr>
<tr>
<td></td>
<td>(1.918)</td>
<td>(0.591)</td>
<td>(0.524)</td>
<td>(2.076)</td>
</tr>
<tr>
<td>DIROWN</td>
<td>-0.345</td>
<td>-0.099</td>
<td>-0.348</td>
<td>-0.925</td>
</tr>
<tr>
<td></td>
<td>(-1.660)</td>
<td>(-0.593)</td>
<td>(-1.818)</td>
<td>(-5.573)</td>
</tr>
<tr>
<td>DIROWN^2</td>
<td>1.375</td>
<td>0.154</td>
<td>0.632</td>
<td>2.019</td>
</tr>
<tr>
<td></td>
<td>(2.928)</td>
<td>(0.407)</td>
<td>(1.458)</td>
<td>(5.378)</td>
</tr>
<tr>
<td>DIROWN^3</td>
<td>-0.870</td>
<td>-0.006</td>
<td>-0.176</td>
<td>-0.987</td>
</tr>
<tr>
<td></td>
<td>(-3.014)</td>
<td>(-0.028)</td>
<td>(-0.661)</td>
<td>(-4.275)</td>
</tr>
<tr>
<td>TDTA</td>
<td>-0.502</td>
<td>-0.015</td>
<td>-0.064</td>
<td>0.816</td>
</tr>
<tr>
<td></td>
<td>(-17.006)</td>
<td>(-0.619)</td>
<td>(-2.331)</td>
<td>(34.55)</td>
</tr>
<tr>
<td>TDTE</td>
<td>-0.003</td>
<td>0.819</td>
<td>0.739</td>
<td>-0.029</td>
</tr>
<tr>
<td></td>
<td>(-0.104)</td>
<td>(37.284)</td>
<td>(29.406)</td>
<td>(-1.349)</td>
</tr>
<tr>
<td>AGE</td>
<td>-0.023</td>
<td>-0.014</td>
<td>0.029</td>
<td>0.090</td>
</tr>
<tr>
<td></td>
<td>(-0.810)</td>
<td>(-0.623)</td>
<td>(1.106)</td>
<td>(3.900)</td>
</tr>
<tr>
<td>SIZE1</td>
<td>-0.273</td>
<td>-0.034</td>
<td>0.003</td>
<td>-0.072</td>
</tr>
<tr>
<td></td>
<td>(-5.808)</td>
<td>(-0.889)</td>
<td>(0.077)</td>
<td>(-1.907)</td>
</tr>
<tr>
<td>SIZE2</td>
<td>0.514</td>
<td>0.071</td>
<td>0.037</td>
<td>0.162</td>
</tr>
<tr>
<td></td>
<td>(11.18)</td>
<td>(1.909)</td>
<td>(0.878)</td>
<td>(4.403)</td>
</tr>
<tr>
<td>GROWTH</td>
<td>0.010</td>
<td>0.018</td>
<td>0.001</td>
<td>0.024</td>
</tr>
<tr>
<td></td>
<td>(0.353)</td>
<td>(0.834)</td>
<td>(0.023)</td>
<td>(1.083)</td>
</tr>
<tr>
<td>Adjusted R^2</td>
<td>0.495</td>
<td>0.672</td>
<td>0.570</td>
<td>0.677</td>
</tr>
<tr>
<td>F-Statistic</td>
<td>75.519</td>
<td>156.329</td>
<td>101.751</td>
<td>160.330</td>
</tr>
<tr>
<td></td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Inflection Points (%)</td>
<td>100.00</td>
<td>100.00</td>
<td>100.00</td>
<td>100.00</td>
</tr>
</tbody>
</table>

* At 10% level of significance, ** at 5% level of significance and *** at 1% level of significance respectively.

To determine whether x is a minimum or maximum turning point, the second order derivative test is used and the value of \( \frac{\partial^2 y}{\partial x^2} \) is calculated. If \( \frac{\partial^2 y}{\partial x^2} > 0 \), the turning
point is a maximum and if \( \frac{\partial^2 y}{\partial x^2} < 0 \), the turning point is a minimum. The second order derivative reveals that the firm performances as measured by ROA, is negatively related in the range of 0% to 12.69%, positively related in the range of 12.69% to 100% (figure 41 in the appendix 6). The coefficient DIROWN^2 is positive and significant. However, DIROWN and DIROWN^3 are negative and significant.

The firm performance as measured by ROE is negatively related in the range of 0% to 32.78%. It continued to rise after that point and never fell down (figure 42 in the appendix 6). The coefficient DIROWN^2 is positive and DIROWN and DIROWN^3 are negative; but none of these are significant under ROE. The firm performance as measured by MBVR is negatively related in the range of 0% to 21.56%. It continued to rise after that point and never fell down (figure 43 in the appendix 6). The coefficient DIROWN^2 is positive and DIROWN and DIROWN^3 are negative; but only DIROWN is significant. Similarly, the firm performance as measured by Tobin’s Q is negatively related in the range of 0% to 27.47%. It continued to rise after that point and never fell down (figure 44 in the appendix 6). The coefficient DIROWN^2 is positive and significant. However, DIROWN and DIROWN^3 are negative and significant.

This finding is consistent with earlier studies (such as, Morck et al, 1988; Griffith, 1999; Short and Keasey, 1999) implying that there is no linear relationship between director shareholding and firm performance. However, the convergence of interest is evident at lower and very higher level of ownership. The managerial entrenchment is evident within certain ranges under all the performance measures. The result of the analysis support the agency theory implying that the effective separation of ownership and control may lead agency conflict that may be detrimental to the economic welfare of the principals.

6.4.2 Blockholding and Firm Performance

This part of the study examines the linearity of relationship between the blockholding and firm performance. To examine the inflection (turning) points of performance associated with blockholding, consistent with Short and Keasey (1999) the variables LBOWN^2 and LBOWN^3 are added as the square and cube root of the percentage of the shares held by blockholders, in addition to variable LBOWN.
Consistent with Short and Keasey (1999) the estimated coefficient of LBO and LBO$^3$ are expected to be positive and LBO$^2$ is expected to be negative. Unexpectedly the regression coefficients in table 31 show that LBO and LBO$^3$ are negative and LBO$^2$ are positive under ROA, ROE and MBVR. The expected sign was not found under any performance measure.

### Table 31: Blockholding and firm performance under different performance measures

This table presents the summary results of the percentage largest blockholding and firm performance under different performance measures. Column (a), (b), (c) and (d) represent the various coefficients of various performance measures. The $t$-tests are presented in the parentheses.

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>(a) ROA</th>
<th>(b) ROE</th>
<th>(c) MBVR</th>
<th>(d) Tobin's Q</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>0.102</td>
<td>0.236</td>
<td>0.227</td>
<td>-0.060</td>
</tr>
<tr>
<td></td>
<td>(4.777)</td>
<td>(0.774)</td>
<td>(0.247)</td>
<td>(-0.478)</td>
</tr>
<tr>
<td>LBO</td>
<td>-0.509</td>
<td>-0.163</td>
<td>-0.338</td>
<td>-0.096</td>
</tr>
<tr>
<td></td>
<td>(-2.589)</td>
<td>(-1.008)</td>
<td>(-1.825)</td>
<td>(-0.622)</td>
</tr>
<tr>
<td>LBO$^2$</td>
<td>1.337</td>
<td>0.349</td>
<td>0.659</td>
<td>0.262</td>
</tr>
<tr>
<td></td>
<td>(3.002)</td>
<td>(0.953)</td>
<td>(1.573)</td>
<td>(0.752)</td>
</tr>
<tr>
<td>LBO$^3$</td>
<td>-0.612</td>
<td>-0.148</td>
<td>-0.218</td>
<td>0.092</td>
</tr>
<tr>
<td></td>
<td>(-2.214)</td>
<td>(-0.652)</td>
<td>(-0.837)</td>
<td>(0.424)</td>
</tr>
<tr>
<td>TDTA</td>
<td>-0.509</td>
<td>-0.019</td>
<td>-0.073</td>
<td>0.809</td>
</tr>
<tr>
<td></td>
<td>(-17.616)</td>
<td>(-0.791)</td>
<td>(-2.670)</td>
<td>(35.793)</td>
</tr>
<tr>
<td>TDTE</td>
<td>0.005</td>
<td>0.819</td>
<td>0.738</td>
<td>-0.024</td>
</tr>
<tr>
<td></td>
<td>(0.183)</td>
<td>(37.187)</td>
<td>(29.304)</td>
<td>(-1.134)</td>
</tr>
<tr>
<td>AGE</td>
<td>-0.026</td>
<td>-0.008</td>
<td>0.045</td>
<td>0.108</td>
</tr>
<tr>
<td></td>
<td>(-0.933)</td>
<td>(-0.350)</td>
<td>(1.748)</td>
<td>(5.024)</td>
</tr>
<tr>
<td>SIZE1</td>
<td>-0.366</td>
<td>-0.053</td>
<td>-0.037</td>
<td>-0.133</td>
</tr>
<tr>
<td></td>
<td>(-7.843)</td>
<td>(-1.373)</td>
<td>(-0.850)</td>
<td>(-3.649)</td>
</tr>
<tr>
<td>SIZE2</td>
<td>0.554</td>
<td>0.081</td>
<td>0.058</td>
<td>0.178</td>
</tr>
<tr>
<td></td>
<td>(12.138)</td>
<td>(2.148)</td>
<td>(1.358)</td>
<td>(4.981)</td>
</tr>
<tr>
<td>GROWTH</td>
<td>0.006</td>
<td>0.018</td>
<td>0.000</td>
<td>0.022</td>
</tr>
<tr>
<td></td>
<td>(0.232)</td>
<td>(0.822)</td>
<td>(-0.014)</td>
<td>(1.028)</td>
</tr>
<tr>
<td>Adjusted R$^2$</td>
<td>0.513</td>
<td>0.671</td>
<td>0.569</td>
<td>0.702</td>
</tr>
<tr>
<td>F-Statistic</td>
<td>81.084</td>
<td>15.989</td>
<td>101.331</td>
<td>180.032</td>
</tr>
<tr>
<td></td>
<td>22.52</td>
<td>28.53</td>
<td>30.16</td>
<td>17.95</td>
</tr>
<tr>
<td>Inflection Points (%)</td>
<td>100.00</td>
<td>100.00</td>
<td>100.00</td>
<td>N/A</td>
</tr>
</tbody>
</table>

* At 10% level of significance, ** at 5% level of significance and *** at 1% level of significance respectively.
The inflection points are obtained as 22.52% and 100% under ROA. It means that the firm performance as measured by ROA is negatively related in the range of 0% to 22.52%. It continued to rise after that point and never fell down (figure 45 in the appendix 7). The coefficient LBOWN$^2$ is positive and LBOWN and LBOWN$^3$ are negative; but all of these are significant under ROA. The inflection points are obtained as 28.53% and 100% under ROE. It means that the firm performance as measured by ROA is negatively related in the range of 0% to 28.53%. It continued to rise after that point and never fell down (figure 46 in the appendix 7). The coefficient LBOWN$^2$ is positive and LBOWN and LBOWN$^3$ are negative; but none of these are significant under ROE. The inflection points are obtained as 30.16% and 100% under MBVR. It means that the firm performance as measured by MBVR is negatively related in the range of 0% to 30.16%. It continued to rise after that point and never fell down (figure 47 in the appendix 7). The coefficient LBOWN$^2$ is positive and LBOWN and LBOWN$^3$ are negative; but only LBOWN is significant under MBVR. The inflection point is obtained as 17.95%. It means that the firm performance as measured by Tobin’s Q is negatively related in the range of 0% to 17.95%. It continued to rise after that point and never fell down (figure 48 in the appendix 7). The coefficient LBOWN$^2$ is positive and LBOWN and LBOWN$^3$ are negative; but only LBOWN is significant under Tobin’s Q.

Based on this finding, it can be argued that there is no linear relationship between blockholding and firm performance. The result of the analysis support the agency theory implying that the effective separation of ownership and control may lead agency conflict that may be detrimental to the economic welfare of the principals.

### 6.4.3 Institutional Ownership and Firm Performance

This part of the study presents the linearity of relationship between the institutional shareholding and firm performance. To examine the inflection (turning) points of performance associated with shares owned by institutions, consistent with Short and Keasey (1999) the variables INSTOWN$^2$ and INSTOWN$^3$ are added as the square and cube root of the percentage of the shares held by institution, in addition to variable INSTOWN. Consistent with Short and Keasey (1999) the estimated coefficient of INSTOWN and INSTOWN$^3$ are expected to be positive and INSTOWN$^2$ is expected to be negative. Unexpectedly the regression coefficients in table 32 show that INSTOWN and INSTOWN$^3$ are negative and INSTOWN$^2$ are positive under ROA,
MBVR and Tobin’s Q performance measures. The expected sign is only found under ROE performance measure.

**Table 32: Institutional ownership and firm performance under different performance measures**

This table presents the summary results of the percentage of institutional shareholding and firm performance under different performance measures. Column (a), (b), (c) and (d) represent the various coefficients of various performance measures. The t-tests are resented in the parentheses.

