



Effects of Corporate Governance Guidelines on Investors: An Experimental Examination of Bangladeshi Investors' Decisions

By

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Dedication

To my parents

I dedicate this dissertation to my father Mr. Md. Sadiruzzaman and my mother Mrs. Jahanara Begum who have always kept me in their prayers, and encouraged and supported me throughout my life.

Declaration on sources

I hereby confirm that the work presented in this thesis is my own and original work that has been carried out through the School of Accounting and Commercial Law, Victoria University of Wellington, during my candidature as a PhD student. I declare that the material of this thesis has not been submitted either in whole or in part for the award of any other degree or diploma at this or any other university. To the best of my knowledge and belief, it contains no material previously published or written by other persons or institutions except where due reference has been made.

ATM Tariquzzaman

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Abstract

The main purpose of the study is to examine whether investors assign importance to corporate governance in making investment decisions. The study involves a 2x2x2 between-participant experiment on real investors that examines the effects of corporate governance structure, financial condition and insider trading on individual investor decisions¹. The findings of this study extend the literature on corporate board practices and investor perceptions by providing evidence from this emerging economy that strong corporate governance has a positive impact on investor decisions. The study also confirms the findings of prior literature that financial condition of a company positively influences investor decisions. Hence, the results provide insights into the effects of strengthening corporate governance guidelines and of variation in financial condition on investor decisions. The study provides evidence that the common occurrence of illegal insider trading in the emerging market of Bangladesh does not appear to impact on investor decision making, unlike in developed countries.

The results of this study also contribute to understanding of how the quality of corporate governance impacts on decision making. It appears that governance directly impacts the perceived reliability of financial reports and trust in the board and management and that these factors fully mediate the impact on investor decision making.

The theoretical model and instrument developed for this study will be useful for further studies to explore the impact of other corporate governance factors on investor decisions. Furthermore, the theoretical model and instrument will also be useful for further studies in other developed and developing countries, particularly where insider trading is regarded by investors as being a concern and to investigate the impact of other corporate governance factors on investors and financial analysts.

Keywords: Corporate Governance, Board of Directors, Insider Trading, Financial Reports, Reliability, Trust and Investment Decisions.

¹ The study uses the terms corporate governance and board quality interchangeably.

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CHAPTER ONE: INTRODUCTION

1.1 Introduction

Corporate governance has been the subject of close attention by regulators and researchers over recent decades particularly following major corporate scandals such as Enron and World com, and the global financial crisis. Major failures in the corporate sector have been attributed to weak corporate governance.

Following the scandals, there have been significant regulatory reforms around the world such as the introduction of new corporate governance guidelines or the revision of existing guidelines. Many countries face challenges to implement some aspects of a code of good governance despite the enormous efforts of regulators and international organisations. The work of international securities market regulators has been aided by international organizations such as World Bank, IMF and the Organisation for Economic Cooperation and Development (OECD) to accelerate implementation of reforms and introduction of effective monitoring of compliance. According to Aguilera and Cuervo-Cazurra (2009), about 64 countries had been able to adopt a code of good governance by the mid-1980. Regulators expect that rules on corporate governance will enhance investor confidence, increase reliability of financial information, reduce information asymmetry, and thus benefit investors. However, experience shows that there are reasons to be skeptical that simply mandating corporate governance will actually improve the quality of corporate governance and thus positively impact company performance and value.

Many prior studies have documented a positive relationship between corporate governance and company performance and value. However, little is known about how and whether investors consider the strength of governance of a company in deciding whether to invest in the company's stock. Accordingly, this study conducts an experiment on real investors to examine the effect of corporate governance on investor decision making.

1.2 Background and Relevance of this Study

Increasing interest in development of the capital market in Bangladesh has heightened the need for improved corporate governance in listed companies. The securities regulator, Bangladesh Securities and Exchange Commission (BSEC), recognized the need to introduce rules on corporate governance and in 2006, the Commission initially enacted 'comply or explain' corporate governance guidelines. The Commission allowed flexibility in compliance with the provisions of the guidelines, and in most cases these have been honored more in the breach than in the observance (Ahmed & Yusuf, 2005). Companies could avoid compliance by simply explaining why they were unable to comply, and there was no verification of these explanations. Thus, in August 2012, with a view to ensuring improved corporate governance, the BSEC enacted new corporate governance guidelines. These guidelines are compulsory aim to strengthen the board of listed companies by a raft of measures which include specifying the minimum proportion of independent directors, and imposing specific qualification requirements for the independent directors: "(1) The independent director shall be a knowledgeable individual with integrity who is able to ensure compliance with financial, regulatory and corporate laws and can make meaningful contribution to business. (2) The person should be a Business Leader/Corporate Leader/Bureaucrat/University Teacher with Economics or Business Studies or Law background/Professionals like Chartered Accountants,

Cost & Management Accountants, and Chartered Secretaries, and (3) must have at least 12 (twelve) years of corporate management/professional experience.” The guidelines also require that the Chairman and the CEO of the company shall be different individuals (Guideline Condition 1.2-1.4, BSEC, 2012). The primary purposes of the guidelines are to foster greater independence of boards of directors, and to help strengthen internal controls, accounting policies and compliance with International Accounting Standards (IAS), and ultimately improve investors’ confidence (BSEC, 2012). It is important to examine the effects of the new guidelines on investor decisions.

Only a few studies have been carried out on corporate governance practice in Bangladesh and none of the studies have addressed the behaviour of individual investors’ in listed companies (as impacted by the quality of independent directors and the separation of the chairman and CEO roles). This study examines the effects of corporate governance structure, financial condition of the companies, and insider trading, on individual investor decisions. The study also investigates investors’ perceived reliability of financial reports and their trust in the board and management which may mediate the impacts of board quality, financial condition, and insider trading.

1.3 Problem Statements, Objectives of this Study and Research Questions

Prior research indicates that individual investors take information on corporate governance into account for investment judgments and decisions (Chang & Wei, 2011). One of the reasons for considering information on corporate governance is that better corporate governance has been shown to be correlated with financial performance (e.g., Gompers, Ishii, & Metrick, 2003 and Cremers & Nair, 2005) and reduced information asymmetry (Kanagaretnam, Lobo, & Whalen,

2007). The board of directors is a vital part of the corporate governance structure of a corporation (Fama & Jensen, 1983). Gillan (2006) reported that the board of directors is the main source of implementing corporate governance. Similarly, Boone, Field, Karpoff, & Raheja (2007) state that the board of directors, as appointed by shareholders, are responsible for improving corporate governance in the company. Further, the board of directors acts as the agent of shareholders and has fiduciary duties to capital providers such as the duty of care and duty of loyalty. Therefore, a board is responsible for building a firm's reputation through improving corporate governance (Berghe & Levrau, 2004). Sharma (2006) reported that strong corporate governance in a company leads non-professional and professional investors to perceive lower investment risk and thus be more willing to invest. However, little is known about the interaction with financial condition and insider trading in impacting investment decision making. Furthermore, little is also known how these three factors impact on perceived reliability of financial reports and trust in board and management and how these latter two factors in turn impact on decision making.

Investigation of the role of insider trading is particularly important for Bangladesh as there is a widespread perception that insider trading is common and that it significantly weakens the capital market (CPD, 2011). Insider trading is regarded as undermining and reducing investor trust and confidence in the market because insider traders take informational advantage over other investors and earn abnormal profits (Seyhun, 1986; Lakonishok & Lee, 2001 and Piotroski & Roulstone, 2005). Prior research has suggested a positive relationship between insider trading and earnings manipulation (Sawicki & Shrestha, 2008). This finding suggests examining not only the direct impact of insider trading but also the link between insider trading and reliability of financial information when corporate governance is strong or weak.

Therefore, this study addresses the following questions:

1. In emerging markets does board quality impact on investors' decisions?
2. Does board quality impact investors' decisions when inside information is available?
3. Does board quality impact investors' perceived reliability of financial reports?
4. Does board quality impact perceived reliability of financial reports when inside information is available?
5. Does board quality impact investors' decisions when financial condition is bad?
6. Does investors perceived reliability of financial reports impact investors' decisions?
7. Does board quality impact investors' trust in board and management?
8. Does availability of inside information impact investors' trust in board and management?
9. Does investors' trust in board and management impact investors' decisions?
10. Does perceived reliability of financial reports impact on trust in board and management?
11. Does trust in management mediate the relationship between board quality and investors' decisions?
12. Does perceived reliability of financial reports mediate the relationship between board quality and investors' decisions?
13. Does perceived reliability of financial reports mediate the relationship between financial condition and investors' decisions?
14. Does trust in management mediate the relationship between availability of inside information and investors' decisions?
15. Does perceived reliability of financial reports mediate the relationship between availability of inside information and investors' decisions?

1.4 Research Methodology

This study performs a laboratory experiment to examine whether corporate governance strength, insider trading, and financial condition, the interaction effects of these independent constructs of interest, and the mediating effects of perceived reliability of financial reports and trust, impact on investor decisions. The study participants were 307 individual who invest on the Dhaka and Chittagong stock exchanges in Bangladesh. The experiment is a 2x2x2 between participants study yielding 8 experimental conditions for a hypothetical company, that were randomly assigned to all participants. The participants were asked to respond to a set of questionnaires including questions that capture dependent variables, attention checks questions, debriefing questions, and demographic questions.

The study used SPSS and AMOS statistical software to perform descriptive analysis and ANCOVA, ANOVA, regression and SEM analyses to test the hypotheses of this study.

1.5 Main Findings and Contributions

The findings of this study are consistent with the results of prior studies that have found that good corporate governance has a positive impact on investment decision making (Hirst, Koonce, & Simko, 1995; Hodge, 2003; Maines & Wahlen, 2006; Zhang & Wiersema, 2009; Holder-Webb & Sharma, 2010). The results further confirm the findings of Elliott, Hodge, & Sedor, (2011) that trust in the board and management affects investor decisions.

The study yields new findings that perceived reliability of financial reports positively influences investor trust in the board and management and in turn, investor decisions. The study

also found that perceived reliability of financial reports and investor trust in the board and management fully mediate the influence of board quality on investment decisions, and partially mediate the influence of financial condition. However, the study found that insider trading did not have a significant effect on investor decisions.

The experimental study on real investors in an emerging economy to examine the effect of corporate governance on investor decisions is, to my knowledge, the first such experimental study on the Bangladesh capital market. The findings of the study should be useful to regulators in understanding the complexities of implementing corporate governance guidelines.

The theoretical model and instrument developed for this study can be used for further studies to explore the impact of other corporate governance factors on investor decisions. In addition, the theoretical model and instrument should be useful for related studies in other countries or blocs of countries, particularly where insider trading is regarded as being a concern.

1.6 Structure of the Thesis

The remainder of this thesis is set out as follows: Chapter 2 provides an overview of the institutional setting in Bangladesh. In particular, the economic environment, historical development of the corporate sector, an overview of the capital market, the legal framework and institutional setting for corporate governance, the corporate governance guidelines, and insider trading laws. Chapter 3 provides an overview of different models of corporate governance. Chapter 4 provides a review of the literature on the impact of board quality as determined by the experience of directors, independence of directors, duality of the chairman and CEO, and the impact of insider trading on investor decisions. Chapter 5 discusses the

theoretical framework and develops the hypotheses. Chapter 6 explains the methodology employed in the study. Chapter 7 reports the results of the study. Chapter 8 presents a discussion of the results and, finally, Chapter 9 provides the conclusions, suggests future research, and notes the limitations of the study.

CHAPTER TWO: INSTITUTIONAL SETTING IN BANGLADESH

2.1 Introduction

The principal objective of this study is to examine the effect of corporate governance on investment decisions. The study ran a laboratory experiment on individual investors in Bangladesh to see how they value corporate governance in making investment decisions. Bangladesh is a developing country. In general, unlike developed countries, corporate governance in developing countries is inadequately framed and less effective due to weak enforcement mechanisms and a weak legal framework (Porta, Lopez-de-Silanes, Shleifer, & Vishny, 2000).

Further, differences in national systems of economic and political governance are visible across developed and developing economies, which leads individual countries to frame corporate governance in their own suitable manner (Oman, Fries, & Buiters, 2004). Therefore, it is important to discuss current institutional settings in Bangladesh with respect to establishing corporate governance mechanisms. This chapter is organised in five sections: 2.2 Economic environment of Bangladesh, 2.3 Historical development of the corporate sector in Bangladesh, 2.4 History of the Bangladesh capital market, 2.5 Institutional setting of corporate governance in Bangladesh, 2.6 Legal framework of corporate governance in Bangladesh, 2.7 Corporate governance guidelines in Bangladesh, 2.8 Laws on insider trading, and 2.9 Conclusion.

2.2 Economic Environment of Bangladesh

2.2.1 The History of the People's Republic of Bangladesh

The region now constituting Bangladesh has been under Muslim rule for more than five hundred years from late 12th century to 1757 A.D. The last sovereign ruler, Nawab Sirajuddowla, was defeated by the British at the battle of Palashi on 23rd June 1757. From 1757 Bangladesh was ruled by the British for nearly 200 years until Britain withdrew in 1947. During this period Bangladesh was part of the British Indian province of Bengal and Assam described as East Bengal. When British colonisation ended in 1947 India and Pakistan were created as new countries. Pakistan's partition from India arose from differences in religions. Pakistan was created out of Muslim majority territories in the West and East while India from Hindu majority regions in the centre. East Bengal became part of Pakistan as the majority of the people were Muslims. Therefore, Pakistan comprised two geographically separate parts, West Pakistan and East Pakistan (former East Bengal). The two parts were 1600 kilometres apart and had significant differences in cultural and linguistic identity. From the very beginning of the Pakistan regime there were clear tensions between West Pakistan and East Pakistan on Urdu and Bengali as national languages. The people of East Pakistan, Bengalis, wanted their language Bengali to be recognised officially as coequal to Urdu as they did not speak Urdu. Furthermore, there was economic exploitation of East Pakistan by West Pakistan. For example, between 1948 and 1960 only 34 percent of East Pakistan export earnings were spent in East Pakistan (Islam, 1981; Khan, 1972). There was insignificant development of facilities and industry during that period although East Pakistan was more populous than West Pakistan. Because of this discrimination against them, the people of East Pakistan protested strongly and finally declared independence of the new country, Bangladesh, on March 26, 1971 under the leadership of Sheikh Mujibur Rahman. After nine months of violent war Bangladesh gained independence.

Bangladesh lies in the north-eastern part of South Asia and is bounded by India on the west, the north and northwest, Myanmar on the southeast, and the Bay of Bengal on the south (see Figure 1). The country occupies an area of 147,600 km², has a population of about 161 million people, giving a population density of 1090 persons/km² (World Bank, 2015b).

Figure 1: Bangladesh Map



Source: Google map (<https://www.google.co.nz/maps/place/Bangladesh/>)

2.2.2 Economy of Bangladesh

The Bangladesh economy has remained strong and resilient despite the global and local challenges that have hindered exports and private investment. According to World Bank study, Bangladesh is among the top 12 developing countries with a population of over 20 million who have achieved 6 plus percent growth in 2016. GDP growth in Bangladesh increased to 6.6% in FY2015 from 6.1% in FY2014 (see Figure 2). The Bangladesh economy moved up to 44th position in the world economy in 2015 from 58th in 2013 (World Bank, 2015b). According to an IMF report the economic indicators per capita income, reserves, remittances, export earnings, investment, budget size and power generation have improved significantly over the last five