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>(a) ROA</th>
<th>(b) ROE</th>
<th>(c) MBVR</th>
<th>(d) Tobin’s Q</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>0.074</td>
<td>0.079</td>
<td>-0.617</td>
<td>-0.211</td>
</tr>
<tr>
<td></td>
<td>(3.486)</td>
<td>(0.274)</td>
<td>(-0.705)</td>
<td>(-1.636)</td>
</tr>
<tr>
<td>INSTOWN</td>
<td>-0.356</td>
<td>0.084</td>
<td>-0.016</td>
<td>-0.229</td>
</tr>
<tr>
<td></td>
<td>(-1.869)</td>
<td>(0.567)</td>
<td>(-0.092)</td>
<td>(-1.482)</td>
</tr>
<tr>
<td>INSTOWN^2</td>
<td>0.718</td>
<td>-0.243</td>
<td>-0.098</td>
<td>0.573</td>
</tr>
<tr>
<td></td>
<td>(1.570)</td>
<td>(-0.683)</td>
<td>(-0.237)</td>
<td>(1.542)</td>
</tr>
<tr>
<td>INSTOWN^3</td>
<td>-0.401</td>
<td>0.148</td>
<td>0.076</td>
<td>-0.388</td>
</tr>
<tr>
<td></td>
<td>(-1.358)</td>
<td>(0.647)</td>
<td>(0.285)</td>
<td>(-1.616)</td>
</tr>
<tr>
<td>TDTA</td>
<td>-0.516</td>
<td>-0.022</td>
<td>-0.079</td>
<td>** 0.805 ***</td>
</tr>
<tr>
<td></td>
<td>(-16.742)</td>
<td>(-0.924)</td>
<td>(-2.851)</td>
<td>(32.145)</td>
</tr>
<tr>
<td>TDTTE</td>
<td>0.005</td>
<td>0.819</td>
<td>** 0.738</td>
<td>*** -0.025</td>
</tr>
<tr>
<td></td>
<td>(0.185)</td>
<td>(37.108)</td>
<td>(28.798)</td>
<td>(-1.097)</td>
</tr>
<tr>
<td>AGE</td>
<td>0.016</td>
<td>-0.001</td>
<td>0.066</td>
<td>** 0.154 ***</td>
</tr>
<tr>
<td></td>
<td>(0.542)</td>
<td>(-0.031)</td>
<td>(2.530)</td>
<td>(6.569)</td>
</tr>
<tr>
<td>SIZE1</td>
<td>-0.322</td>
<td>-0.043</td>
<td>-0.022</td>
<td>** -0.098</td>
</tr>
<tr>
<td></td>
<td>(-6.589)</td>
<td>(-1.137)</td>
<td>(-0.493)</td>
<td>(-2.466)</td>
</tr>
<tr>
<td>SIZE2</td>
<td>0.554</td>
<td>0.076</td>
<td>** 0.054</td>
<td>0.190 ***</td>
</tr>
<tr>
<td></td>
<td>(11.565)</td>
<td>(2.033)</td>
<td>(1.257)</td>
<td>(4.891)</td>
</tr>
<tr>
<td>GROWTH</td>
<td>0.005</td>
<td>0.020</td>
<td>0.003</td>
<td>0.025</td>
</tr>
<tr>
<td></td>
<td>(0.186)</td>
<td>(0.881)</td>
<td>(0.102)</td>
<td>(1.068)</td>
</tr>
<tr>
<td>Adjusted R^2</td>
<td>0.542</td>
<td>0.669</td>
<td>0.553</td>
<td>0.638</td>
</tr>
<tr>
<td>F-Statistic</td>
<td>63.705</td>
<td>154.615</td>
<td>94.979</td>
<td>134.807 ***</td>
</tr>
<tr>
<td></td>
<td>35.13</td>
<td>21.51</td>
<td>0.00</td>
<td>27.87</td>
</tr>
<tr>
<td>Inflection Points (%)</td>
<td>84.24</td>
<td>87.95</td>
<td>93.47</td>
<td>70.57</td>
</tr>
</tbody>
</table>

* At 10% level of significance, ** at 5% level of significance and *** at 1% level of significance respectively.

The inflection points are obtained as 35.13% and 84.24% under ROA. It means that the firm performance as measured by ROA is negatively related in the range of 0% to 35.13%, positively related in the range of 35.13% to 84.24% and negatively related...
when the institutional ownership exceeds 84.24% (figure 49 in the appendix 8). The coefficient LBOWN\(^2\) is positive and LBOWN and LBOWN\(^3\) are negative; but only LBOWN is significant under ROA.

The inflection points are obtained as 21.51% and 87.95% under ROE. It means that the firm performance as measured by ROE is negatively related in the range of 0% to 21.51%, positively related in the range of 21.51% to 87.95% and negatively related when the institutional ownership exceeds 87.95% (figure 50 in the appendix 8). The coefficient LBOWN\(^2\) is negative and LBOWN and LBOWN\(^3\) are positive; but none of these are significant under ROE. The inflection points are obtained as 0 and 93.47% under MBVR. It means that the firm performance as measured by ROA is positively related in the range of 0% to 93.47% and negatively related when the institutional ownership exceeds 93.47% (figure 51 in the appendix 8). The coefficient LBOWN\(^3\) is positive and LBOWN and LBOWN\(^2\) are negative; but none of these are significant under MBVR. The inflection points are obtained as 27.87% and 70.57% under Tobin’s Q. It means that the firm performance as measured by Tobin’s Q is negatively related in the range of 0% to 27.87%, positively related in the range of 27.87% to 70.57% and negatively related when the institutional ownership exceeds 70.57% (figure 52 in the appendix 8). The coefficient LBOWN\(^2\) is positive and LBOWN and LBOWN\(^3\) are negative; but none of these are significant under Tobin’s Q.

Based on this finding, it can be argued there is no linear relationship between institutional shareholding and firm performance. Due to the presence of concentrated shareholding by directors/managers and the absence of investment related products in Bangladesh, the institutional shareholding may not be a realistic in Bangladesh corporate sector. The result of the analysis support the agency theory implying that the separation of ownership and control may lead agency conflict that may be detrimental to the economic welfare of the principals.

6.5 Board Composition and Firm Performance

This section presents the board composition and firm performance. The model developed in Chapter 5 is regressed by using 2-Stage Least Square (2SLS) regression analysis. The categorization of the sample revealed that approximately 51.92 percent of the sample firms have the CEO duality. This figure is higher than Japanese, United Kingdom, Italian and Belgian Companies as firms in these countries only have 10-20
percent CEO duality (Kang and Zardkoohi, 2005). However, this figure is fairly lower than that of U. S. firms as there are almost 80 percent corporations in U.S. have CEO duality (Kang and Zardkoohi, 2005).

Table 33: Board composition and firm performance under different performance measures
This table presents the summary results of the board composition and firm performance under different performance measures. Column (a), (b), (c) and (d) represent the various coefficients of various performance measures. The t-tests are presented in the parentheses.

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>(a) ROA</th>
<th>(b) ROE</th>
<th>(c) MBVR</th>
<th>(d) Tobin’s Q</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>-0.066 **</td>
<td>-0.570</td>
<td>-4.021 **</td>
<td>0.441 **</td>
</tr>
<tr>
<td></td>
<td>(-2.320)</td>
<td>(-1.023)</td>
<td>(-2.781)</td>
<td>(1.983)</td>
</tr>
<tr>
<td>BDCOM</td>
<td>0.021</td>
<td>-0.016</td>
<td>-0.012</td>
<td>0.012</td>
</tr>
<tr>
<td></td>
<td>(0.604)</td>
<td>(-0.407)</td>
<td>(-0.298)</td>
<td>(0.318)</td>
</tr>
<tr>
<td>BDSIZE</td>
<td>0.039</td>
<td>0.114</td>
<td>0.164 ***</td>
<td>0.252 ***</td>
</tr>
<tr>
<td></td>
<td>(1.116)</td>
<td>(2.863)</td>
<td>(4.159)</td>
<td>(6.848)</td>
</tr>
<tr>
<td>CEOD</td>
<td>0.001</td>
<td>0.011 **</td>
<td>0.004</td>
<td>-0.021</td>
</tr>
<tr>
<td></td>
<td>(0.023)</td>
<td>(0.295)</td>
<td>(0.092)</td>
<td>(-0.589)</td>
</tr>
<tr>
<td>AGE</td>
<td>0.021</td>
<td>-0.033</td>
<td>0.030</td>
<td>0.091 **</td>
</tr>
<tr>
<td></td>
<td>(0.605)</td>
<td>(-0.840)</td>
<td>(0.770)</td>
<td>(2.474)</td>
</tr>
<tr>
<td>SIZE1</td>
<td>-0.165 **</td>
<td>-0.028</td>
<td>0.002</td>
<td>-0.380 ***</td>
</tr>
<tr>
<td></td>
<td>(-2.878)</td>
<td>(-0.432)</td>
<td>(0.032)</td>
<td>(-6.334)</td>
</tr>
<tr>
<td>SIZE2</td>
<td>0.587 ***</td>
<td>0.046</td>
<td>0.026</td>
<td>0.096</td>
</tr>
<tr>
<td></td>
<td>(10.319)</td>
<td>(0.711)</td>
<td>(0.400)</td>
<td>(1.610)</td>
</tr>
<tr>
<td>GROWTH</td>
<td>0.001</td>
<td>0.000</td>
<td>-0.018</td>
<td>0.019</td>
</tr>
<tr>
<td></td>
<td>(0.023)</td>
<td>(0.009)</td>
<td>(-0.479)</td>
<td>(0.530)</td>
</tr>
<tr>
<td>Adjusted R²</td>
<td>0.223</td>
<td>-0.004</td>
<td>0.021</td>
<td>0.142</td>
</tr>
<tr>
<td>F-Statistic</td>
<td>29.033 ***</td>
<td>1.391</td>
<td>3.095 **</td>
<td>17.226 ***</td>
</tr>
</tbody>
</table>

* At 10% level of significance, ** at 5% level of significance and *** at 1% level of significance respectively.

The regression results of the board composition and firm performance under different performance measures are presented in Table 33. The regression coefficients suggest that there is no significant relationship between board composition and firm performance under any performance measures. The Adjusted R squared and F-statistic being significant indicates reasonable overall fit. Consistent with Zahra and Stanton (1988), BDSIZE (Board Size) has significant positive explanatory power in influencing the firm performance under MBVR and Tobins’s Q. The results also indicate that CEOD (CEO duality) has significant explanatory power in influencing firm performance. AGE has significant positive explanatory power firm performance under
Tobin’s Q. SIZE1 has significant negative explanatory power in influencing firm performance under ROA and Tobin’s Q and SIZE2 has significant positive explanatory power in influencing firm performance under ROA.

The correlation matrix of the explanatory variables is presented in table 34. It is revealed that there are no strong correlations among them as the correlation coefficients are very small (less than 0.75 or negative).

Table 34: Board composition and firm performance: Correlation matrix of the explanatory variables

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>BDCOM</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>BDSIZE (Log)</td>
<td>-0.132</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>CEO</td>
<td>0.012</td>
<td>0.042</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>AGE</td>
<td>-0.151</td>
<td>-0.108</td>
<td>0.125</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>SIZE1</td>
<td>-0.013</td>
<td>-0.074</td>
<td>0.107</td>
<td>0.142</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>SIZE2</td>
<td>-0.058</td>
<td>-0.042</td>
<td>-0.045</td>
<td>-0.109</td>
<td>-0.793</td>
<td>1.000</td>
</tr>
<tr>
<td>7</td>
<td>GROWTH</td>
<td>-0.064</td>
<td>-0.024</td>
<td>-0.009</td>
<td>0.083</td>
<td>0.061</td>
<td>-0.056</td>
</tr>
</tbody>
</table>

This finding is consistent with earlier studies (such as, Rechner and Dalton, 1986; Fosberg, 1989; Barnhart et al, 1994; Grace et al, 1995; Dalton et al, 1998; Dalton and Daily, 1999; Cho and Kim, 2007) implying that board composition in the form of outside independent directors does not influence the firm economic performance. However, it contradicts with a number of earlier studies (such as, Schellenger et al, 1989; Daily and Dalton, 1992, Tian and Lau, 2001; Luan and Tang, 2007) implying that outside independent directors enhance firm performance. While this relationship was not quite clear in case of developed economies (Judge, et al, 2003), the results clearly does not support the agency theory, in case of emerging economy, such as Bangladesh implying that the outside directors are not good monitor. As discussed in Chapter 2, it may be due to the absence of the legislative requirement of having the adequate qualifications and expertise of the independent directors. Based on this analysis the hypothesis 2 is rejected.

6.6 CEO Duality and Firm Performance

This section presents the structural independence of board and firm performance. Before doing formal analysis it would be very helpful in understanding the explanatory analyses of the structural independence and firm performance.
Figure 18: Board leadership structure and firm performance under ROA performance measure

Figure 19: Board leadership structure and firm performance under ROE performance measure

Figure 20: Board leadership structure and firm performance under MBVR performance measure
Figure 21: Board leadership structure and firm performance under Tobin's Q performance measure

Figure 18, 19, 20 and 21 show the board leadership structure and firm performance under ROA, ROE, MBVR and Tobin's Q respectively. These figures reveal that in general the firms are over performing under the independent leadership structure (i.e. CEO non-duality) than that of CEO duality firms under all the performance measures.

Further, the model developed in Chapter 5 is regressed by using 2-Stage Least Square (2SLS) regression analysis. The regression results of the CEO duality and firm performance under different performance measures are presented in table 35 and the correlation matrix of the explanatory variables is presented in table 36.

The regression coefficients of the relationship between the CEO duality and firm performance also suggest that there is no significant relationship between CEO duality and firm performance under any performance measure. Rather, there is a significant negative relationship between CEO duality and the firm performance under Tobin’s’ Q. The Adjusted R squared and F-statistic being significant indicates reasonable overall fit. The results also indicate that ‘board size’ has significant positive explanatory power under all the performance measures. Director ownership has significant positive explanatory power in influencing the firm performance under ROA, MBVR and Tobin’s Q. Institutional ownership has no explanatory power in influencing the firm performance. TDTA has significant negative explanatory power under ROA and MBVR performance measures and has significant positive explanatory power under Tobin’s Q performance measure. TDTE has positive explanatory power under ROE, MBVR performance measures, but has a negative explanatory power under
Tobin’s Q performance measure. AGE has significant explanatory power in influencing firm performance only under Tobin’s Q performance measure. SIZE1 has significant negative explanatory power in influencing firm performance under ROA and Tobin’s Q performance measures. SIZE2 has significant positive explanatory power in influencing firm performance under ROA, ROE and Tobin’s Q performance measures.

**Table 35: CEO duality and firm performance under different performance measures**

This table presents the summary results of the CEO duality and firm performance under different performance measures. Column (a), (b), (c) and (d) represent the various coefficients of various performance measures. The t-tests are presented in the parentheses.

<table>
<thead>
<tr>
<th></th>
<th>Dependent Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(a)</td>
</tr>
<tr>
<td></td>
<td>ROA</td>
</tr>
<tr>
<td>Intercept</td>
<td>-0.027</td>
</tr>
<tr>
<td></td>
<td>(-1.119)</td>
</tr>
<tr>
<td>CEOD</td>
<td>-0.012</td>
</tr>
<tr>
<td></td>
<td>(-0.422)</td>
</tr>
<tr>
<td>BDSIZE (Log)</td>
<td>0.103 ***</td>
</tr>
<tr>
<td></td>
<td>(3.618)</td>
</tr>
<tr>
<td>DIROWN</td>
<td>0.215 ***</td>
</tr>
<tr>
<td></td>
<td>(7.184)</td>
</tr>
<tr>
<td>INSTOWN</td>
<td>0.044</td>
</tr>
<tr>
<td></td>
<td>(1.522)</td>
</tr>
<tr>
<td>TDTA</td>
<td>-0.512 ***</td>
</tr>
<tr>
<td></td>
<td>(-17.166)</td>
</tr>
<tr>
<td>TDTLE</td>
<td>-0.006</td>
</tr>
<tr>
<td></td>
<td>(-0.221)</td>
</tr>
<tr>
<td>AGE</td>
<td>-0.029</td>
</tr>
<tr>
<td></td>
<td>(-1.020)</td>
</tr>
<tr>
<td>SIZE1</td>
<td>-0.287 ***</td>
</tr>
<tr>
<td></td>
<td>(-6.070)</td>
</tr>
<tr>
<td>SIZE2</td>
<td>0.508 ***</td>
</tr>
<tr>
<td></td>
<td>(11.119)</td>
</tr>
<tr>
<td>Adjusted R²</td>
<td>0.501</td>
</tr>
<tr>
<td>F-Statistic</td>
<td>77.256 ***</td>
</tr>
</tbody>
</table>

* At 10% level of significance, ** at 5% level of significance and *** at 1% level of significance respectively.
The correlation matrix of the explanatory variables is presented in table 36. It is revealed that there are no strong correlations among them as the correlation coefficients are very small (less than 0.75 or negative).

**Table 36: CEO duality and firm performance: Correlation matrix of the explanatory variables**

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>CEOD</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>BDSIZE (Log)</td>
<td>0.055</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>DIROWN</td>
<td>-0.116</td>
<td>-0.091</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>INSTOWN</td>
<td>0.089</td>
<td>-0.063</td>
<td>0.345</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>TDTA</td>
<td>-0.035</td>
<td>-0.162</td>
<td>0.118</td>
<td>0.085</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>TDTE</td>
<td>-0.019</td>
<td>-0.083</td>
<td>-0.005</td>
<td>0.053</td>
<td>-0.009</td>
<td>1.000</td>
</tr>
<tr>
<td>7</td>
<td>AGE</td>
<td>0.151</td>
<td>-0.125</td>
<td>-0.128</td>
<td>0.037</td>
<td>0.035</td>
<td>0.040</td>
</tr>
<tr>
<td>8</td>
<td>SIZE1</td>
<td>0.082</td>
<td>-0.114</td>
<td>0.143</td>
<td>0.071</td>
<td>0.216</td>
<td>-0.015</td>
</tr>
<tr>
<td>9</td>
<td>SIZE2</td>
<td>-0.039</td>
<td>-0.054</td>
<td>-0.078</td>
<td>-0.048</td>
<td>0.055</td>
<td>0.023</td>
</tr>
</tbody>
</table>

Therefore, both the explanatory and multivariate analysis confirm the earlier studies (such as, Berg and Smith, 1978; Chaganti *et al.*, 1985; Molz, 1988; Rechner and Dalton, 1989; Rechner and Dalton, 1991; Donaldson and Davis, 1991; Dalton *et al.*, 1998; Judge *et al.*, 2003; Abdullah, 2004; Braun and Sharma, 2007; Elsayed, 2007) implying that CEO duality does not influence the firm performance. However, this finding contradicts with number of earlier studies (such as, Pearce II and Zahra, 1991; Daily and Dalton, 1992; Boyd, 1995; Tian and Lau, 2001; Lin, 2005) implying that CEO duality enhance firm performance. The result of the analysis supports the agency theory, but refutes the stewardship theory implying that the combined leadership role is not good for firm economic performance. Based on this analysis the hypothesis 3 is accepted.

### 6.7 Executives Compensation: Effects of Ownership Structure and Firm Size

This section presents the relationship between the ownership structure, firm size and executive pay. The model developed in Chapter 5 is regressed by using the 2-Stage Least Square (2SLS) regression analysis. The regression of the relationship between ownership structure, firm size and executive pay is presented in table 37.

The regression coefficients suggest that there is a significant negative relationship between the director share ownership (DIROWN) and executive pay; institutional share ownership (INSTOWN) and executive pay; significant positive
relationship between the largest blockholding (LBOWN) and executive pay. These are significant at 5% level. Therefore, it can be argued that effective ownership involvement may be the substitute of professional managers. However, the debt (both the TDTA and TDTE) and GROWTH do not have any explanatory power in influencing the firm performance. The AGE has significant explanatory power in influencing the executive pay. The results confirm the earlier studies (such as, Core et al, 1999) implying that ownership structure influences the executives pay (either positively or negatively). Based on this analysis the hypothesis 4a is accepted.

Table 37: Relationship between ownership structure, firm size and executive pay

This table presents the summary results of the ownership structure, firm size and executive pay. The t-tests are presented in the parentheses.

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>Intercept</th>
<th>DIROWN</th>
<th>LBOWN</th>
<th>INSTOWN</th>
<th>TDTA</th>
<th>TDTE</th>
<th>AGE</th>
<th>SIZE1</th>
<th>SIZE2</th>
<th>GROWTH</th>
<th>Adjusted R²</th>
<th>F-Statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>-3.390</td>
<td>-0.057</td>
<td>0.076</td>
<td>-0.042</td>
<td>0.035</td>
<td>0.008</td>
<td>0.137</td>
<td>0.372</td>
<td>0.463</td>
<td>0.023</td>
<td>0.666</td>
<td>152.099</td>
</tr>
<tr>
<td></td>
<td>(-12.928)</td>
<td>(-2.138)</td>
<td>(3.017)</td>
<td>(-1.753)</td>
<td>(1.449)</td>
<td>(0.358)</td>
<td>(6.045)</td>
<td>(9.526)</td>
<td>(12.367)</td>
<td>(1.021)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

** at 5% level of significance and *** at 1% level of significance respectively.

Further, SIZE1 and SIZE2 significantly influence the executive pay. These are significant at 1% level. The result confirms the earlier studies (such as, Zhou, 2000;
Cichello, 2005; Fernandes, 2005; Merhebi et al, 2006) implying that firm size has significant influence in executive pay. Based on this analysis the hypothesis 4b is accepted.

The correlation matrix of the explanatory variables is presented in table 38. It is revealed that there are no strong correlations among them as the correlation coefficients are very small (less than 0.75 or negative).

Table 38: Effects of ownership structure and firm size on executive compensation: Correlation matrix of the explanatory variables

<table>
<thead>
<tr>
<th></th>
<th>DIROWN</th>
<th>LBOWN</th>
<th>INSTOWN</th>
<th>TDTA</th>
<th>TDTE</th>
<th>AGE</th>
<th>SIZE1</th>
<th>SIZE2</th>
<th>GROWTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>-0.406</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>0.370</td>
<td>-0.123</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>0.103</td>
<td>-0.023</td>
<td>0.083</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>-0.029</td>
<td>0.039</td>
<td>0.044</td>
<td>-0.024</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>-0.086</td>
<td>-0.071</td>
<td>0.024</td>
<td>0.021</td>
<td>0.031</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>0.210</td>
<td>-0.195</td>
<td>0.075</td>
<td>0.205</td>
<td>-0.030</td>
<td>0.114</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>-0.079</td>
<td>-0.006</td>
<td>-0.041</td>
<td>0.047</td>
<td>0.017</td>
<td>-0.107</td>
<td>-0.762</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>0.007</td>
<td>-0.007</td>
<td>-0.053</td>
<td>-0.007</td>
<td>0.014</td>
<td>0.067</td>
<td>0.057</td>
<td>-0.061</td>
<td>1.000</td>
</tr>
</tbody>
</table>

6.8 Executives Pay: Pay-Performance Sensitivity

This part of the study presents the results of relationship between the executive pay and firm performance under different performance measures, or pay-performance sensitivity. The explanatory analysis reveals that executive pay is gradually increasing over the years (figure 22); whereas the firm is performance is decreasing over the years (figures 53-56 in the appendix 9).

Figure 22: Changes in average executive pay over various years
Further, to conduct the empirical analysis, the model developed in Chapter 5 is regressed by using 2-Stage Least Square (2SLS) regression analysis. The regression coefficients of the relationship between the executive pay and firm performance under different performance measures are presented in table 39. The correlation matrix of the explanatory variables is presented in table 40.

Table 39: Relationship between executive pay and firm performance

This table presents the summary results of the executive pay and firm performance under different performance measures. Column (a), (b), (c) and (d) represent the various coefficients of various performance measures. The $t$-tests are presented in the parentheses.

<table>
<thead>
<tr>
<th></th>
<th>(a)</th>
<th>(b)</th>
<th>(c)</th>
<th>(d)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ROA</td>
<td>ROE</td>
<td>MBVR</td>
<td>Tobin’s Q</td>
</tr>
<tr>
<td>Intercept</td>
<td>-0.069 **</td>
<td>-0.532</td>
<td>-4.424</td>
<td>0.713 **</td>
</tr>
<tr>
<td></td>
<td>(-2.299)</td>
<td>(-0.900)</td>
<td>(-2.886)</td>
<td>(3.043)</td>
</tr>
<tr>
<td>LogPAY</td>
<td>-0.017</td>
<td>-0.002</td>
<td>-0.045</td>
<td>0.190 **</td>
</tr>
<tr>
<td></td>
<td>(-0.283)</td>
<td>(-0.028)</td>
<td>(-0.685)</td>
<td>(3.124)</td>
</tr>
<tr>
<td>BDCOM</td>
<td>0.021</td>
<td>-0.016</td>
<td>-0.011</td>
<td>0.012</td>
</tr>
<tr>
<td></td>
<td>(0.602)</td>
<td>(-0.413)</td>
<td>(-0.287)</td>
<td>(0.335)</td>
</tr>
<tr>
<td>BDSIZE</td>
<td>0.038</td>
<td>0.113 **</td>
<td>0.161</td>
<td>0.265 ***</td>
</tr>
<tr>
<td></td>
<td>(1.079)</td>
<td>(2.833)</td>
<td>(4.062)</td>
<td>(7.206)</td>
</tr>
<tr>
<td>AGE</td>
<td>0.023</td>
<td>-0.034</td>
<td>0.036</td>
<td>0.066 **</td>
</tr>
<tr>
<td></td>
<td>(0.655)</td>
<td>(-0.848)</td>
<td>(0.903)</td>
<td>(1.753)</td>
</tr>
<tr>
<td>SIZE1</td>
<td>-0.158 **</td>
<td>-0.029</td>
<td>0.019</td>
<td>-0.452 ***</td>
</tr>
<tr>
<td></td>
<td>(-2.571)</td>
<td>(-0.422)</td>
<td>(0.282)</td>
<td>(-7.054)</td>
</tr>
<tr>
<td>SIZE2</td>
<td>0.594 ***</td>
<td>0.047</td>
<td>0.046</td>
<td>0.007</td>
</tr>
<tr>
<td></td>
<td>(9.449)</td>
<td>(0.667)</td>
<td>(0.658)</td>
<td>(0.104)</td>
</tr>
<tr>
<td>GROWTH</td>
<td>0.001</td>
<td>0.001</td>
<td>-0.017</td>
<td>0.014</td>
</tr>
<tr>
<td></td>
<td>(0.034)</td>
<td>(0.013)</td>
<td>(-0.450)</td>
<td>(0.398)</td>
</tr>
<tr>
<td>Adjusted $R^2$</td>
<td>0.223</td>
<td>0.004</td>
<td>0.022</td>
<td>0.154</td>
</tr>
<tr>
<td>F-Statistic</td>
<td>28.973 ***</td>
<td>1.377</td>
<td>3.158 **</td>
<td>18.763 ***</td>
</tr>
</tbody>
</table>

** at 5% level of significance and *** at 1% level of significance respectively.

The regression coefficients suggest that there is a positive relationship between the executive pay and firm performance only under Tobin’s Q performance measure. It is significant at 5% level. However, due to absence of compensation in the form of share option or option based compensation in the Bangladesh corporate sector, the market performance measures may not be considered as realistic in this case. Board
Size has a significant positive explanatory power in influencing firm performance under ROE and Tobin’s Q performance measures. AGE and SIZE2 have significant positive explanatory power in influencing firm performance under Tobin’s Q and ROA performance measure respectively. SIZE1 has significant negative explanatory power in influencing firm performance under ROA and Tobin’s Q performance measures.

The correlation matrix of the explanatory variables is presented in table 40. It is revealed that there are no strong correlations among them as the correlation coefficients are very small (less than 0.75 or negative).

Table 40: Executives pay and firm performance: Correlation matrix of the explanatory variables

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>LogPay</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BDCOM</td>
<td>0.006</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LogBS</td>
<td>0.103</td>
<td>-0.133</td>
<td>-0.134</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AGE</td>
<td>-0.241</td>
<td>-0.154</td>
<td>-0.134</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SIZE1</td>
<td>-0.377</td>
<td>-0.011</td>
<td>-0.112</td>
<td>0.207</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SIZE2</td>
<td>-0.428</td>
<td>-0.055</td>
<td>-0.080</td>
<td>0.013</td>
<td>-0.503</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>GROWTH</td>
<td>-0.042</td>
<td>-0.065</td>
<td>-0.028</td>
<td>0.092</td>
<td>0.073</td>
<td>-0.033</td>
<td>1.000</td>
</tr>
</tbody>
</table>

This finding confirms the earlier studies (such as, Kerr and Bettis, 1987; Jensen and Murphy, 1990b; Firth et al, 2006) implying that there is no relationship between executive pay and firm performance; that is no pay-performance sensitivity. However, this finding contradicts with the earlier studies (such as, Murphy, 1985; Main, 1991; Garen, 1994; Conyon, 1987; Merhebi, et al, 2006). Based on this analysis the hypothesis 4c is rejected, implying that the executive compensation may not be a suitable governance mechanism in the context of Bangladesh.

6.9 Capital Structure and Agency Cost

This part of the study presents whether the corporate capital structure in the form of debt and equity may reduce the agency cost. Consistent with Singh and Davidson III (2003), this study uses the two specific measures of agency cost, such as (a) the expenses ratio and (b) the assets utilization ratio or assets turnover ratio (which is explained in part 5.12.5). A low ‘expense ratio’ means that management is controlling the operating expenses and vice versa, whereas a low ‘asset utilization ratio’ means that management is using the assets in non-cash flow generating venture and vice versa. Therefore, an inverse (negative) relationship between the debt and agency
cost of ‘expense ratio’ and a positive relationship between the debt and the agency cost of ‘asset utilization ratio’ is expected.

To conduct the empirical analysis the model developed in Chapter 5 is regressed by using 2-Stage Least Square (2SLS) regression analysis. The regression coefficients of the relationship between the debt and agency cost are presented in table 41.

### Table 41: Relationship between debt and agency cost

This table presents the summary results of the debt and agency cost. Column (a), (b), (c) and (d) represents the various coefficients of various measures of debt. The *t*-tests are presented in the parentheses.