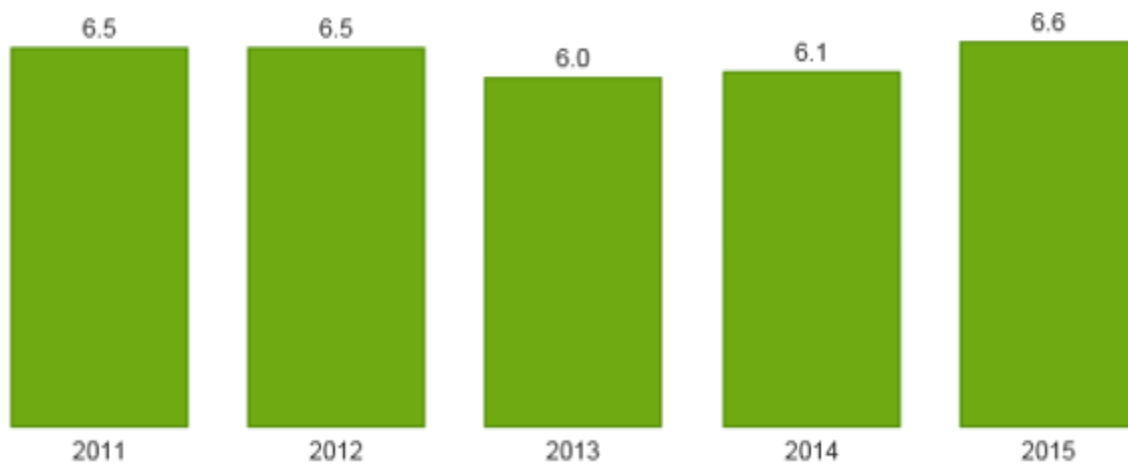
years (IMF, 2015). Bangladesh is mainly an agricultural country, but many large-scale industries have developed. Among them, are readymade garments, cotton textiles, pharmaceuticals, fertilizers, wood products, iron and steel, ceramics, cement, plastic products and chemicals. Goldman Sachs has projected Bangladesh as one of the “Next 11 after BRIC” on the basis of its positive economic fundamentals (Lawson, Heacock, & Stupnytska, 2007; Wilson & Stupnytska, 2007)², while JP Morgan has included Bangladesh in the “Frontier Five” economies (Hagerty, 2008; Abdullah, Boyle, & Joham, 2011)³. Moreover, Bangladesh ranks ahead of all countries in South Asia except India in terms of sovereign credit ratings (Ratha, De, & Mohapatra, 2011). The Bangladesh economy is expected to grow by 6.7% in FY2016 on strong garment exports and to increase to 7% in FY 2017. It is now the world’s second-largest garment exporter after China (Hodgson, Khan, Haynes, & Arnold, 2016). The economic growth of Bangladesh is largely due to the success of its agriculture and the fast growing industry and service sectors. As a result, Bangladesh is no longer considered to be a lower income nation; rather it should be regarded as a lower middle income country (MoF, 2016). Bangladesh was ranked the eighth happiest country (HPI score 38.4) among 140 countries in the world in 2016, far ahead of many developed countries (HPI, 2016).⁴

²The N-11 includes Bangladesh, Egypt, Indonesia, Iran, Korea, Mexico, Nigeria, Pakistan, Philippines, Turkey and Vietnam. The group comprises 7% of the world economy and accounts for 9% of the world’s energy consumption and an equal share of global CO2 emissions, well below BRIC’s 30% share of emissions. However, growth conditions vary widely across the N-11, and several face significant challenges. [BRIC stands for the combined economies of Brazil, Russia, India and China (Wilson & Stupnytska, 2007)].

³ The term ‘frontier five economies’ refers to a subset of emerging markets comprising five countries Kazakhstan, Kenya, Nigeria, Vietnam and Bangladesh with typically modest market capitalization, limited investability and liquidity, and limited market information. These countries have favourable long term growth prospects.

⁴ The Happy Planet Index measure is based on sustainable wellbeing for all. It indicates how well a nation is doing in achieving long, happy, sustainable lives.

Figure 2: GDP Growth of Bangladesh (% per year)



Source: Asian Development Bank (2016)

2.3 Historical Development of the Corporate Sector in Bangladesh

The history of the corporate sector in Bangladesh begins with developments in the early days of the Indian sub-continent. The evolution of the corporate sector in the sub-continent began around 800 BC (or perhaps even earlier) when the business people of the Indian subcontinent adopted the corporate form *sreni*⁵ (Khanna, 2005). The *sreni* was a separate legal entity which could have over 1000 members and had largely centralised management. The head of the management (called '*Jetthaka* or *Sreshthi*') was usually an experienced, skilled, intelligent, and sometimes, rich person. The head was often assisted by two to five executive officers (*Karya Chinatakah*) who had the power to bind the *sreni* on business. The business of *sreni* was administered by certain written rules (called *sreni dharma*) on the internal governance of the *sreni* such as production practices, prices, quality controls and so forth. In regards to enforcement of the rules

⁵ The term '*sreni*' was used during Ancient India to refer to almost all kind of business, political and municipal activity (Khanna, 2005)

the head had the power to impose a penalty on a *sreni* member for violation of the *sreni* dharma. However, the assembly of members of the *sreni* had the power to remove the head. This indicates that *sreni dharma* was the set of rules of governance of the entity similar to the corporate governance mechanisms of the modern company. The number, size and complexities of the *sreni* increased with the growth of trade in India until the British took over.

After British took possession of the sub-continent, the East India Company was formed in 1600. At that time, companies used to incorporate either by Royal Charter or by Special Acts of Parliament. However, in 1844, the provision of incorporation and registration of Companies without a Royal Charter or Special Act of Parliament was enacted. The law required joint stock companies to register certain particulars of the company. The law was subsequently amended in 1856 and again in 1857 to enable a company to complete registration with limited liability. The law was again amended in 1862 and made into a comprehensive Act to cover a large number of important decisions of the English Courts. In 1908 several amendments were consolidated by the Companies (Consolidation) Act, 1908. Following that, the Companies Act, 1913 was passed in the sub-continent, which was almost identical to the earlier English Companies Act. The Act was amended several times during 1914-1932, and major changes were made in the Companies (Amendment) Act, 1936 which came into operation on 15th January 1937. After the partition of India and Pakistan, Pakistan adopted the Companies Law (with amendments) and, similarly, when Bangladesh came into existence after the violent struggle for independence in 1971 from Pakistan, the government of Bangladesh also adopted this law. The Companies Act, 1913 remained the primary guidelines for business in Bangladesh until the Companies Act, 1994 was passed by the parliament in 1994. As the result of this historical background, the development of corporate law in Bangladesh has been strongly influenced by English Company Law.

As in many emerging economies, the family-based company has been central to the development of corporate culture in Bangladesh. Forty three percent of the total equity market capitalization is held by sponsors who are from the founders' families, thirty eight percent is held by the public at large and the remainder is owned by institutions (World Bank, 2003). Imam and Malik (2007) report that the top five shareholders, holding on average 36.96% of the total market, belong mostly to controlling families. In another study, Farooque (2007) states that the top five stockholders, holding more than 50% of a firm's outstanding shares, typically are linked to a single family. Thus, sponsors or their relatives and friends often represent and dominate the board and management, which has the potential to hinder effective governance of the corporate sector in Bangladesh.

2.4 An Overview of the Bangladesh Capital Market

2.4.1 History of the Bangladesh Capital Market

Before the independence of Bangladesh in 1971, a stock exchange named the East Pakistan Stock Exchange Association Limited was established in 1954 in Narayangonj close to Dhaka, the present capital city of Bangladesh, by 8 promoters/members.⁶ It was shifted to Dhaka in 1958 and renamed as East Pakistan Stock Exchange Limited in 1962 and finally as Dhaka Stock Exchange (DSE) in 1964. Trading at the stock exchange started in 1956. This continued until it was suspended during the liberation war of Bangladesh in 1971. Trading did not recommence with independence as socialism became a fundamental principles in the Constitution of the People's Republic of Bangladesh. All enterprises worth more than Taka 2.5 million were nationalized by a President's Order in 1972. Under the nationalization policy, the government

⁶ The need to establish a stock exchange in the then East Pakistan was first decided by the government when, early in 1952, the Calcutta Stock Exchange had prohibited transactions in Pakistani shares and securities. The then Pakistan government decided to open a branch of the Karachi Stock Exchange at Dhaka instead of setting up an independent stock exchange in East Pakistan.

took control of over 92% of the total industrial assets of the country (Uddin, 2005; Uddin & Hopper, 2003). This policy was revised in 1976 with privatization of the nationalized assets. The DSE recommenced trading with 9 listed companies having total paid up capital of Tk.0.138 billion and market capitalization of Tk. 0 .147 billion which was 0.138 % of GDP (Khan, 1992).

The DSE grew slowly until 1982 but then rapid growth commenced which further accelerated in 1993 as a new government paid special attention to the development of the stock market. Government established the BSEC, as the regulator of the capital market, and took certain steps to attract entrepreneurs, local and foreign investors and other market participants, such as (1) removal of capital gains tax and withdrawal of restrictions on foreigners to repatriate capital gains and dividend income, (2) making the Bangladeshi Taka Account convertible on current account, (3) withdrawal of regulatory restrictions on foreign portfolio investment, (4) introduction of certain tax benefits for investors and listed companies, and (5) removal of restrictions on companies to issue shares at a premium (Solaiman, 2005).

The Bangladesh Capital market has experienced two major crisis – one in 1996, the other in 2011. It first came into prominence after it experienced the first most serious turmoil in 1996. The DSE and the new Chittagong Stock Exchange (CSE) both had a bull run during July to November in 1996.⁷ Market capitalization of DSE went up by 265% and the average daily turnover increased by over 1000%. There were about 192 securities listed with both stock exchanges at that time. According to the official record, the DSE index increased by 281% from 989.40 in July 1996 to a peak of 3648 in November 1996 in just 5 months. This abnormal growth was not sustained for long. It was down to 2300 by December 1996 and continued to decrease

⁷ The development of Bangladesh capital market is concentrated around Dhaka Stock Exchange as it is situated in the commercial area of Dhaka, the capital of Bangladesh, and it is also the most populous city of the country.

to 486.62 in April 1999. The index dropped by about 83.44% in three years from 1996 to 1999. This caused significant damage to investors' confidence in the market (Saha, 2012).

The stock market crisis of 1996 led the government to initiate massive market reforms such as the introduction of electronic trading in August 1998, the establishment and incorporation of the Central Depository Bangladesh Ltd (CDBL) as a public limited company in August 2000, and the incorporation of the Central Depository System (CDS) as an independent company in January 2004. Taxes on dividends were introduced and new rules and regulations were introduced to strengthen corporate governance. In 2005 and 2006 a significant number of companies went public and there was a strong uptrend in investor participation. Market capital, the market index, average turnover and all other stock market factors showed positive and stable growth.

However, unusual growth recurred in 2010. Between July and December 2010 the DSE General Price Index (DGEN) registered a growth of 34.7 percent, market capitalisation increased by 29.5 per cent and the Price Earnings (P/E) ratio increased to 26.3 between July 2010 and December 2010. Market capitalisation at the end of December, 2010 was as high as 51.5 per cent of GDP, as compared to 38.5 per cent of GDP in June, 2010. Following this bull run, the index fell by about a half from its December 2010 all-time high, corresponding to a loss of about 22% of GDP as of October 2012. The unusual growth in the market was attributed to entry of a large number of individual investors in the market coupled with high liquidity, poor corporate governance, insider trading and market manipulation (CPD, 2011). Such growth did not reflect the real economy of the country during that time. The Asian Development Bank reported that the boom and bust of the stock market in 2010 happened due to weak enforcement capacity of the BSEC, excessive investment by commercial banks in the stock market, poor reporting standards, weak corporate governance mechanisms and insider trading (Asian Development Bank, 2014).

According to a study of Sultana, Hossain, and Uddin (2016) the commercial banks invested in the stock market more than their exposure limit to the capital market, which triggered the unusual growth in the market. As the regulatory authority, the Bangladesh Bank (the country's central bank) had failed to monitor commercial banks over-investment in the stock market. When the Bangladesh Bank (BB) ordered commercial banks to reduce their exposure to the stock market, market capital decreased to 14.8% at the end of FY2010's third quarter from 17% in the previous quarter. The market continued to decline further and crashed during November and December 2010 when the Bank raised the Cash Reserve Ratio (CRR) and Statutory Liquidity Reserve requirement (SLR) of the commercial banks by 0.5 percentage points during that period (Sultana, Hossain, and Uddin, 2016). The frequent changes of rules by the BSEC regarding margin requirements of stock brokers/dealers and merchant bankers also affected investor confidence adversely (Asian Development Bank, 2014; Sultana, Hossain, and Uddin, 2016).

After the stock market crisis in 2010 the BSEC introduced a number of reforms to discipline the capital market and to improve corporate governance. Enforcement capacity was increased through the establishment of a capital market tribunal to expedite pending cases in the various courts in Bangladesh.⁸ These important measures, aimed at market stability and development, and implemented by the BSEC are listed in Appendix A below. Among the remarkable reforms of the recent years are the Financial Reporting Act, 2015, to ensure quality, transparency and accountability in the accounting and auditing profession in Bangladesh, and BSEC's Corporate Governance Guidelines, 2012 to improve the quality of corporate governance.

⁸ ADB (2014) reported that about 366 securities market related cases were pending with various courts in 2014, which include 15 cases brought as a result of the stock market crisis of 1996.

2.4.2 Current State of Capital Market of Bangladesh

Stability returned after 2011 and by 2014 the market had grown steadily by 19% (\$39.16 billion) from \$33 billion in February 2011. In October 2014, the DSEX reached a peak of 5334.04, but fell below 4000 points by June 2015. However, market indices and market capitalisation remained mostly unchanged during FY2015-16 while the DSEX index fell by only 283.94 points. The market has been registering a positive trend during 2016. As of 4 August 2016 market capitalisation reached \$US40 billion, approximately 18.70 percent of estimated GDP of the country for FY2015-16. The number of individual investors has significantly increased from 2.67 million in June 2011 to 2.91 million in August 2016 (CDBL, 2016). Table 2.1 presents the market capitalisation of major stock exchanges for the N-11 countries as of June 2015. It shows that market capitalisation to GDP ratio for Bangladesh, at only 24.04%, is very small relative to the other countries. This also indicates that the Bangladesh capital market is underdeveloped relative to its neighbours.

Table 2.1: Market capitalization and GDP of the N-11 countries

Country	Stock Exchange	Market Capitalization (US\$ in bn)	GDP (US\$ in bn)	Market Capitalization (% GDP)
Bangladesh	Dhaka Stock Exchange (DSE)	41.74	173.64	24.04
India	Mumbai Stock Exchange (BSE)	1613.29	2308.02	69.90
Pakistan	Karachi Stock Exchange (KSE)	71.20	250.14	28.46
Indonesia	Bursa Efek Indonesia (BEI)	397.05	895.68	44.33
Malaysia	Bursa Malaysia	451.21	327.89	137.61
Thailand	The Stock Exchange of Thailand (SET)	424.86	386.29	109.98
Taiwan	Taiwan Stock Exchange (TWSE)	919.12	527.77	174.15
Philippines	Philippine Stock Exchange (PSE)	271.64	308.03	88.19
Japan	Japan Exchange Group	5004.76	4210.36	118.87
Hong Kong	Hong Kong Exchange	3966.07	310.07	1279.07
Singapore	Singapore Stock Exchange (SGX)	774.12	296.06	261.47

Source: BSEC Annual Report (2015)

2.5 Institutional Settings of Corporate Governance in Bangladesh

Prior research on corporate governance suggests that a country's institutional framework plays a critical role in implementation of effective governance mechanisms to protect investor interests from managerial exploitation (Porta, Lopez-de-Silanes, Shleifer, & Vishny, 1998; Shleifer & Vishny, 1997). However, countries vary in their institutional set up. A sound legal framework, regulatory capacity and effective enforcement can be considered as preconditions for establishing good corporate governance. The major regulatory institutions in Bangladesh are the BSEC, The Registrar of Joint Stock Companies and Firms (RJSC), Stock Exchanges (SEs), Bangladesh Bank (BB) and the Insurance Development Regulatory Authority (IDRA).

2.5.1 Bangladesh Securities and Exchange Commission

With the rise of the modern corporate sector and investor participation in the capital market, the BSEC was established in 1993 under 'The Bangladesh Securities Commission Act, 1993', replacing the office of the Controller of Capital Issues established in 1947 and the related law, 'The Capital Issue Act, 1947'.⁹ According to the Securities and Exchange Commission Act, 1993, the BSEC has power to make securities laws in order to regulate and ensure fair and transparent markets and also to develop the capital market. In addition, in order to protect shareholders, the BSEC has power to impose conditions on listed companies when necessary under section 2CC of the Securities and Exchange Ordinance, 1969.

The mission of the BSEC is to protect the interests of investors and to develop and maintain fair, transparent and efficient securities markets and facilitate capital formation by companies. The

⁹ Prior to the establishment of the BSEC in 1993 the Ministry of Finance was responsible for overseeing the capital market. The Securities and Exchange Ordinance, 1969 and the Securities Exchange Rules, 1987 comprised the main legal framework for administering the securities market at that time.

BSEC is an independent statutory organization which has the power to issue securities laws, guidelines, orders, directives and notifications. It is charged with enforcing registration, disclosure, and securities fraud rules, and with overseeing the administration of stock exchanges (and their listing and disclosure rules). As a result of this institutionalization of securities laws, the BSEC has capacity to enforce insider trading laws and corporate governance guidelines to protect minority shareholders, facilitate market transactions, and to foster investor confidence and trust in the board and management of the company and to enhance the reliability of financial statements of the company.