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>(a)</th>
<th>(b)</th>
<th>(c)</th>
<th>(d)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>STDTA</td>
<td>LTDTA</td>
<td>TDTA</td>
<td>TDTE</td>
</tr>
<tr>
<td>Intercept</td>
<td>0.716 ***</td>
<td>0.903 ***</td>
<td>1.629 ***</td>
<td>8.458</td>
</tr>
<tr>
<td></td>
<td>(5.710)</td>
<td>(9.122)</td>
<td>(9.722)</td>
<td>(1.163)</td>
</tr>
<tr>
<td>ER</td>
<td>0.020 (0.507)</td>
<td>0.156 ***</td>
<td>0.106 **</td>
<td>-0.007 (-0.179)</td>
</tr>
<tr>
<td>AUR</td>
<td>0.035 (0.662)</td>
<td>-0.174 **</td>
<td>-0.075</td>
<td>-0.82 (-1.455)</td>
</tr>
<tr>
<td>AGE</td>
<td>0.063 ** (1.695)</td>
<td>-0.116 **</td>
<td>-0.024</td>
<td>-0.019 (-0.486)</td>
</tr>
<tr>
<td>SIZE1</td>
<td>-0.318 *** (3.863)</td>
<td>-0.302 ***</td>
<td>-0.412 ***</td>
<td>-0.047 (-0.543)</td>
</tr>
<tr>
<td>SIZE2</td>
<td>0.013 (0.138)</td>
<td>0.071</td>
<td>0.054</td>
<td>0.060 (0.612)</td>
</tr>
<tr>
<td>GROWTH</td>
<td>-0.026 (-0.705)</td>
<td>0.052</td>
<td>0.007</td>
<td>-0.017 (-0.441)</td>
</tr>
<tr>
<td>Adjusted R²</td>
<td>0.907</td>
<td>0.123</td>
<td>0.147</td>
<td>-0.004</td>
</tr>
<tr>
<td>F-Statistic</td>
<td>13.314 ***</td>
<td>17.053 ***</td>
<td>20.682</td>
<td>0.583</td>
</tr>
</tbody>
</table>

** at 5% level of significance and *** at 1% level of significance respectively.

The regression coefficients based on agency cost of ‘expense ratio’ suggest that there is a significant positive relationship between the debt under LTDTA and TDTA measures and agency cost. Therefore, based on agency cost of ‘expense ratio’ it can be concluded that debt can not reduce the agency cost.

Further, the regression coefficients based on ‘asset utilization ratio’ suggest that there is a significant negative relationship between debt under LTDTA measure and
agency cost of 'asset utilization ratio'. Therefore, based on agency cost of 'asset utilization ratio' it also can be concluded that the debt can not reduce the agency cost.

The correlation matrix of the explanatory variables is presented in table 42. It is revealed that there are no strong correlations among them as the correlation coefficients are very small (less than 0.75 or negative).

**Table 42: Debt and agency cost: Correlation matrix of the explanatory variables**

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>ER</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>AUR</td>
<td>-0.220</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>AGE</td>
<td>-0.002</td>
<td>-0.166</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>SIZE1</td>
<td>-0.305</td>
<td>0.649</td>
<td>-0.014</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>SIZE2</td>
<td>0.378</td>
<td>-0.716</td>
<td>0.031</td>
<td>-0.896</td>
<td>1.000</td>
</tr>
<tr>
<td>6</td>
<td>GROWTH</td>
<td>0.025</td>
<td>-0.030</td>
<td>0.075</td>
<td>0.021</td>
<td>-0.015</td>
</tr>
</tbody>
</table>

This finding does not confirm the earlier studies (such as, Singh and Davidson III, 2003; Jiraporn and Gleason, 2007) implying that additional debt can not reduce the agency cost. Based on this analysis the hypothesis 5a is rejected.

### 6.10 Capital Structure and Firm Performance

This part of the study presents the relationship between the capital structure and firm performance under different performance measures. While doing so, this study considers four specific measures of capital structure, such as 'Short Term Debt to Total Assets' (STDTA), 'Long Term Debt to Total Assets' (LTDTA), 'Total Debt to Total Assets' (TDTA) and 'Total Debt to Total Equity' (TDTE). These are discussed below.

#### 6.10.1 Capital Structure and Firm Performance (STDTA)

To conduct the empirical analysis by using the STDTA, the model developed in Chapter 5 is regressed by using 2-Stage Least Square (2SLS) regression analysis. The regression coefficients of the relationship between STDTA and firm performance under different performance measures are presented in table 43.

The regression coefficients suggest that there is a significant negative relationship between the STDTA and firm performance under ROA, a significant positive relationship between STDTA and Tobin's Q. The significant positive relationship between the tax payment and performance under the ROA performance measure implies that tax savings influence the firm's profitability. LIQ had no
explanatory power in influencing the firm performance. AGE has significant positive explanatory power under Tobin's Q performance measure. SIZE1 has significant negative explanatory power in influencing the firm performance under ROA and Tobin's Q performance measures and SIZE2 has significant positive explanatory power in influencing the firm performance under ROA and Tobin's Q performance measures. GROWTH has no explanatory power in influencing firm performance.

Table 43: Relationship between capital structure and firm performance (STDTA)
This table presents the summary results of the STDTA and firm performance. Column (a), (b), (c) and (d) represent the various coefficients of various measures of debt. The t-tests are presented in the parentheses.

<table>
<thead>
<tr>
<th></th>
<th>ROA</th>
<th>ROE</th>
<th>MBVR</th>
<th>Tobin's Q</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>0.002</td>
<td>0.326</td>
<td>-0.723</td>
<td>0.496 **</td>
</tr>
<tr>
<td></td>
<td>(0.116)</td>
<td>(0.703)</td>
<td>(-0.595)</td>
<td>(3.234)</td>
</tr>
<tr>
<td>STDTA</td>
<td>-0.377 ***</td>
<td>0.002</td>
<td>-0.032</td>
<td>0.596 ***</td>
</tr>
<tr>
<td></td>
<td>(-11.528)</td>
<td>(0.051)</td>
<td>(-0.785)</td>
<td>(18.914)</td>
</tr>
<tr>
<td>TAX</td>
<td>0.074 **</td>
<td>0.015</td>
<td>0.009</td>
<td>-0.023</td>
</tr>
<tr>
<td></td>
<td>(2.396)</td>
<td>(0.392)</td>
<td>(0.230)</td>
<td>(-0.757)</td>
</tr>
<tr>
<td>LIQ</td>
<td>0.023</td>
<td>-0.063</td>
<td>-0.018</td>
<td>-0.011</td>
</tr>
<tr>
<td></td>
<td>(0.740)</td>
<td>(-1.620)</td>
<td>(-0.463)</td>
<td>(-0.366)</td>
</tr>
<tr>
<td>AGE</td>
<td>0.050</td>
<td>-0.021</td>
<td>0.052</td>
<td>0.091 **</td>
</tr>
<tr>
<td></td>
<td>(1.599)</td>
<td>(-0.539)</td>
<td>(1.343)</td>
<td>(3.043)</td>
</tr>
<tr>
<td>SIZE1</td>
<td>-0.276 ***</td>
<td>-0.020</td>
<td>0.011</td>
<td>-0.143 **</td>
</tr>
<tr>
<td></td>
<td>(-5.209)</td>
<td>(-0.302)</td>
<td>(0.160)</td>
<td>(-2.796)</td>
</tr>
<tr>
<td>SIZE2</td>
<td>0.592 ***</td>
<td>0.064</td>
<td>0.041</td>
<td>0.097 **</td>
</tr>
<tr>
<td></td>
<td>(11.399)</td>
<td>(0.978)</td>
<td>(0.629)</td>
<td>(1.935)</td>
</tr>
<tr>
<td>GROWTH</td>
<td>-0.006</td>
<td>0.001</td>
<td>-0.015</td>
<td>0.043</td>
</tr>
<tr>
<td></td>
<td>(-0.206)</td>
<td>(0.029)</td>
<td>(-0.393)</td>
<td>(1.448)</td>
</tr>
<tr>
<td>Adjusted R²</td>
<td>0.363</td>
<td>-0.004</td>
<td>-0.003</td>
<td>0.407</td>
</tr>
<tr>
<td>F-Statistic</td>
<td>56.566 ***</td>
<td>0.612</td>
<td>0.714</td>
<td>68.074 ***</td>
</tr>
</tbody>
</table>

* At 10% level of significance, ** at 5% level of significance and *** at 1% level of significance respectively.
The correlation matrix of the explanatory variables is presented in table 44. It is revealed that there are no strong correlations among them as the correlation coefficients are very small (less than 0.75 or negative).

**Table 44:** Capital structure and firm performance (STDTA): Correlation matrix of the explanatory variables

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>0.084</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>0.135</td>
<td>-0.045</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>-0.083</td>
<td>-0.077</td>
<td>-0.045</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>0.228</td>
<td>0.088</td>
<td>0.092</td>
<td>0.090</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>-0.050</td>
<td>-0.088</td>
<td>-0.116</td>
<td>-0.106</td>
<td>-0.795</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>0.030</td>
<td>-0.009</td>
<td>0.033</td>
<td>0.069</td>
<td>0.065</td>
<td>-0.065</td>
<td>1.000</td>
</tr>
</tbody>
</table>

### 6.10.2 Capital Structure and Firm Performance (LTDATA)

To conduct the empirical analysis by using the LTDTA, the model developed in Chapter 5 is regressed by using 2-Stage Least Square (2SLS) regression analysis. The correlation matrix of the explanatory variables is presented in table 45. The regression coefficients of the relationship between LTDTA and firm performance under different performance measures are presented in table 46.

The correlation matrix of the explanatory variables is presented in table 45. It is revealed that there are no strong correlations among them as the correlation coefficients are very small (less than 0.75 or negative).

**Table 45:** Capital structure and firm performance (LTDATA): Correlation matrix of the explanatory variables

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>0.070</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>0.104</td>
<td>-0.050</td>
<td>-0.021</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>0.128</td>
<td>-0.060</td>
<td>-0.075</td>
<td>0.069</td>
<td>0.119</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>0.064</td>
<td>0.075</td>
<td>0.069</td>
<td>0.119</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>0.115</td>
<td>-0.075</td>
<td>-0.097</td>
<td>-0.094</td>
<td>-0.791</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>-0.047</td>
<td>-0.015</td>
<td>0.024</td>
<td>0.065</td>
<td>0.057</td>
<td>-0.068</td>
<td>1.000</td>
</tr>
</tbody>
</table>

The regression coefficients suggest that there is a significant negative relationship between the LTDATA and firm performance under ROA, a significant positive relationship between LTDATA and Tobin’s Q. The significant positive relationship between the tax payment and performance under the ROA performance...
measure implies that tax savings influence the firm’s profitability. LIQ has negative explanatory power in influencing the firm performance under ROE performance measure. AGE has significant positive explanatory power under Tobin’s Q performance measure. SIZE1 has significant negative explanatory power in influencing the firm performance under ROA and Tobin’s Q performance measures and SIZE2 has significant positive explanatory power in influencing the firm performance under ROA and Tobin’s Q performance measures. GROWTH has no explanatory power in influencing firm performance.

Table 46: Relationship between capital structure and firm performance (LTDTA)

This table presents the summary results of the LTDTA and firm performance. Column (a), (b), (c) and (d) represent the various coefficients of various measures of debt. The t-tests are presented in the parentheses.

<table>
<thead>
<tr>
<th></th>
<th>(a)</th>
<th>(b)</th>
<th>(c)</th>
<th>(d)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LTDTA</td>
<td>-0.348 ***</td>
<td>-0.016</td>
<td>-0.056</td>
<td>0.559 ***</td>
</tr>
<tr>
<td>TAX</td>
<td>0.081 **</td>
<td>0.014</td>
<td>0.008</td>
<td>-0.033</td>
</tr>
<tr>
<td>LIQ</td>
<td>0.037</td>
<td>-0.065 **</td>
<td>-0.019</td>
<td>-0.032</td>
</tr>
<tr>
<td>AGE</td>
<td>-0.023</td>
<td>-0.023</td>
<td>0.043</td>
<td>0.207 ***</td>
</tr>
<tr>
<td>SIZE1</td>
<td>-0.172 **</td>
<td>-0.023</td>
<td>0.017</td>
<td>-0.306 ***</td>
</tr>
<tr>
<td>SIZE2</td>
<td>0.498 ***</td>
<td>0.061</td>
<td>0.028</td>
<td>0.248 ***</td>
</tr>
<tr>
<td>GROWTH</td>
<td>0.020</td>
<td>0.002</td>
<td>-0.012</td>
<td>0.001</td>
</tr>
<tr>
<td>Adjusted R²</td>
<td>0.345</td>
<td>-0.004</td>
<td>-0.001</td>
<td>0.372</td>
</tr>
<tr>
<td>F-Statistic</td>
<td>52.531 ***</td>
<td>0.634</td>
<td>0.897</td>
<td>58.876 ***</td>
</tr>
</tbody>
</table>

* At 10% level of significance, ** at 5% level of significance and *** at 1% level of significance respectively.
6.10.3 Capital Structure and Firm Performance (TDTA)

To conduct the empirical analysis by using the TDTA, the model developed in Chapter 5 is regressed by using 2-Stage Least Square (2SLS) regression analysis.

**Table 47: Relationship between capital structure and firm performance (TDTA)**

This table presents the summary results of the TDTA and firm performance. Column (a), (b), (c) and (d) represent the various coefficients of various measures of debt. The t-tests are presented in the parentheses.