Recent major initiatives by the BSEC in 1993 include restructuring its organization and strengthening market surveillance, introducing guidelines to conduct special audits on a sample basis, enacting corporate governance rules for listed companies, requiring mandatory declaration of compliance in their annual reports. The BSEC, through its rules, requires all listed companies to comply with Bangladesh Financial Reporting Standards (BFRS) and be audited in accordance with Bangladesh Standards of Auditing (BSA).

The main functions of the BSEC include:

- Regulating the business of the stock exchanges or any other securities market.
- Registering and regulating the business of stock brokers/dealers, authorised representatives, merchant bankers and managers to issues, trustees of trust deeds, registrars to an issue, underwriters, portfolio managers, investment advisers and other intermediaries in the securities market.
- Registering, monitoring and regulating collective investment schemes including all forms of mutual funds.
- Monitoring and regulating all authorized self-regulatory organizations in the securities market.

- Prohibiting fraudulent and unfair trade practices relating to securities trading in any securities market.
- Promoting investors' education and providing training for intermediaries of the securities market.
- Prohibiting insider trading in securities.
- Regulating the substantial acquisition of shares and take-over of companies.
- Undertaking investigation and inspection, inquiries and audit of any issuer or dealer of securities, the stock exchanges and intermediaries, and any self-regulatory organization in the securities market.
- Conducting research and publishing information.

BSEC works closely with many national organizations, including the stock exchanges, the Ministry of Finance, the Bangladesh Bank, the Registrar of Joint Stock Companies and Firms, and the Insurance Development and Regulatory Authority. BSEC, as a member of International Organization of Securities Commissions (IOSCO) also takes part in the policy making process.¹⁰

2.5.2 The Register of Joint Stock Companies

The Office of the Registrar of Joint Stock Companies & Firms (RJSC) is the only authority which facilitates formation of companies, firms, partnership, societies, etc. and keeps track of all ownership related issues as prescribed by the laws in Bangladesh. It deals with the different types of entities: private limited companies, public limited companies, trade organizations and societies, and partnership firms. RJSC provides registration and ensures lawful administration of the entities under the provisions of applicable acts: The Companies Act, 1994 for companies and

¹⁰ BSEC was initially an ordinary member of the International Organization of Securities Commissions (IOSCO), the association of national securities regulators. After accomplishing necessary reforms in line with IOSCO's principle on capital market legislation, BSEC achieved full membership of IOSCO on 22 December 2013.

trade organizations, The Partnership Act, 1932 for partnership firms and The Societies Registration Act, 1860 for societies. Currently, there are around 9000 companies registered under RJSC.

The major functions and activities of RJSC are:

- To incorporate companies (including trade organization), partnership and societies firms under the Companies Act 1994, Partnership Act 1932 and Societies Registration Act 1860 and,
- To administer and enforce the relevant statutory provisions of these acts in relation to the incorporated companies (including trade organization), societies and partnership firms.

The Companies Act, 1994 is the law that governs the incorporated domestic corporations and institutions. The law offers a relatively comprehensive protection of basic shareholders' rights. The Act includes provisions regarding preparation and publication of financial statements, disclosures and audit. However, there are some inconsistencies and lack of clarity in the Companies Act in regard to disclosure requirements and preparation of financial statements (Ahmed & Yusuf, 2005). The Act does not provide comprehensive guidelines for good governance. Furthermore, the World bank has identified that RJSC is incapable of monitoring compliance with laws by registered companies due to limited qualified manpower and operational deficiencies (World Bank, 2015a). However, the stock exchanges and BSEC have issued a number of important new requirements to compensate for the gaps in the company law and to establish good governance in listed companies.

2.5.3 Stock Exchanges

As mentioned earlier, Bangladesh has two stock exchanges, the DSE established in 1954 and CSE, established in 1995. They are self-regulated, private sector entities and have their common

operating rules approved by BSEC. The exchanges were demutualised in 2014 under the exchanges Demutualization Act, 2013.¹¹

Stock exchanges have an important role in promoting good standards of corporate governance as the second tier regulatory authority. They have power to enact and amend listing and disclosure requirements. Stock exchanges are responsible for supervising and monitoring the affairs of listed companies and also to ensure fair trading of securities. The exchanges have formed special monitoring cells to examine the corporate affairs of listed companies including examination of financial statements and also the compliance status for corporate governance of the listed companies. The functions of the stock exchanges include:

- Listing of securities (under the DSE/CSE Listing Regulations, 2015).
- Facilitate automated trading, and settlement of trading of securities (under the DSE/CSE Settlement of Transactions Regulations, 2013, The DSE Automated Trading Regulations, 1999, and the CSE Internet Based Trading Services Regulations, 2002).
- Market Administration & Control includes market surveillance and investigation, and disposal of investor complaints (under the DSE Short-sale Regulations, 1999, the CSE Short-sale Regulations, 2005, The DSE/CSE Margin Rules, 1999 and The Prohibition of Insider Trading Rules, 1995).
- Monitoring the activities of listed companies (under the DSE/CSE Listing Regulations, 2015 and the BSEC Corporate Governance guidelines, 2012).

¹¹ Demutualization refers to conversion of the mutually-owned non-profit stock exchange to a for-profit, investors-owned exchange. One of the main objective of demutualization of stock exchanges is to separate regulatory function from commercial operation of the exchanges and improve corporate governance of the stock exchange (Aggarwal, 2002; The Exchanges Demutualised Act, 2013).

- Protecting investors in case of default by stock brokers (under the Investors' Protection Fund Regulations, 2014).

2.5.4 *Bangladesh Bank*

Bangladesh Bank is the central bank of the country which was established in 1972 as the regulatory authority of banking companies and other financial institutions under the Banking Companies Act, 1991 and Financial Institutions Act, 1993. It provides guidelines for these institutions to operate businesses in a fair and transparent manner. Bangladesh Bank is responsible for making monetary policy to stabilize the value of the currency, create sustainable growth and development, manage the foreign reserves, ensure a secure and efficient payment system, and give advice to the government on the interaction of monetary policy with fiscal and exchange rate policy.

Bangladesh Bank started when there were 6 nationalised commercial banks, 2 specialized banks and 3 foreign banks.¹² The banking sector has expanded significantly after 1980 when the government encouraged Bangladesh Bank to provide licenses for new private banks. After a decade the government created a new legal framework by issuance of the Bank Company Act, 1991 and the Financial Institutions Act, 1994 to promote further the development of private banks and non-banking financial institutions (NBFI) in Bangladesh. Currently, there are 6 state-owned commercial banks, 2 specialized banks, and 39 private commercial banks that include 8 Islamic Shariah-based banks and 9 foreign commercial banks (Bangladesh Bank, 2016). NBFIs are regulated under the Financial Institutions Act, 1993. The major limitations of the NBFIs are that they (1) cannot issue cheques, pay orders or demand drafts (2) cannot accept demand

¹² Specialized banks are established for specific objectives such as agricultural or industrial development. One is the Krishi Bank that operates only in the agricultural sector; the other is Bangladesh Development Bank (BDBL) which provides loan and equity capital for industrial projects.

deposits and (3) cannot trade in foreign exchange. The first non-banking financial institution was established in 1981 with the objective of promoting business with diversified financing modes such as syndicated financing, bridge financing, lease financing, securitization instruments, and private placement of equity. Since 1981 the number of financial institutions has increased to 47 in 2016.

In 2003 Bangladesh Bank issued corporate governance guidelines for the banks and NBFIs and specified detailed governance mechanisms including disclosure requirements. Bangladesh Bank gradually forced the banks and NBFIs to comply with the corporate governance guidelines prescribed by the BRPD Circular No. 16 dated 24 July 2003. According to the ROSC Report, 2009 of the World Bank, Bangladesh Bank has made significant improvement in promoting corporate governance in banks. However, recent financial scandals in the banking sector indicate that there has already been poor corporate governance in the banks and also weak supervision and monitoring by Bangladesh Bank (Mahmood & Islam, 2015). A recent World Bank study reports that Bangladesh Bank has failed to effectively enforce financial reporting and governance requirements on the commercial publicly-owned and state-owned banks (World Bank, 2015a).

2.5.5 Insurance Development Regulatory Authority (IDRA)

The Insurance Development and Regulatory Authority (IDRA) was established in 2011 as the regulator of the insurance industry under the Insurance Development and Regulatory Act, 2010, replacing its predecessor, the Chief Controller of Insurance Office. The mission of IDRA is to protect the interests of the policy holders and other stakeholders under insurance policy, and supervise and regulate the insurance industry effectively.