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>(a)</th>
<th>(b)</th>
<th>(c)</th>
<th>(d)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>0.065 **</td>
<td>0.368</td>
<td>-0.300</td>
<td>-0.250 **</td>
</tr>
<tr>
<td></td>
<td>(3.178)</td>
<td>(0.761)</td>
<td>(-0.238)</td>
<td>(-2.001)</td>
</tr>
<tr>
<td>TDTA</td>
<td>-0.510 ***</td>
<td>-0.009</td>
<td>-0.060</td>
<td>0.809 ***</td>
</tr>
<tr>
<td></td>
<td>(-16.358)</td>
<td>(-0.209)</td>
<td>(-1.428)</td>
<td>(31.876)</td>
</tr>
<tr>
<td>TAX</td>
<td>0.055 *</td>
<td>0.014</td>
<td>0.006</td>
<td>0.008</td>
</tr>
<tr>
<td></td>
<td>(1.910)</td>
<td>(0.365)</td>
<td>(0.146)</td>
<td>(0.350)</td>
</tr>
<tr>
<td>LIQ</td>
<td>-0.007</td>
<td>-0.065 *</td>
<td>-0.023</td>
<td>0.036</td>
</tr>
<tr>
<td></td>
<td>(-0.227)</td>
<td>(-1.654)</td>
<td>(-0.591)</td>
<td>(1.534)</td>
</tr>
<tr>
<td>AGE</td>
<td>0.012</td>
<td>-0.021</td>
<td>0.049</td>
<td>0.151 ***</td>
</tr>
<tr>
<td></td>
<td>(0.412)</td>
<td>(-0.540)</td>
<td>(1.258)</td>
<td>(6.474)</td>
</tr>
<tr>
<td>SIZE1</td>
<td>-0.307 ***</td>
<td>-0.024</td>
<td>0.002</td>
<td>-0.094 **</td>
</tr>
<tr>
<td></td>
<td>(-6.274)</td>
<td>(-0.359)</td>
<td>(0.038)</td>
<td>(-2.351)</td>
</tr>
<tr>
<td>SIZE2</td>
<td>0.539 ***</td>
<td>0.064</td>
<td>0.036</td>
<td>0.181 ***</td>
</tr>
<tr>
<td></td>
<td>(11.214)</td>
<td>(0.975)</td>
<td>(0.549)</td>
<td>(4.631)</td>
</tr>
<tr>
<td>GROWTH</td>
<td>0.005</td>
<td>0.001</td>
<td>-0.014</td>
<td>0.025</td>
</tr>
<tr>
<td></td>
<td>(0.169)</td>
<td>(0.028)</td>
<td>(-0.369)</td>
<td>(1.091)</td>
</tr>
<tr>
<td>Adjusted R²</td>
<td>0.453</td>
<td>-0.004</td>
<td>-0.001</td>
<td>0.638</td>
</tr>
<tr>
<td>F-Statistic</td>
<td>82.054 ***</td>
<td>0.617</td>
<td>0.918</td>
<td>172.923 ***</td>
</tr>
</tbody>
</table>

* At 10% level of significance, ** at 5% level of significance and *** at 1% level of significance respectively.

The regression coefficients of the relationship between TDTA and firm performance under different performance measures are presented in table 47. The regression coefficients suggest that there is a significant negative relationship between the TDTA and firm performance under ROA, a significant positive relationship
between TDTA and Tobin’s Q. The significant positive relationship between the tax payment and performance under the ROA performance measure implies that tax savings influence the firm’s profitability. LIQ has negative explanatory power in influencing the firm performance under ROE performance measure. AGE has significant positive explanatory power under Tobin’s Q performance measure. SIZE1 has significant negative explanatory power in influencing the firm performance under ROA and Tobin’s Q performance measures and SIZE2 has significant positive explanatory power in influencing the firm performance under ROA and Tobin’s Q performance measures. GROWTH has no explanatory power in influencing the firm performance.

The correlation matrix of the explanatory variables is presented in table 48. It is revealed that there are no strong correlations among them as the correlation coefficients are very small (less than 0.75 or negative).

Table 48: Capital structure and firm performance (TDTA): Correlation matrix of the explanatory variables

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>0.105</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>0.165</td>
<td>-0.039</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>0.017</td>
<td>-0.068</td>
<td>-0.031</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>0.212</td>
<td>0.091</td>
<td>0.096</td>
<td>0.113</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>0.029</td>
<td>-0.081</td>
<td>-0.104</td>
<td>-0.110</td>
<td>-0.780</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>-0.001</td>
<td>-0.012</td>
<td>0.028</td>
<td>0.071</td>
<td>0.058</td>
<td>-0.063</td>
<td>1.000</td>
</tr>
</tbody>
</table>

6.10.4 Capital Structure and Firm Performance (TDTE)

Further to conduct the empirical analysis by using the TDTE, the model developed in Chapter 5 is regressed by using 2-Stage Least Square (2SLS) regression analysis. The regression coefficients of the relationship between TDTE and firm performance under different performance measures are presented in table 49.

The regression coefficients suggest that there is a significant positive relationship between the TDTE and firm performance under ROE and MBVR. The significant positive relationship between the tax payment and performance under the ROA performance measure implies that tax savings influence the firm’s profitability. LIQ has positive explanatory power in influencing the firm performance under ROA performance measure and significant negative explanatory power in influencing firm
performance under ROE and Tobin's Q. AGE has significant positive explanatory power under MBVR and Tobin's Q performance measures. SIZE1 has significant negative explanatory power in influencing the firm performance under ROA and Tobin's Q performance measures and SIZE2 has significant positive explanatory power in influencing the firm performance under ROA, ROE and Tobin's Q performance measures. GROWTH has no explanatory power in influencing firm performance.

Table 49: Relationship between capital structure and firm performance (TDTE)

This table presents the summary results of the TDTE and firm performance. Column (a), (b), (c) and (d) represent the various coefficients of various measures of debt. The t-tests are presented in the parentheses.

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>(a) ROA</th>
<th>(b) ROE</th>
<th>(c) MBVR</th>
<th>(d) Tobin's Q</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>-0.055 **</td>
<td>0.004</td>
<td>-1.725 **</td>
<td>1.171 ***</td>
</tr>
<tr>
<td></td>
<td>(-2.417)</td>
<td>(0.015)</td>
<td>(-2.174)</td>
<td>(6.343)</td>
</tr>
<tr>
<td>TDTE</td>
<td>-0.002</td>
<td>0.819 ***</td>
<td>0.740 ***</td>
<td>-0.009</td>
</tr>
<tr>
<td></td>
<td>(-0.066)</td>
<td>(37.366)</td>
<td>(28.739)</td>
<td>(-0.248)</td>
</tr>
<tr>
<td>TAX</td>
<td>0.104 **</td>
<td>0.028</td>
<td>0.023</td>
<td>-0.070 *</td>
</tr>
<tr>
<td></td>
<td>(3.091)</td>
<td>(1.257)</td>
<td>(0.884)</td>
<td>(-1.916)</td>
</tr>
<tr>
<td>LIQ</td>
<td>0.071 **</td>
<td>-0.050 **</td>
<td>-0.001</td>
<td>-0.087 **</td>
</tr>
<tr>
<td></td>
<td>(2.110)</td>
<td>(-2.238)</td>
<td>(-0.049)</td>
<td>(-2.359)</td>
</tr>
<tr>
<td>AGE</td>
<td>0.020</td>
<td>0.002</td>
<td>0.070 **</td>
<td>0.139 ***</td>
</tr>
<tr>
<td></td>
<td>(0.582)</td>
<td>(0.081)</td>
<td>(2.690)</td>
<td>(3.752)</td>
</tr>
<tr>
<td>SIZE1</td>
<td>-0.137 ***</td>
<td>-0.040</td>
<td>0.005</td>
<td>-0.360 ***</td>
</tr>
<tr>
<td></td>
<td>(-2.438)</td>
<td>(-1.083)</td>
<td>(0.126)</td>
<td>(-5.858)</td>
</tr>
<tr>
<td>SIZE2</td>
<td>0.562 ***</td>
<td>0.084 **</td>
<td>0.057</td>
<td>0.143 **</td>
</tr>
<tr>
<td></td>
<td>(9.909)</td>
<td>(2.266)</td>
<td>(1.300)</td>
<td>(2.312)</td>
</tr>
<tr>
<td>GROWTH</td>
<td>0.004</td>
<td>0.016</td>
<td>-0.001</td>
<td>0.026</td>
</tr>
<tr>
<td></td>
<td>(0.128)</td>
<td>(0.740)</td>
<td>(-0.019)</td>
<td>(0.703)</td>
</tr>
<tr>
<td>Adjusted R²</td>
<td>0.237</td>
<td>0.672</td>
<td>0.548</td>
<td>0.093</td>
</tr>
<tr>
<td>F-Statistic</td>
<td>31.365 ***</td>
<td>201.329 ****</td>
<td>119.386 ***</td>
<td>11.010 ***</td>
</tr>
</tbody>
</table>

* At 10% level of significance, ** at 5% level of significance and *** at 1% level of significance respectively.

The correlation matrix of the explanatory variables is presented in table 50. It is revealed that there are no strong correlations among them as the correlation coefficients are very small (less than 0.75 or negative).
This finding overall suggests that the debt may influence the firm performance under market based performance measures which may be unrelated to the intrinsic value of the shares. But it can not influence the firm performance under accounting based performance measures. The significant positive relationship between the tax payment and performance under the ROA performance measure implies that tax savings influence the firm’s profitability.

**Table 50: Capital structure and firm performance (TDTE): Correlation matrix of the explanatory variables**

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>TDTE</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>TAX</td>
<td>0.015</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>LIQ</td>
<td>0.017</td>
<td>-0.057</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>AGE</td>
<td>0.027</td>
<td>-0.069</td>
<td>-0.034</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>SIZE1</td>
<td>-0.014</td>
<td>0.071</td>
<td>0.062</td>
<td>0.111</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>SIZE2</td>
<td>0.015</td>
<td>-0.084</td>
<td>-0.110</td>
<td>-0.805</td>
<td>1.000</td>
<td>-0.063</td>
</tr>
<tr>
<td>7</td>
<td>GROWTH</td>
<td>0.019</td>
<td>-0.012</td>
<td>0.029</td>
<td>0.072</td>
<td>0.060</td>
<td>-0.063</td>
</tr>
</tbody>
</table>

This finding is consistent with earlier studies (such as, Majumdar and Chhibber, 1999; Singh and Davidson III, 2003; Harvey *et al*, 2004; Berger and Bonoaccorsi di Patti, 2006; Kyereboah-Coleman, 2006; Jiraporn and Gleason, 2007) implying that additional debt can not influence the firm performance, but contradicting to some earlier studies (such as Campello, 2003). Based on this analysis the hypothesis 5b is rejected.

### 6.11 Summary of the Analysis

This study examines whether the specific corporate governance mechanisms influence the firm economic performance in Bangladesh. A number of hypotheses were developed in Chapter 5 and these are tested by statistical methods in this chapter. The summary of the hypotheses are presented in table 51 below.

**Table 51: Summary of the hypotheses and related analysis**

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hypothesis 1a</strong></td>
<td>There is a significant relationship between the percentage of shares owned by the directors/ sponsors and firm performance.</td>
</tr>
</tbody>
</table>
### Hypothesis 1b
There is a significant relationship between the percentage of shares owned by the blockholders and firm performance.

**Accepted**

### Hypothesis 1c
There is a significant relationship between the percentage of shares owned by the institutions and firm performance.

**Rejected**

### Hypothesis 1d
There is a significant relationship between the percentage of shares owned by the outsiders and firm performance.

**Rejected**

### Hypothesis 2
There is a significant relationship between the board composition (proportion of outside independent directors) and firm performance.

**Rejected**

### Hypothesis 3
CEO non-duality is positively related to firm performance.

**Accepted**

### Hypothesis 4a
There is a significant relationship between ownership structure and executives pay.

**Accepted**

### Hypothesis 4b
There is a significant relationship between in executives pay and firm size.

**Accepted**

### Hypothesis 4c
There is a sensitivity between executives pay and firm's performance.

**Rejected**

### Hypothesis 5a
A firm's capital structure may reduce the shareholders agency cost.

**Rejected**

### Hypothesis 5b
A firm's capital structure may influence its performance.

**Rejected**

### 6.12 Chapter Summary and Conclusion

This chapter presented the detail analysis between the specific governance arrangements and firm performance from the model developed in earlier chapter. It started with explaining the assumptions of the statistical test. It is found that this study met the assumptions of the statistical test.

Later this chapter examined the relationship between he various governance arrangements and firm performance. While doing so firstly, it examined the relationship between various ownership groups and firm performance. It is revealed that director/sponsors ownership and blockholding significantly influence the firm
performance under different performance measures. The institutional ownership and outside ownership do not influence the firm performance in Bangladesh. It is very interesting to be noted that the uniform findings were found under different performance measures.

Secondly, it examined the relationship between the board composition and firm performance; the board leadership structure (CEO duality) and firm performance. It is revealed that board composition in the form of representation of outside independent directors and combined board leadership structure does not influence the firm performance in Bangladesh. Thirdly, the effect of executive pay and firm performance is examined. It is revealed that the ownership structure and firm size influence the executive pay. However, no relationship between the executive pay firm performance or pay-performance sensitivity is found. Fourthly, the effects of capital structure and agency cost and the capital structure and firm performance are presented. It is found that the debt can not reduce the agency cost. However, the debt can influence the firm performance only under the market based performance measures.
Chapter 7  Summary and Conclusion

"Integrity without knowledge is weak and useless, and knowledge without integrity is dangerous and dreadful." Samuel Johnson (1709 - 1784)

7.1 Introduction

The objective of this study is to provide an insight of corporate governance in Bangladesh as well as by using the firm level data, to empirically examine whether the various corporate mechanisms (such as, ownership structure, adequate supervisory arrangements, such as monitoring by the board, executive compensation and capital structure) influence the firm economic performance. Based on both the theoretical discussions and empirical investigations, this study finally seeks to assist the regulatory body in framing and/or improving the corporate governance best practices/guidelines for Bangladeshi firms.

While doing so, the Chapter 1 of this study discusses corporate governance and problems, historical background, the issue of corporate governance in developed as well as non developed and emerging economies. Chapter 1 also outlines the motivation, the research questions, the objectives and significance of this study and the contributions of this study to the academic literature. That chapter also outlines the structure of the thesis.

Chapter 2 of this study exposed the overview of the existing corporate governance regime in Bangladesh. It begins with providing a detailed discussion of the socio-political and cultural framework in Bangladesh. It explains the socialist experience of the country, the failure of the socialism and how Bangladesh moved from socialism to the capitalism. That chapter describes the corporate legal environment in Bangladesh and various legal instruments, such as the Companies Act, Securities Laws and Legislations, Insolvency Act, and other related laws and legislations. It also gives a brief idea about the Financial Reporting and Accounting and Auditing Standards in Bangladesh. It outlines the role and responsibility of the ‘Registrar of the Joint Stock Companies’ and ‘Securities and Exchange Commission’ in company formation and governance. It gives a brief idea about the capital market in Bangladesh, in particular the stock exchanges, trading and settlement of securities. Most notably this chapter
discusses the stock market collapse in Bangladesh in 1996, which was a remarkable incident in Bangladesh corporate sector and provides an evidence of lack of firm level corporate governance practices. It identifies the corporate financing pattern and the corporate ownership structure in Bangladesh; provides a detailed overview of the banking sector, insurance companies and other non-bank financial institutions in Bangladesh. It also discusses the problems of the capital market in Bangladesh and various initiatives taken by the regulatory bodies, government and non-government sector to overcome such a situation, and thereby enhancing the corporate governance practices.