The insurance industry is relatively large with 77 insurance companies in Bangladesh of which 47 are listed on the stock exchanges. Listed insurance companies are governed by company, insurance, and securities laws. Financial reporting by these companies is required to comply with Bangladesh Financial Reporting Standards (BFRS) to ensure reliability, comparability and consistency under the law. However, IDRA is presently not effective in enforcing compliance with BFRS (World Bank, 2015b).

2.6 Legal Framework for Corporate Governance in Bangladesh

The framework for sound corporate governance typically comprises elements of legislation, regulation, and business practices determined by a country's specific economic and legal circumstances (Porta, Lopez-de-Silanes, Shleifer, & Vishny, 1998). Achievement of steady economic growth in Bangladesh requires the Bangladesh corporate sector to implement good corporate governance practices consistent with global standards. Regulators and civil society have led the move to bring corporate governance issues to the attention of Bangladeshi companies and prescribed legislative reforms for adoption of effective corporate governance.

The major pieces of legislation impacting governance of companies are the Companies Act, 1994, the Securities and Exchange Ordinance, 1969, the Securities and Exchange Commission Act, 1993, the Banking Company, Act 1991, and the Insurance Act, 2010. Under these laws, numerous rules, regulations, orders, directives, circulars and notifications have been issued to improve governance mechanism and to protect the interest of stakeholders. These comprise Securities and Exchange Rules, 1987, Credit Rating Rules, 1996, Margin Rules, 1999, SEC (Issue of Capital) Rules, 2001, SEC (Filatotchev & Bishop) Rules, 2001, BSEC (Public Issue) Rules, 2015, SEC (Right Issue), Rules, 2006, SEC (Private Placement of Debt Securities) Rules, 2012, BSEC (Research Analysts) Rules, 2013, BSEC (Alternative Investment) Rules, 2015, SEC

Prohibition of Insider Trading Rules, 1995, SEC (Merchant Banker and Portfolio Manager) Rules, 1996, SEC (Stock dealer, broker and authorised representative), Rules, 2000, SEC (Market Makers) Rules 2000, SEC (Mutual Fund) Rules, 2001, SEC (Substantial Acquisition and Takeover) Rules, 2002, SEC (Securities Custodial Services) Rules, 2003, and SEC (Asset Backed Securities) Rules, 2004. Appendix B provides the list of securities laws of the Bangladesh securities market.

The Companies Act, 1994 defines the structure and formation of firms and companies and requires companies to comply with the provisions of the Act. The Act states the rights of shareholders, appointment and removal of directors and management, and the ability of minority shareholders to sue the company. However, it is silent about the composition of the board of directors, qualification and experience requirements to become a director, board size, number of independent directors, duality of the Chairman and CEO, composition and responsibilities of the Audit Committee, and adequate disclosure provisions to prohibit insider trading. The Act also does not provide comprehensive guidelines for corporate governance in accordance with OECD principles or at least with the codes of governance practised in emerging economies (World Bank, 2015a). Another problem identified by this World Bank study is the lack of adequate legal enforcement of the provisions of the Act. There are also complications in enforcing the provisions of the laws due to shared responsibilities among the regulatory authorities. The involvement of several bodies in corporate accountability may impede enforcement.

The Bangladesh Enterprise Institute (BEI), a private sector, proposed detailed guidelines on corporate governance in 2003 but it has no statutory power to enforce the guidelines.¹³ Similarly,

¹³ BEI, a non-profit research centre, was set up in 2000 funded by international donors the UK Department for International Development (DFID) and the Global Corporate Governance Forum with the aim of promoting the private sector and also to contribute to formulating policy for the private sector.

the two professional accounting bodies: (1) Institute of Chartered Accountants of Bangladesh (ICAB), and (2) Institute of Cost and Management Accountants (ICMAB) have no legal mandate to force companies to comply with the accounting standards proposed by the accounting professional bodies nor the corporate governance guidelines issued by the BEI (World Bank, 2003).¹⁴ In order to improve the legal framework on adoption of IAS and ISA, and improve corporate governance, Bangladesh has enacted the Financial Reporting Act, 2015. The Act provides for establishment Financial Reporting Council (FRC) the major functions of which include:

- To prepare and implement accounting and auditing standards consistent with global standards while considering the country's socio-economic conditions.
- To monitor and enforce compliance with the financial reporting standards and auditing standards.
- To make necessary rules and regulation to implement the standards.
- To monitor the activities of auditors.
- To promote and advise accountants and auditors.
- To provide registration of auditors.
- To conduct training and provide seminars for professional accountants and auditors.

2.7 Corporate Governance Guidelines in Bangladesh

BSEC, as the securities market regulator in Bangladesh, has primary responsibility for protection of investors and an important role in establishing standards for corporate governance. BSEC first

¹⁴ ICAB was established in 1973 to issue and promote accounting and auditing standards in Bangladesh in line with the International Accounting Standard (IAS)/International Financial Reporting Standards (IFRS) and International Standards of Auditing (ISA). The primary objective of this institution is to bring uniformity in accounting and auditing issues in Bangladesh through issuance of Bangladesh Accounting Standard (BAS), Bangladesh Financial Reporting Standards (BFRS) and Bangladesh Standards of Auditing (BSA) (World Bank, 2003). The other accounting professional body is ICMAB which was established in 1977 with the purposes of developing economic competitiveness by promoting the cost and management accounting professions.

issued brief corporate governance guidelines in February 2006 through the Notification No. SEC/CMRRCD/2006-158/Admin/02-08 under the Securities and Exchange Ordinance, 1969, which were only applicable to listed companies. The guidelines were not mandatory requirements for companies; rather these were on a comply or explain basis. The policy of ‘comply or explain’ was an attempt to make companies familiar with good corporate governance at an early stage.

BSEC initiatives to improve corporate governance have included guidelines on: inclusion of independent directors on the board, constitution and responsibilities of an audit committee headed an independent director, separation of responsibilities of the chairman and CEO (preferably), appointment of a chief financial officer, restrictions on statutory auditors to provide additional services to the client which give rise to conflicts of interest, and detailed statements about the application of IAS, accounting policies and internal control of the company in directors’ reports (see Appendix C, Corporate Governance Guidelines, 2006). However, the 2006 guidelines did not include experience and qualifications of independent directors and audit committee members, detailed explanation of independence of directors and the audit committee, requirements on separation of responsibilities of the chairman and CEO, and a detailed statement on company performances in directors’ reports.

To improve corporate governance in listed companies, the BSEC revised the corporate governance guidelines and issued new corporate governance guidelines in 2012, moving from a comply or explain basis to compulsory requirements under section 2CC of the Securities and Exchange Ordinance, 1969. The new guidelines (1) increased the proportion of independent directors from 1/10 to 1/3 to foster greater independence of boards of directors, (2) specified qualifications and experience of independent directors, roles and responsibilities of directors,

audit committees, and distribution of roles and responsibilities of the chairman and CEO to different individuals, and (3) required disclosure of additional information in directors' reports to the shareholders. A comparative statement between the corporate governance guidelines issued in 2006 and 2012 is presented in Table 2.2.

Table 2.2: Comparison of corporate governance guidelines issued in 2006 vs 2012

CG components	CG Guidelines, 2012 (on compulsory basis)	CG Guidelines, 2006 (on comply or explain basis)
Board Effectiveness	<ul style="list-style-type: none"> • The company has not entered into any fraudulent or illegal transaction, or any transaction violating the company's code of conduct. • Specific qualification criteria for ID. • IDs need to be nominated by the Board of Director and approved by the shareholders at the Annual General Meeting (AGM). • The post of an ID cannot remain vacant for more than 90 days. • Code of conduct for all board members and annual compliance with the same. • The normal tenure of an ID is three years which can be extended for another one term only. • The chairman and CEO must be different individuals. 	<ul style="list-style-type: none"> • Independent Directors (ID) need to be appointed by the appointed directors. • No such requirement. • No such requirement. • No such requirement. • No such requirement. • No such requirement.
Audit Committee (AC) Affairs	<ul style="list-style-type: none"> • The AC Chairman shall be an ID. • 10 specific roles of AC have been identified. • At least one independent director must present to fulfil the quorum of the AC meeting. • The Chairman of the AC must be present at the AGM. 	<ul style="list-style-type: none"> • The chairman and CEO preferably be different individuals. • Any member of the AC can be its Chairman. • The roles of AC have been expressed in general terms.¹⁵ • Professional qualification requirement for the Chairman of the AC only. • No specific requirement for the independent AC member(s) to present in the AC meetings. • No specific requirement for the AC Chairman to present at the AGM. • No such requirement.

¹⁵ Guideline 3.00 requires the AC to assist the BOD in ensuring that the financial statements present a true and fair view of the state of affairs of the company and in ensuring a good monitoring system within the business.

	<ul style="list-style-type: none"> • The company secretary shall be the secretary of the AC. • The AC must report any material finding to the SEC after expiry of six months from the date of its first reporting to the BOD or after reporting to the board three times, whichever is earlier. 	<ul style="list-style-type: none"> • No such requirement. • The AC must report any material finding to the SEC after expiry of nine months from the date of its first reporting to the BOD or after reporting to the board three times, whichever is earlier.
Auditor Independence	<ul style="list-style-type: none"> • Neither any partner nor any employee of the external audit firm should hold any share of the client firm during the term of the audit assignment. 	<ul style="list-style-type: none"> • No such requirement.
Additional Statements by the BOD	<ul style="list-style-type: none"> • Industry outlook and possible future developments in the respective industry. • Segment-wise or product-wise performance. • Different risks facing the organization and related concerns. • Discussion on the cost of goods sold, gross profit margin and net profit margin of the company. • Discussion on continuity of any extraordinary gain or loss. • A statement of all related party transactions including the basis of such transactions. • Application of funds raised from public issues, rights issues or through other instruments. • An explanation when the company's financial result deteriorates after major events such as an Initial public offering (IPO), Repeat Public Offerings (RPO), and Rights Offerings. • Reasons for significant deviation between quarterly financial performance and annual financial performance need to be discussed. • Remuneration to the board members. • Key operating and financial data of a minimum of last five years shall be summarized. • Disclosure of the directors' biographical information including their expertise and positions held in different committees and any directorships held in other organizations. • The board composition of the holding company shall be made applicable to the 	<ul style="list-style-type: none"> • No such requirement. • No such requirement. • No such requirement. • No such requirement. • No such requirement. • No such requirement. • No such requirement. • No such requirement. • No such requirement. • No such requirement. • No such requirement. • No such requirement.

composition of the Board of Directors of the subsidiary company.

- | | |
|--|------------------------|
| • The holding company shall appoint one of its IDs to be the director of the subsidiary company. | • No such requirement. |
| • The minutes of the subsidiary company's board meeting shall be placed to the board meeting of the holding company for review. | • No such requirement. |
| • The minutes of the board meeting of the holding company shall state that the board has reviewed the affairs of the subsidiary company. | • No such requirement. |
| • The AC of the holding company shall review the financial statements of the subsidiary company including any investment made by the subsidiary. | • No such requirement. |
| • The financial statements do not contain any materially untrue statement or omit any material fact or any misleading statement | • No such requirement. |

Source: Modified the Table from Biswas (2012)

2.8 Laws on Insider Trading in Bangladesh

BSEC enacted the SEC (Prohibition of Insider Trading) Rules, 1995 restricting illegal insider trading. According to the rules, insider trading refers to the buying and/or selling or otherwise transferring of securities by an insider based on non-public information that can influence price of securities. In Bangladesh, similar to most jurisdictions, insiders include the directors/sponsors of a company and its major shareholders, its managing agent, banker, auditor, adviser, officer or employee, or any other person who could obtain price sensitive information because of a relationship with any of the above persons. Price sensitive information includes (but is not limited to) the following:

- Information regarding a company's financial results, including revenues or earnings;
- An acquisition, joint venture, disinvestment or other significant transaction;
- Tender offer by the company for another company's securities, or by another company for the former company's securities;
- Declaration of dividend payment;
- Purchase or sale of company's fixed assets;
- Issuance of new securities;
- Establishment of a new unit within the company, BMRE (Balancing, Modernization, Rehabilitation and Expansion), or any fundamental changes of company policy and programme, production planning, and restructuring; and
- Any significant changes in company's management.

BSEC has administrative power to institute and conduct proceedings independently against insider traders. Departures from the rules on insider trading may result in a penal sanction of imprisonment of up to 5 years, a fine, or both. The BSEC also has the authority to suspend or cancel registration if the offender is a market intermediary, take the concerned securities into custody and restrict transfer of the securities concerned for a certain period.

2.9 Summary

This chapter has focused on the historical background of the corporate sector, capital market and the institutional framework in Bangladesh including institutional settings and the legal framework for corporate governance. It is evident that Bangladesh has experienced steady economic growth since independence and also significant development of the corporate sector.

The capital market remains underdeveloped compared to other Asian countries but recent initiatives to strengthen the legal and institutional framework in Bangladesh to secure improved corporate governance may result in more rapid growth.

The chapter has also discussed insider trading laws since the study, *inter alia*, examines the effect of insider trading on investor decision making. The next chapter provides an overview of the literature on corporate governance, board quality, key determinants of board quality, insider trading, and the impact of these on investor decision making.

CHAPTER THREE: DEFINITIONS OF CORPORATE GOVERNANCE AND MODELS OF BOARD PRACTICES ACROSS THE GLOBE

3.1 Introduction

This chapter considers the definition of corporate governance and reviews different models of board practice. Corporate governance is critical to the relationship between the company board, managers and shareholders and to assure investors of a return on their investment (OECD, 2004; Shleifer & Vishny, 1997).

3.2 Definition of Corporate Governance

The term “corporate governance” is derived from a Greek word ‘kyberman’ which means to steer, guide or govern. This was later transformed to the Latin word ‘gubernare’ and the French version of governance is ‘gouvernance’ which means the process of decision making and the execution of decisions (Elena, 2012).

Definitions of corporate governance appear in a vast amount of literature articulated by academics, institutions and regulators. However, there is neither a generally accepted definition of corporate governance nor an established ideal model for corporate governance (Mallin & Ow-Yong, 1998). Academics and regulators have put forward definitions of corporate governance in a variety of ways. Table 3.1 presents some widely accepted definitions of corporate governance. One of the reasons for the different views and definitions is that the choice of governance mechanisms across countries differs (Arcot & Bruno, 2006) due to differences in culture, historical background and sociopolitical conditions. In each jurisdiction, corporate governance structure has certain characteristics or constituent elements, which distinguish it from structures operating in other jurisdictions.

Shleifer and Vishny (1997) define corporate governance as

“the ways in which suppliers of finance to corporations assure themselves of getting a return on their investment (p.737)”.

They suggest that corporate governance is essential in a company to assure capital providers of obtaining a return on investment. Their definition highlights the problem of separation of ownership and control that results in the need for good corporate governance (Epps & Cereola, 2008). Similarly, in another study, Porta, Lopez-de-Silanes, Shleifer, & Vishny, (2000) described corporate governance mechanisms as a set of devices to protect outside investors from insiders' expropriation. They recognise that conflicts of interest between large and minority shareholders, and expropriation resulting from division between insider and outsider shareholders gives rise to the need for good governance mechanisms in companies. However, their views provide a narrow perspective on corporate governance because they only focus on the return on investment of suppliers of capital ignoring others parties involved in a company. The fact is that there are various stakeholders in a company who have different interests in the company.

It is important to recognize the significant contribution of the Cadbury Committee to improve corporate governance in the modern corporate world.¹⁶ The Cadbury Report defines corporate governance as the system by which companies are directed and controlled. The report highlights

¹⁶ The Cadbury committee was formed by the UK Financial Reporting Council (FRC) in 1991 in response to continuing concern about the quality and perceived lack of confidence by investors' in financial reporting and accountability (Weir & Laing, 2001). The Committee drafted a corporate governance 'Code of best practices' for listed companies on a 'comply or explain' basis. The report was subsequently revisited by the Paul Ruthman Committee (1992), the Greenbury Committee (1995) and the Hampel Committee (1998) for greater transparency and accountability in regards to board structure and operation, directors' contracts and the establishment of board monitoring committees (Weir & Laing, 2001; Joshi, 2010). The combined code was subsequently refined from the Hampel, Cadbury and Greenbury reports' whereby it was required for all UK listed companies to maintain internal control to protect shareholder interests and the board is held responsible to review effectiveness of internal control, financial, operational and compliance and risk management (Joshi, 2010). However, the combined report has gone through a continuous review process by the Turnbull Committee (1999), Myners report (2001), Smith report (2003), Higgs report (2003), Turnbull review group (2005), Sir David Walker review (2009), and issued a code in September 2014 (ICAEW, 2016). The code has again reviewed by FRC, and most recently the FRC issued a new code in April 2016 for UK listed companies, effective from June 2016, reflecting new requirements for audit committees and auditor's appointment to listed companies (ICAEW, 2016).

lack of director accountability, poor quality of financial reports, irrational directors' remuneration and lack of confidence in external auditors. It provided a number of recommendations for strengthening corporate governance including directors accountability to shareholders. Prowse (1998b) has provided similar views with regards to the accountability of directors. However, the Cadbury Report has been the subject of criticism since it has made directors accountable only to shareholders, not to stakeholders in general.