Chapter 3 of this study presents the theoretical framework. Without explaining the economic and/or finance theories the corporate governance problems can not be logically explained; therefore that chapter started in explaining the background economic and finance theories on corporate governance and problems. It also explains the theory adopted in this study. That chapter discusses the underlying problems of corporate governance under Berle and Means (1932) model. It is revealed that corporate governance problems around the world are not necessarily the same as the Berle and Means (1932) model of corporate governance. It exposes the similarities and contrasts corporate governance in Bangladesh with that of other developed countries. While doing so, it compares two dominant and alternative corporate governance models around the world. It also discusses ‘The Asian Corporate Governance Model’ and attempts to frame a theoretical model in explaining the corporate governance and problems in Bangladesh. It is revealed that similar to corporations in Germany, Japan and East Asia the corporate control mechanisms in Bangladesh are mostly insider oriented, such as ownership structure and, in general, the board of directors. Due to highly concentrated ownership, lack of takeover regulations, non-efficient market, and due to huge transaction costs associated with takeover process, some of the important external control mechanisms, such as the market for corporate control or takeovers are largely absent in Bangladesh. Due to the absence of liquid capital market some other dominant control mechanisms, such as compensation in the form of stock options, debt covenant (even though banks are the major source of corporate financing), and dividend policy are also absent in the Bangladesh corporate sector. However, similar to corporate boards in Anglo-American countries, there are the representations of the outside independent directors in the corporate boards in Bangladesh. Therefore, it was
concluded that corporate control mechanisms in Bangladesh are the hybrid of internal and external systems.

Following the identification of mechanisms of accountability, this study empirically examined relevant control governance mechanisms that may promote accountability in the Bangladesh corporate sector by conducting statistical tests in Chapter 6.

**Chapter 4** reviews the earlier research on corporate governance. In doing so, that chapter explains the relevance of agency theory in literature review, provides the detail of the earlier studies, such as the ownership structure, board practices, compensation and capital structure. The review of such literature helps in identifying the deficiencies in earlier studies and establishes the justification of the current study, which is also the basis of hypotheses development.

**Chapter 5** outlines the research design, details of the data set, research methodology, methods and techniques. That chapter starts with explaining the research paradigm; it is identified that there is a relative dominance of functionalist paradigm in accounting/finance research. The research questions developed in Chapter 1 are formulated into the several testable hypotheses, such as ownership structure and firm performance hypotheses, board composition and board leadership structure hypothesis, executive compensation and firm performance hypotheses and capital structure and firm performance hypotheses. That chapter explains the study period, data set and step by step construction of sample; explains the sources of data and difficulties in collecting the data from a developing country, such as Bangladesh. That chapter explains all the variables related to this study. That chapter also specifies the models for statistical analysis and other details of the analysis. While developing a model for statistical test, the justification of considering a variable is explained.

In **Chapter 6**, data are analyzed by using statistical tests. While doing so the assumptions of the statistical analysis including the assumptions for univariate and multivariate analysis are described; based on the existing governance arrangements, the effect of various ownership structure and firm performance are examined. Firstly, the directors/sponsors stock ownership and firm performance is examined under both the univariate and multivariate analysis. The linearity of the relationship between the directors/sponsors stock ownership and firm performance are also examined. This enabled the identification of inflection points (performance associated with various ownership turning point). Similarly, that chapter examines the blockholding and firm
7.2 Summary of the Findings

This part of the study summarizes the findings of this study. The findings of this study can be classified as explanatory findings and empirical findings. Before summarizing the empirical findings, it would be helpful in interpreting the explanatory findings. This study presented the insights of corporate governance in Bangladesh. In particular this chapter critically discusses the key issues and challenges in the existing corporate governance regime in Bangladesh. It presented the evolution of corporate governance in Bangladesh, explored several institutional weaknesses and discussed the key issues and challenges in the existing corporate governance regime in Bangladesh. This study also presented a theoretical model of corporate governance for Bangladesh corporate sector, which is the hybrid of internal and external control model or an 'emerging economy model'.

As argued in Chapter 3 (part 3.5.3), the Asian model of corporate governance in general is characterized by high family influence as well as widely dispersed ownership structure, pyramidal and cross shareholding and illiquid capital market (Bhasa, 2004b; Kaymak and Bektas, 2008). However, variation of corporate governance practices is seen within this region in South and South East Asia. For example the listed firms in China are in fact the State Owned Enterprises (SOEs) and in many cases state, local, city or regional government has the controlling stake (Firth et al, 2006). Similarly, the
existence of vibrant capital markets, formal and functional legal systems, and the existence of a market for corporate control are present in India and Taiwan (Bhasa, 2004b). These differences are not due to a random phenomenon, rather due to country specific characteristics.

Although many of the corporate governance characteristics of the Bangladesh context align with German-Japanese ‘bank-based’ or ‘relationship-based’ model of corporate governance, Bangladesh corporate governance has some similarities and differences with corporate governance in other countries in Asia, South and in particular South East Asia. Listed firms in Bangladesh are controlled by founding sponsors/directors who are in turn the family members. But there is no pyramidal and cross shareholding. Due to highly concentrated ownership, illiquid capital market, lack of takeover regulations, a non-efficient market, and due to huge transaction costs associated with the takeover process, some of the important external control mechanisms, such as, a market for corporate control or takeovers are largely absent in the Bangladesh corporate sector (Franks and Mayer, 1990; Sarkar, et al, 1998; Asian Development Bank, 2000). Unlike the firms in Germany and Japan, the lending banks do not have any position on the board and they have very little role in firm governance.

Due to the absence of a liquid capital market, some other dominant control mechanisms, such as compensation in the form of stock options, debt covenants (even though banks are the major source of corporate financing), and effects of dividend policy in corporate monitoring are also absent in the Bangladesh corporate sector (Rashid and Rahman, 2008). However, similar to corporate boards in Anglo-American countries, there is the representation of the outside independent directors on the corporate boards in Bangladesh.

The empirical findings of this study are derived by examining whether the specific corporate governance mechanism influences firm performance in Bangladesh. Therefore, this study tested nine (9) hypotheses by using statistical analysis. The summary of the empirical findings are discussed below.

7.2.1 Ownership Structure and Firm Performance

The empirical findings of the relationship between ownership structure and firm performance suggest that the firms with majority ownership by director/sponsors are
over perforating than any other ownership group. Based on this analysis, the following hypotheses are accepted.

**Hypothesis 1a:** There is a significant relationship between the percentage of shares owned by the directors/ sponsors and firm performance.

**Hypothesis 1b:** There is a significant relationship between the percentage of shares owned by the blockholders and firm performance.

Further, based on this analysis, the following hypotheses are rejected.

**Hypothesis 1c:** There is a significant relationship between the percentage of shares owned by the institutions and firm performance.

**Hypothesis 1d:** There is a significant relationship between the percentage of shares owned by the outsiders and firm performance.

### 7.2.2 Board Composition and Firm Performance

The empirical findings of the relationship between board composition and firm performance suggests that the board composition in the form of representation of outside independent directors can not influence the firm performance. Based on this analysis, the following hypothesis is rejected.

**Hypothesis 2:** There is a significant relationship between the board composition (proportion of outside independent directors) and firm performance.

### 7.2.3 CEO Duality and Firm Performance

The empirical finding of the relationship between CEO duality and firm performance suggests that the CEO duality or dual leadership structure does not influence the firm performance. Based on this analysis, the following hypothesis is accepted.

**Hypothesis 3:** CEO non-duality is positively related to firm performance.
7.2.4 Executive Compensation and Performance

The empirical findings of the relationship between the ownership structure, firm size and executive pay suggest that there is a significant positive relationship between ownership structure and executive pay; executive pay and firm size; however there was no conclusive evidence on pay-performance sensitivity. Although such relationship is found under the Tobin’s Q performance measure, due to an absence of liquid capital market and stock options in the form of compensation, the market performance measures may not be considered to be realistic.

Based on this analysis, the following hypotheses are accepted.

**Hypothesis 4a:** There is a significant relationship between ownership structure and executives pay.

**Hypothesis 4b:** There is a significant relationship between executives pay and firm size.

Based on this analysis, the following hypothesis is rejected.

**Hypothesis 4c:** There is a sensitivity between executives pay and firm performance.

7.2.5 Capital Structure and Agency Cost

The empirical findings of the relationships between the capital structure and agency cost suggest that leverage can not reduce the agency cost. Based on this analysis, the following hypothesis is rejected.

**Hypothesis 5a:** Firm’s capital structure may reduce the shareholders agency cost.

7.2.6 Capital Structure and Firm Performance

The empirical findings of the relationship between the capital structure and firm performance suggest that leverage can influence the firm performance only under the market based performance measures. Based on this analysis, the following hypothesis is rejected.

**Hypothesis 5b:** A firm’s capital structure may influence its performance.
7.3 Implications of the Findings

Although this study supports a number of earlier studies, it could not provide conclusive evidence on some important issues, such as board composition in the form of representing the outside independent directors. As argued in Chapter 3, due to differences in ownership structure and financing patterns of corporations around the world, agency conflict may vary. The corporate governance practices also vary widely across the countries and across the firms (Doidge et al, 2007). Corporate governance mechanisms that work well in some developed countries may not work well in some emerging economies (Majumdar and Chhibber, 1999). Dharwadkar et al (2000) classified the agency problems as the ‘traditional’ agency problems, which is most common in developed economies with dominant outsiders as opposed to ‘unique’ agency problems, which is most common in emerging economies. The “traditional agency solutions that mitigate agency problems in the strong governance context of developed economies might not necessarily be effective in the weak governance context prevalent in emerging economies” (p 651). The differences in the results from earlier studies suggest that the corporate governance problem in the developing countries, such as Bangladesh may not be similar to that of other countries. The diversity of this study with the earlier studies implies that the ‘one size does not fit all’ or one set of governance arrangements may not be suitable for every country. Following paragraphs details the implications of this study.

7.3.1 Ownership Structure and Firm Performance

The finding of the significance relationship between directors/sponsors ownership and firm performance and blockholding and firm performance are not surprising. As noted earlier, the directors/sponsors and blockholders has both the ability and incentives in monitoring. Consistent with Demsetz (1983), it is revealed that the firm performance enhances within a certain level of insider ownership, implying that a certain level of shareholding is good for the overall health of the company. These findings suggest that due to alignment of the proprietary rights, the insider is motivated to work for the overall interest of the firm. These findings also suggest that the effective owners’ involvement in the firms may reduce the agency conflict, thereby enhance firm performance. It also confirms the ‘convergence of interest hypothesis’ which is evident
at lower and very higher level of ownership. The managerial entrenchment is evident within the different range under different performance measures.

Although institutional investors have been identified as a key factor in determining the performance in the emerging market (such as, Baysinger and Butler, 1985; Gibson, 2003), this study suggest that the institutional investors do not influence firm performance in Bangladesh. The lower firm performance under institutional ownership implies that the institutions are not a good monitor in Bangladesh corporate sector. They may have some short term objectives, which are not beneficial to the firms. This problem also may be due to unobserved firm heterogeneity or omitted variables (such as, Himmelberg et al, 1999) or due to simultaneity between ownership and value (Pindado and De La Torre, 2004). It also may be due to industry specific omitted variable as corporate ownership structure is endogenously determined and the cost and benefit of different ownership structure may vary across the firms (Demsetz, 1983; Mak and Li, 2001).

The above findings support the agency theory implying that the effective separation of ownership and control may lead to agency conflict which is detrimental to the economic welfare of the principals.

7.3.2 Board Composition and Firm Performance

It is quite interesting to investigate why the outside independent directors can not influence the firm performance. It is noted in this study that, due to the one-tier board culture in Bangladesh corporate sector, the independent directors in no way have a supervisory position on the board. Further, the ‘Corporate Governance Notification 2006’ allows them to be appointed by existing elected directors. Therefore, there is a provision to appoint them into the board due to having a close relationship with the existing (inside) board members. Due to absence of the legislative requirement of having the adequate qualification and expertise of the independent directors, many of them may not be competent to perform their assigned tasks. They may not have required expertise in providing adequate guidance/professional advice. They also may not have inside information of the firm (Finkelstein and Hambrick, 1996, p 225; Nicholson and Kiel, 2007, p 588). Such information asymmetry may have reduced the control role of the outside directors in the firm or they may have failed to perform their assigned tasks due to having lack of appropriate support by the insiders. Therefore,
without restructuring the board and defining the board members qualification and expertise, the board independence may not provide any beneficial outcome to the firms. This finding does not capture the agency theory implying that the outside directors can not influence firm performance in the context of Bangladesh.

7.3.3 CEO Duality and Firm Performance

It is also quite interesting to investigate why dual leadership structure does not influence the firm performance. One probable reason is that, the CEO duality may reduce the effectiveness of the board and may create a conflict between management and board that may reduce the firm economic performance (Zahra, 1990; Solomon, 2007). Another probable reason is that, duality may have been imposed, rather than adopted in a usual organization practices to consolidate CEOs power (Kang and Zardkoohi, 2005). It may have reduced the board’s ability to exercise the governance function in the context of Bangladesh. This finding captures the agency theory implying that the combined leadership structure does not enhance the firm economic performance in the context of Bangladesh.

7.3.4 Executive Compensation and Firm Performance

The empirical findings of the relationship between the ownership structure, firm size and executive pay suggest that there is a significant positive relationship between ownership structure and executive pay; executive pay and firm size. It implies that, the exercise of property rights and the task complexity in large firms may be followed by lower and higher pay respectively. However, there is no conclusive evidence of pay-performance sensitivity. The significant relationship between the pay-performance sensitivity was found only under the Tobin’s Q performance measures. The weak association between pay and performance reports that the executive compensation as a governance mechanism may not be suitable in the context of Bangladesh. As noted in Chapter 3 (part 3.5.6) this is due to the absence of share options, a liquid capital market and performance based pay. It also implies that the ‘agents are not necessarily rational; risk-averse or self interested’ (Finkelstein and Hambrick, 1996).
7.3.5 Capital Structure and Agency Cost

The regression coefficients based on agency cost of ‘expense ratio’ suggest that there is a positive relationship between debt and agency cost under STDTA, LTDTA and TDTA. However, the relationship found to be significant only under LTDTA and TDTA. Although, there is an inverse relationship between TDTE and agency cost of ‘expense ratio’; it is not significant at any level. Further, the regression coefficients based on agency cost of ‘asset utilization ratio’ suggest that there is a significant negative relationship between debt and agency cost of LTDTA. Therefore, based on agency cost of both ‘expense ratio’ and ‘asset utilization ratio’ it can be concluded that debt can not reduce the agency cost.

This study contradicts to the theory that debt may reduce the divergent behavior of the firm. Due to having strong ownership control in the firms by firm managers, they may have employed the debt to exercise control; but the debt can not reduce the dysfunctional behavior of the firm.

7.3.6 Capital Structure and Firm Performance

The significant positive relationship between capital structures (STDTA, LTDTA, TDTA and TDTE) and firm performance under the Tobin’s Q implies the additional debt may influence the firm performance only under a market based performance measure. However, debt can not influence the firm performance under accounting based performance measures, such as ROA. A possible explanation is that, unlike the corporations in Germany and Japan, the lending banks or the other significant fund providers have no position on the corporate boards and management. It also may be due to the absence of insolvency law, the poor quality of enforcement of contracts, property rights (Day and Taylor, 2004). As noted in Chapter 2, due to having strong ownership control in the firms by firm managers, they may have employed the debt just to exercise control; but the debt can not reduce the dysfunctional behavior of the firm. The significant positive relationship between the tax payment and performance under the ROA performance measure implies that tax savings influence the firm’s profitability.

The effectiveness of debt as a disciplining mechanism depends on a number of institutional factors, such as prevailing accounting and auditing systems, well-developed capital markets, financial intermediaries, and legal institutions in a country
Where such institutions are ineffective, or bankruptcy laws are weakly implemented, or where accounting and disclosure practices are not well defined, firms’ insider may use debt as a device for expropriation as external fund providers are likely to have less or inaccurate information about a corporation’s capital structure and its other operational details (Sarkar and Sarakr, 2005). Day and Taylor (2004) propose a direct method of controlling dysfunctional behavior, such as to become involved in the internal management of the indebted firm, which may reduce information asymmetry, may increase the debtor’s capability to influence repayment directly and may allow the lender to veto dysfunctional decisions and encourage functional ones.

7.4 Implications of the Findings from a Policy Perspective

The findings of the study have number of implications from policy perspective. Firstly, the finding of the significance relationship between directors/sponsors ownership and firm performance and blockholding and firm performance imply that these forms of ownership are good for Bangladesh corporate sector. Further, the non-linearity of the relationship between the directors/sponsors ownership and firm performance and blockholding and firm performance imply that such ownership may not be beneficial at all levels. In other words managerial entrenchment is evident at certain level of ownership. Therefore, limiting the degree of ownership may be required. Secondly, finding no relationship between ‘board composition’ in the form of outside independent directors and the firm economic performance and board leadership structure and firm performance imply that a regulatory steps may be required to improve the corporate board practice in Bangladesh. Thirdly, finding no conclusive evidence between pay-performance sensitivity implies that the incentive based pay may be implemented that may align the goal of management with that of the firm. Thirdly, finding no relationship between ‘capital structure’ and firm performance imply that a direct method may be required to control the dysfunctional behavior, such as to become involved in the internal management of the indebted firm.

7.5 Conclusions and Some Policy Recommendations

This study on corporate governance is conducted in the context of Bangladesh. This study exposes the evolution of corporate governance in Bangladesh, highlighting
various internal factors, such as the historical background, laws and legal institutions, socio-cultural, economic and political environments that constitute the current corporate governance regime in Bangladesh. It is revealed that, although there are many similarities of corporate governance between the developed countries and emerging economies, such as Bangladesh; some of the characteristics are very unique. Further, it is revealed that following the high degree of corporate collapses and scandals around the world, Bangladesh is struggling towards the institutional sweeping change to strengthen the corporate governance practices in the listed firms. Several guidelines have been published both in the government and the private sector. The "Corporate Governance Notification 2006" is the ever published most comprehensive guidelines for corporate governance in Bangladesh. However, these guidelines in no way meet the international standards of corporate governance, such as the 'Cadbury Report 1992' or 'Higgs Report 2003'. Moreover, there are no adequate guidelines in existing laws regarding the financial reporting, auditor’s independence, accountability of the board of directors and professional expertise required by management, legislative definition of independent directors, requirement of remuneration committee, prevention and consequences of fraudulent activities by management and punishment thereafter; and requirement of making any corporate social disclosure.

This study makes some important contributions to the accounting and/or finance literature and reduces the dearth of studies on corporate governance in the emerging economies. Although the empirical findings of this study support the number of earlier studies, it also contradicts to a number of earlier studies in the context of the developed countries. It confirms that the corporate governance problems around the world are not uniform.

Based on both the theoretical discussions and empirical investigations, it is apparent that the corporate governance mechanisms need to be improved in Bangladesh. Charkham (1992) suggests that the foreign systems of corporate governance reflect their history, assumptions and value systems and transplanting of that system is problematic, but the universal principles of sound corporate governance may help in correcting a country’s own system. Further, Murphy and Topyan (2005) suggest that the sound corporate governance culture in emerging economies can best be achieved through the adoption of beneficial aspects of corporate governance in more developed economies. Therefore, this study makes some key policy recommendations based on the beneficial aspects of best corporate governance practices around the
The existing corporate governance practices may be continued with a few improvements. The regulatory body may consider reviewing the corporate governance best practices around the world. The regulatory body may also consider revising the "Corporate Governance Notification 2006" from time to time, should the need arise to keep up with the complexity of governance arrangements.

It is noted that there is no guideline regarding the ultimate controlling share ownership in the Bangladesh Companies Act 1994. Although the pyramidal or cross shareholding structure are not very common in Bangladesh, the regulatory body may consider in defining the controlling share ownership. It may allow the non-controlling shareholders to achieve necessary votes to pose a threat to the poorly performed company management.

The theoretical discussion in Chapter 3 reveals that the outside independent directors may not be a good monitor; the empirical findings in this study also suggest that the outside independent directors in Bangladesh context are not a good monitor as the board composition in the form of representation of outside independent directors does not influence the firm economic performance. The regulatory body may consider enhancing the board effectiveness by requiring increased number of 'Non-Shareholder Directors' or 'Independent Directors' who will be the part of 'Non-Executive Directors' in the board. The United Kingdom 'Cadbury Report 1992' suggest that there should be a minimum three non-executive (outside) directors in the board and the United Kingdom 'Higgs Report 2003' suggested at least half of the members to be the non-executive directors.

It is noted that under the current 'Corporate Governance Notification 2006', the independent directors do not require any specific qualification and/or expertise to sit in the board. Rather, the notification allows them to be elected by the existing board members. The WorldCom's board was made up with more than 50% non-executive directors; however, it was ineffective as most of them were somehow the beneficiary of WorldCom (Kaplan and Kiron, 2004). The United Kingdom 'Tyson Report 2003' recommends the
appointment of non-executive directors with diversity in background, skills and experience to enhance board effectiveness and improved stakeholders' relationship. Therefore, the regulatory body may consider defining the qualifications and/or professional expertise for appointing 'Independent Directors' into the board.

- It is noted that the existing board culture in Bangladesh allows both the executive and the non-executive directors to perform duties together in one organizational layer; therefore there are some incidence of CEO duality. The empirical findings in this study suggest that the dual leadership structure does not influence firm performance. While the dual leadership structure may work well in some Anglo-American countries; due to institutional differences it may not work well in a developing country, such as Bangladesh. It may also reduce the board's ability to exercise the governance function and creates a conflict between management and board. Such conflict of interest may reduce the board independence and may lead to severe problems as seen in Enron (Zahra, 1990; Solomon, 2007). It is suggested to separate the executive function of the board from the monitoring function by splitting the role of Chairperson and CEO, which is also recommended in the United Kingdom 'Cadbury Report 1992' and 'Higgs Report 2003'.

- The regulatory body may consider clearly specifying the accountability structure of the board of directors and professional expertise required by management, and prevention of fraud by management and punishment thereafter.

- The regulatory body may consider requiring the listed companies to disclose the CEO (Managing Director) pay to ensure more accountability in company management. The regulatory body may also consider implementing the incentive based pay that may align the managerial goal with that of firm and may influence the firm performance.

- The current study suggests that the debt does not enhance firm performance. The regulatory body may adopt appropriate policies (in particular the stock exchange may adopt the listing requirement), so that firms may generate
funds in the form of equity. The regulatory body may also allow the lender to become involved in the internal management of the indebted firm.

These policy recommendations may bring accountability to the Bangladesh corporate sector in number of ways. Firstly, defining the controlling shareholders may allow the non-controlling shareholders to achieve necessary votes to pose a threat to the poorly performed company management. Secondly, by requiring increased number of independent directors in the board with adequate qualifications and professional expertise may bring the accountability and influence the firm performance. Thirdly, by separating the executive function of the board from the monitoring function by splitting the role of Chairperson and CEO may reduce the CEO's dominance and may enhance the board independence which may ultimately influence the firm performance. Fourthly, this study asks for requiring the listed companies to disclose the CEO (Managing Director) pay. Such disclosure will bring transparency, shareholder monitoring and accountability in company management. Further, incentive based pay may align the managerial goal with that of the firm and may influence the firm performance. Fifthly, this study asks for adopting appropriate policies, so that the firms will generate funds in the form of equity as it is found that the lender can not reduce the dysfunctional behavior of the firm. The regulatory body may also allow the lender to become involved in the internal management of the indebted firm, which may reduce information asymmetry, may increase the lenders capability to influence repayment directly and may allow the lender to veto dysfunctional decisions and encourage functional ones.

7.6 Limitations of this study

This study may have some limitations. Firstly, this study attempts to identify the suitable corporate governance mechanisms for Bangladeshi firms, but it is too early to say whether such identification is quite realistic. It is also quite unrealistic to identify the degree of concentrated ownership that will enhance the firm performance. If this would be true, the company would accept a certain level of concentrated shareholding.

Secondly, while examining the ownership structure and firm performance, this study used the single ownership categories, such as, sponsors/directors, blockholders, institutions, etc. It is argued that the 'use of single category of ownership may not
capture all the effects of ownership/ performance relationship’ (Lukviarman, 2004, p 95).

Thirdly, in this study the audited financial report was the basis for obtaining the company’s accounting information, such as, total assets, total liabilities and equities, net sales, net income, operating income, operating expenses, etc. As the enforcement of accounting standards are very poor in developing countries and therefore, it may not reflect the true performance of the company’s state of the affairs. Fourthly, the accounting data was collected from a large number of observations of different corporate entities while ignoring the underlying differences in organizations as in no way two organizations are the same (Deegan, 2006). Fifthly, the extreme values of some observed variables such as, EBIT, accumulated profits of a few firms for certain years may severely impact the outcome of this study.

Sixthly, this study examined the impact of board composition in the form of representation of outside independent directors and firm performance. The requirement of appointing the independent directors in the board was mandatory just from 2006. There was no outsider representation in the board before 2006 and it may have severely influenced the outcome of the study. Finally, this study considered the total executive pay as the proxy for top executive pay. It may influence the study. Further, in the absence of CEO and executives compensation in the form stock options, it is quite unrealistic to link the executive pay and market based performance measures.

7.7 Areas of Further Research

Corporate governance research in less developed and emerging economies is relatively new and there are vast issues within this area of research. This study is conducted within the agency theory perspective examining whether a control mechanism enhances firm performance. There is wide scope to conduct corporate governance research in the context of less developed and emerging economies. This study will try to identify the areas of further in this context.

Consistent with the argument of Demsetz (1983) and Mak and Li (2001), corporate ownership structure is endogenously determined and the cost and benefit of different ownership structure may vary across the firms. Therefore, a certain level of ownership may be beneficial for certain industry. Further, as the corporate governance practices vary widely across the countries and across the firms (Doidge et al, 2007),
further study may be carried out examining the industry specific impact of different ownership structure and firm performance.

Although “there is universal agreement on the need for outsiders, preferably independent, to be involved in the direction of companies” (Clarke, 1998, p 118), this study could not find a relationship between outside independent directors and firm performance. The finding of this study is surprising. It may be due to several reasons; firstly, there was no outsider representation in the board before 2006 which led to smaller data size, secondly, the cost and benefits of different board structure may vary across firms or industry (Mak and Li, 2001). Therefore, it can be argued that ‘outside directors do not have expertise’ is still a speculation and further study may be conducted by increasing the sample size and examining the industry specific impact of board composition and firm performance.

This study examined if the board leadership structure (structural independence of the board or CEO non-duality) may enhance the firm performance. Board structure is an endogenously institution and its organization depends on a number of firm characteristics (Barnhart et al, 1994; Hermalin and Weisbach, 2003; Linck et al, 2008; Bennedsen et al, 2008). Although some of the CEOs are found to be in involved in corporate malpractice that led to the corporate scandals in USA, it does not necessarily mean that CEO duality is a bad governance structure (Kang and Zardkoohi, 2005). The cost and benefits of different leadership structure may vary across firms or industry (Mak and Li, 2001; Elsayed, 2007) or “because the practice is prevalent in the industry” (Kang and Zardkoohi, 2005, 794). As argued in Chapter 3 (part 3.8.2) CEO duality is good for some firms, while it is opposite for other firms (Boyd, 1995; Brickley et al, 1997; Elsayed, 2007); a particular firm may adopt CEO duality under an appropriate or inappropriate organizational condition (Kang and Zardkoohi, 2005, p 786). Therefore, it is too early to make a conclusion and further study may also be conducted examining the industry specific impact of board leadership structure and firm performance.

Further study may also be carried out examining the influence of corporate governance mechanisms on post corporate governance reform and firm performance; in other words, if the corporate governance regulation (imposed Corporate Governance Notification 2006) brings any accountability to the corporate sector in Bangladesh. It may justify whether the theory of regulation works well in emerging economy.
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APPENDICES
## Appendix 1: List of the firms in the analysis (In alphabetical order)

<p>| | | |</p>
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<tr>
<td>1.</td>
<td>ACI Limited</td>
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<td>2.</td>
<td>Aftab Automobiles Limited</td>
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<td>3.</td>
<td>Agricultural Marketing Co. Ltd. (Pran)</td>
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<td>5.</td>
<td>Ambee Pharmaceuticals Ltd.</td>
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<td>8.</td>
<td>Apex Footwear Limited</td>
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<td>9.</td>
<td>Apex Spinning &amp; Knitting Mills Ltd.</td>
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<td>10.</td>
<td>Apex Tannery Limited</td>
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<td>11.</td>
<td>Apex Weaving &amp; Finishing Mills Ltd.</td>
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<td>Bangas Ltd.</td>
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<td>17.</td>
<td>Bangladesh Chemical Industries Ltd.</td>
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<td>18.</td>
<td>Bangladesh Dyeing &amp; Finishing Ind. Ltd.</td>
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<td>20.</td>
<td>Bangladesh Export Import Co. Ltd.</td>
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<td>21.</td>
<td>Bangladesh Lamps Ltd.</td>
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<td>22.</td>
<td>Bangladesh Leaf Tobacco Co. Ltd.</td>
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<td>24.</td>
<td>Bangladesh Plantation Ltd.</td>
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<td>25.</td>
<td>Bangladesh Thai Aluminum Ltd.</td>
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<td>26.</td>
<td>Bangladesh Zipper Ind. Ltd.</td>
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<td>27.</td>
<td>Bata Shoe Co. (Bangladesh) Ltd.</td>
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<td>29.</td>
<td>Beximco Denims Limited</td>
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<td>Beximco Fisheries Limited</td>
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<td>Beximco Knitting Limited</td>
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<td>Beximco Synthetics Limited</td>
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<td>Beximco Textiles Limited</td>
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<td>35.</td>
<td>BOC Bangladesh Ltd.</td>
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<td>Chittagong Vegetable Oil Industries Ltd.</td>
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<td>38.</td>
<td>Confidence Cement Ltd.</td>
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<td>Dandy Dyeing Ltd.</td>
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<td>Delta Spinners Ltd.</td>
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<td>Dulamia Cotton Spinning Mills Ltd.</td>
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<td>47.</td>
<td>Eastern Lubricants Blenders Ltd.</td>
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<td>49.</td>
<td>GlaxoSmithKline Bangladesh Ltd.</td>
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323
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<th>Company Name</th>
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<td>Tripti Industries Limited</td>
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<td>Tamijuddin Textile Mills Ltd.</td>
<td>103</td>
<td>Tulip Dairy &amp; Food Products Ltd.</td>
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<tr>
<td>101</td>
<td>The Ibn Sina Pharmaceuticals Ind. Ltd.</td>
<td>104</td>
<td>Wonderland Toys Limited</td>
</tr>
</tbody>
</table>
Hello,

This is Md. Afzalur Rashid, doing Ph. D. in the School of Accounting and Finance at the University of Wollongong, Australia. I am doing my research on corporate governance in the context of Bangladesh. My sample consists of 104 companies listed in Dhaka Stock Exchange. Your company is also in my sample. As such I am in great need of the following information of your company.

It will be highly appreciated if you kindly complete the following questionnaire and return it to me at your earliest convenience by e-mail attachment.

**Questionnaire**

1. Total Number of Directors


2. Number of Non-Shareholder Directors


3. Is the Chairman of the Board and Managing Director/Chief Executive Officer is same person? Yes/ No


4. Managing Director/Chief Executive Officer Pay


5. Managing Director/Chief Executive Officer Age


6. Number of years Managing Director/Chief Executive in the office


It is ensured that the high confidentiality will be maintained and the data will not be used other than the research purpose.

**Md. Afzalur Rashid**

5/38 Chapel Street
Rockdale, NSW 2216
Australia

E Mail: mar558@uow.edu.au
Appendix 3: Corporate Governance Notification for Bangladeshi Firms

The companies listed with any stock exchange in Bangladesh should comply with these conditions or shall explain the reasons for non-compliance in accordance with the condition number 5.

The Conditions:

BOARD OF DIRECTORS:

1.1. Board’s Size

The number of the board members of the company should not be less than 5 (five) and more than 20 (twenty):

Provided, however, that in the case of banks and non-bank financial institutions, insurance companies and statutory bodies for which separate primary regulators like Bangladesh Bank, Department of Insurance etc. exist, the Board of those companies should be constituted as may be prescribed by such primary regulators in so far as those prescriptions are not inconsistent with the aforesaid condition.

1.2. Independent Directors

All companies should encourage effective representation of independent directors on their Board of Directors so that the Board, as a group, includes core competencies considered relevant in the context of each company. For this purpose, the companies should comply with the following:

(i) At least one tenth (1/10th) of the total number of the company’s board of directors, subject to a minimum of one, should be independent directors.

Explanation: For the purpose of this clause “independent director” means a director who does not hold any share in the company or who holds less than one percent (1%) shares of the total paid-up shares of the company, who is not connected with the company’s promoters or directors or shareholder who holds one percent (1%) or more than one percent (1%) shares of the total paid-up shares of the company on the basis of family relationship; who does not have any other relationship, whether pecuniary or otherwise, with the company or its
subsidiary/associated companies, who is not a member, director or officer of any stock exchange, and who is not a shareholder, director or officer of any member of stock exchange or an intermediary of the capital market.

(ii) The independent director(s) should be appointed by the elected directors.

1.3. Chairman of the Board and Chief Executive

The positions of the Chairman of the Board and the Chief Executive Officer of the companies should preferably be filled by different individuals. The Chairman of the company should be elected from among the directors of the company. The Board of Directors should clearly define respective roles and responsibilities of the Chairman and the Chief Executive Officer.

1.4. The Directors’ Report to Shareholders

The directors of the companies should include following additional statements in the Directors’ Report prepared under section 184 of the Companies Act, 1994:-

(a) The financial statements prepared by the management of the issuer company present fairly its state of affairs, the result of its operations, cash flows and changes in equity.

(b) Proper books of account of the issuer company have been maintained.

(c) Appropriate accounting policies have been consistently applied in preparation of the financial statements and that the accounting estimates are based on reasonable and prudent judgment.

(d) International Accounting Standards, as applicable in Bangladesh, have been followed in preparation of the financial statements and any departure there from has been adequately disclosed.

(e) The system of internal control is sound in design and has been effectively implemented and monitored.

(f) There are no significant doubts upon the issuer company’s ability to continue as a going concern. If the issuer company is not considered to be a going concern, the fact along with reasons thereof should be disclosed.

(g) Significant deviations from last year in operating results of the issuer company should be highlighted and reasons thereof should be explained.

(h) Key operating and financial data of at least preceding three years should be summarized.
(i) If the issuer company has not declared dividend (cash or stock) for the year, the reasons thereof should be given.

(j) The number of Board meetings held during the year and attendance by each director should be disclosed.

(k) The pattern of shareholding should be reported to disclose the aggregate number of shares (along with name wise details where stated below) held by:-

   (i) Parent/Subsidiary/Associated companies and other related parties (name wise details);

   (ii) Directors, Chief Executive Officer, Company Secretary, Chief Financial Officer, Head of Internal Audit and their spouses and minor children (name wise details);

   (iii) Executives; and

   (iv) Shareholders holding ten percent (10%) or more voting interest in the company (name wise details).

**Explanation:** For the purpose of this clause, the expression “executive” means top five salaried employees of the company, other than the Directors, Chief Executive Officer, Company Secretary, Chief Financial Officer and Head of Internal Audit.

2.00 **CHIEF FINANCIAL OFFICER (CFO), HEAD OF INTERNAL AUDIT AND COMPANY SECRETARY:**

2.1. **Appointment**

The company should appoint a Chief Financial Officer (CFO), a Head of Internal Audit and a Company Secretary. The Board of Directors should clearly define respective roles, responsibilities and duties of the CFO, the Head of Internal Audit and the Company Secretary.

2.2. **Requirement to Attend Board Meetings**

The CFO and the Company Secretary of the companies should attend meetings of the Board of Directors, provided that the CFO and/or the Company Secretary should not attend such part of a meeting of the Board of Directors which involves
3.00 AUDIT COMMITTEE:

The company should have an Audit Committee as a sub-committee of the Board of Directors. The Audit Committee should assist the Board of Directors in ensuring that the financial statements reflect true and fair view of the state of affairs of the company and in ensuring a good monitoring system within the business.

The Audit Committee shall be responsible to the Board of Directors. The duties of the Audit Committee should be clearly set forth in writing.

3.1. Constitution of Audit Committee

(i) The Audit Committee should be composed of at least 3 (three) members.

(ii) The Board of Directors should appoint members of the Audit Committee who should be directors of the company and should include at least one independent director.

(iii) When the term of service of the Committee members expires or there is any circumstance causing any Committee member to be unable to hold office until expiration of the term of service, thus making the number of the Committee members to be lower than the prescribed number of 3 (three) persons, the Board of Directors should appoint the new Committee member(s) to fill up the vacancy(ies) immediately or not later than 1 (one) month from the date of vacancy(ies) in the Committee to ensure continuity of the performance of work of the Audit Committee.

3.2. Chairman of the Audit Committee

(i) The Board of Directors should select 1 (one) member of the Audit Committee to be Chairman of the Audit Committee.

(ii) The Chairman of the audit committee should have a professional qualification or knowledge, understanding and experience in accounting or finance.

3.3. Reporting of the Audit Committee

3.3.1. Reporting to the Board of Directors

(i) The Audit Committee should report on its activities to the Board of Directors.
(ii) The Audit Committee should immediately report to the Board of Directors on the following findings, if any:-

(a) Report on conflicts of interests;
(b) Suspected or presumed fraud or irregularity or material defect in the internal control system;
(c) Suspected infringement of laws, including securities related laws, rules and regulations; and
(d) Any other matter which should be disclosed to the Board of Directors immediately.

3.3.2. Reporting to the Authorities

If the Audit Committee has reported to the Board of Directors about anything which has material impact on the financial condition and results of operation and has discussed with the Board of Directors and the management that any rectification is necessary and if the Audit Committee finds that such rectification has been unreasonably ignored, the Audit Committee should report such finding to the Commission, upon reporting of such matters to the Board of Directors for three times or completion of a period of 9 (nine) months from the date of first reporting to the Board of Directors, whichever is earlier.

3.4. Reporting to the Shareholders and General Investors

Report on activities carried out by the Audit Committee, including any report made to the Board of Directors under condition 3.3.1 (ii) above during the year, should be signed by the Chairman of the Audit Committee and disclosed in the annual report of the issuer company.

4.00. EXTERNAL/STATUTORY AUDITORS

The issuer company should not engage its external/statutory auditors to perform the following services of the company; namely:-

(i) Appraisal or valuation services or fairness opinions;
(ii) Financial information systems design and implementation;
(iii) Book-keeping or other services related to the accounting records or financial statements;
(iv) Broker-dealer services;
(v) Actuarial services;
(vi) Internal audit services; and
(vii) Any other service that the Audit Committee determines.

5.00 REPORTING THE COMPLIANCE IN THE DIRECTOR'S REPORT

The directors of the company shall state, in accordance with the annexure attached, in the directors' report whether the company has complied with these conditions.
Annexure

Status of compliance with the conditions imposed by the Commission’s Notification No. SEC/CMRRCD/2006-158/Admin/02-08 dated 20th February, 2006 issued under section 2CC of the Securities and Exchange Ordinance, 1969:

(Report under Condition No. 5.00)

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<td>Board Size</td>
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<td>At least 1/10 Independent Director</td>
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<td>1.2 (ii)</td>
<td>Elected Directors will Appoint Independent Directors</td>
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<td>1.3</td>
<td>Chair of the Board and CEO</td>
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<td>Preparation of Financial Statement</td>
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<td>2.2</td>
<td>Requirement to Attend Board Meeting</td>
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<td>3.1 (ii)</td>
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<td>3.1 (iii)</td>
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By order of the Securities and Exchange Commission Bangladesh
Appendix 4: Normality test for the dependent variables.

Figure 23

Normal P-P Plot of Regression Standardized Residual

Dependent Variable: ROA

Figure 24

Normal P-P Plot of Regression Standardized Residual

Dependent Variable: ROE
Figure 25

Normal P-P Plot of MBVR

Figure 26

Normal P-P Plot of Regression Standardized Residual

Dependent Variable: Tobin's Q
Figure 27

Normal P-P Plot of LogPAY

Figure 28

Normal P-P Plot of STDTA
Figure 29

Normal P-P Plot of LTDTA

Figure 30

Normal P-P Plot of TDTA
Figure 31

Normal P-P Plot of TDTE

![Normal P-P Plot of TDTE](image-url)
Appendix 5: Homoscedasticity test for the dependent variables.

Figure 32

Normal Q-Q Plot of ROA

Figure 33

Normal Q-Q Plot of ROE
Figure 34

Normal Q-Q Plot of MBVR

Figure 35

Normal Q-Q Plot of Tobin's Q
Figure 38

Normal Q-Q Plot of LTDTA

Figure 39

Normal Q-Q Plot of TDTA
Normal Q-Q Plot of TDTE

Observed Value vs. Expected Normal Value
Appendix 6: Linearity of the relationship between the director stock ownership and firm performance.

Figure 41

![Graph showing ROA vs. Director Shareholding with R^2 Cubic = 0.027]

Figure 42

![Graph showing ROE vs. Director Shareholding with R^2 Quadratic = 0.007]
Figure 43

Figure 44
Appendix 7: Linearity of the relationship between the largest blockholding and firm performance.

Figure 45

Figure 46
Figure 47

![Graph of MBVR vs. Largest Blockholding with R^2 Cubic = 0.029](image)

Figure 48

![Graph of Tobin's Q vs. Largest Blockholding with R^2 Cubic = 0.051](image)
Appendix 8: Linearity of the relationship between the institutional shareholding and firm performance.

Figure 49

![Graph showing ROA and Institution Shareholding with Rsq Cubic = 0.006](image)

Figure 50

![Graph showing ROE and Institution Shareholding with Rsq Cubic = 0.003](image)
Appendix 9: Firm performance under different performance measures

**Figure 53:** Mean comparative financial performance of the sample firms.

**Figure 54:** Mean comparative market performance of the sample firms.
Appendix 10: Firm performance under different performance measures and different ownership concentrations.

**Figure 55:** Comparative performance of all the sample firms (line graph).

**Figure 56:** Comparative performance of the sample firms (bar graph).
Figure 57: Firm performance in terms of ROA for different ownership groups.

![Graph showing ROA for different ownership groups from 1998 to 2008 with legends indicating Directors/Sponsors, Institution, and Outsiders.]

Figure 58: Firm performance in terms of ROE for different ownership groups.

![Graph showing ROE for different ownership groups from 1998 to 2008 with legends indicating Directors/Sponsors, Institution, and Outsiders.]

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**Figure 59:** Firm performance in terms of MBVR for different ownership groups.

**Figure 60:** Firm performance in terms of Tobin’s Q for different ownership groups.
Appendix 11: Board leadership structure and firm performance under different performance measures.

**Figure 61:** Board leadership structure and firm performance under ROA performance measure.

**Figure 62:** Board leadership structure and firm performance under ROE performance measure.
Figure 63: Board leadership structure and firm performance under MBVR performance measure.

Figure 64: Board leadership structure and firm performance under Tobin’s Q performance measure.