The OECD governance framework reinforces board accountability to the company and its stakeholders (OECD, 2004). The OECD states:

“..... procedures and processes according to which an organisation is directed and controlled. The corporate governance structure specifies the distribution of rights and responsibilities among the different participants in the organisation – such as the board, managers, shareholders and other stakeholders – and lays down the rules and procedures for decision-making” (OECD, 2004).

It suggests that the board is responsible for the overall governance of the company, management of business, strategic planning, leadership, reducing conflicts of interests, and reporting to stakeholders. The OECD has put a global co-operation framework of corporate governance encompassing interests of stakeholders, at the broadest level. Despite the variation in culture, socio-political and legal environment, corporate governance definitions should embrace interests of shareholders and other stakeholders because corporate governance is the system of checks and balances between all the internal and external parties of a company (Oman, 2001; Solomon, 2007).

From the above discussion, it can be observed that some important features of corporate governance are: (1) directors are agents of shareholders, (2) directors need to monitor and control activities of a company, (3) directors and managers are accountable to shareholders and other stakeholders, and (4) directors and managers are obliged to work to protect the interests of investors by increasing the value and performance of a company. It can be recognised that the directors and managers in a corporate setting have a high level of responsibility to provide the optimum returns to owners, and build the confidence and trust of investors. This study focuses on the narrow definition of corporate governance i.e. the shareholder perspective to examine the cause and effect of corporate governance on investor judgment in making investment decisions.

Table 3.1: Some definitions of corporate governance and perspectives thereof

Authors/Organizations	Definitions	Perspectives
The Cadbury Report (1992)	Corporate governance is a system by which companies are directed and controlled. The report specifically stressed the role of boards of directors who are appointed by shareholders to establish appropriate governance structures in companies.	Shareholders and board of directors
Prowse (1998b)	Corporate governance is the rules, standards and organisations in an economy that govern the behaviour of corporate owners, directors, and managers and define their duties and accountability to outside investors, that is, shareholders and lenders’.	Shareholders, board of directors and managers
Shleifer and Vishny (1997)	Corporate governance is the ways in which suppliers of finance to corporations assure themselves of getting a return on their investment.	Shareholders
Porta, Lopez-de-Silanes, Shleifer, & Vishny (2000)	Corporate governance is a set of devices to protect outside investors from insiders’ expropriation.	Shareholders
Oman (2001)	Corporate governance refers to the private and public institutions that include laws, regulations and the business practices which governs the relationship between the corporate managers and the stakeholders.	Stakeholders
OECD (2004)	Corporate governance is a procedure and process according to which an organisation is directed and controlled. The corporate governance structure specifies the distribution of rights and responsibilities among the different participants in the organisation – such as the board, managers, shareholders and other stakeholders – and lays down the rules and procedures for decision-making.	Stakeholders

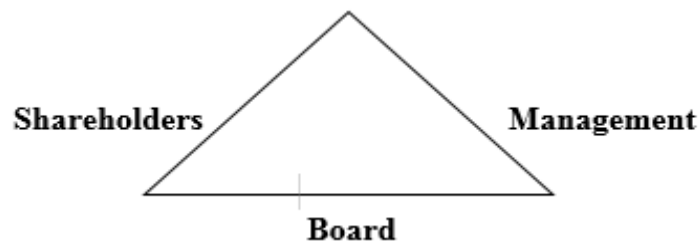
3.3 Models for Board Practices across the Globe

Prior literature has identified different models of corporate governance practice in various jurisdictions. Based on key factors of ownership structure, board structure, composition of the board, board practices, legal framework, rights and responsibilities of directors, management and shareholders, and disclosure requirements the models are classified in three major categories: the Anglo Saxon model, the German model and the Japanese model. This section discusses these models and also corporate governance practices in South Asian countries.

3.3.1 *Anglo-Saxon Model*

This model is also referred to as the Anglo-American model that has been mainly practiced in the USA, UK, Canada, Australia, New Zealand and some other Commonwealth countries. The model has a single tier board comprising executive directors and independent directors (non-executive directors); mostly independent directors are in the majority.¹⁷ This usually limits participation from owners on the board. Directors are key individuals who are appointed by shareholders and hire managers to operate the business. Therefore, directors, management and shareholders become the key players of the corporate governance mechanism forming the corporate governance triangle (Aguilera, 2005) (see Figure 3).

Figure 3: Anglo-Saxon Corporate Governance structure



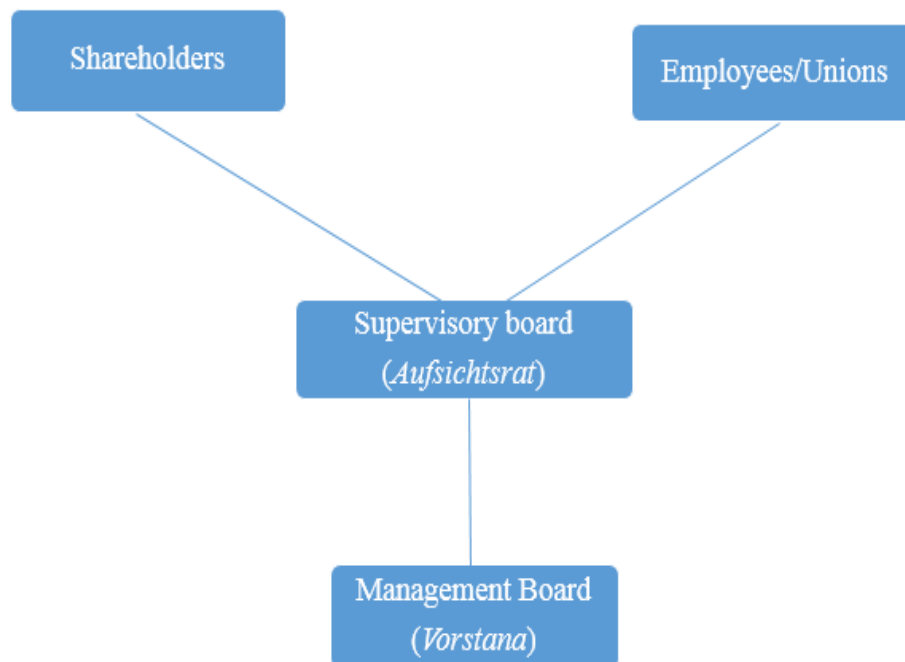
¹⁷ Executive directors are members of management and non-executive directors have no direct relationship with the management and board members of the company.

3.3.2 German Model

The German model of corporate governance differs significantly from the Anglo-Saxon model due to different ownership structures, management, control systems, accounting systems and legal systems. There are some similarities with the Japanese model (Ungureanu, 2012). In the German model, banks and corporations hold substantial shares of listed companies and play a prominent role in corporate governance (Macdonald & Beattie, 1993).¹⁸ They control the activities of management through coalitions with industrial networks with the result that individual shareholders lose control (Cernat, 2004; Macdonald & Beattie, 1993; Ungureanu, 2012). The German model prescribes a two-tiered board: a management board (*Vorstand*) and a supervisory board (*Aufsichtsrat*) (Charkham, 1995). The management board is composed solely of executives of the company while the supervisory board is composed of employee/labour representatives and shareholder representatives (Macdonald & Beattie, 1993; Wójcik, 2003; Ungureanu, 2012). The two boards are completely separate; no one is permitted to be a member simultaneously of these two boards. The primary role of the supervisory board is to monitor the management board; they also have authority to terminate that board. The supervisory board approves management proposals and advises management with regard to the operations of the business (see Figure 4).

¹⁸ One of the reasons for some similarities of corporate governance between the German and Japanese models is probably that the Japanese Commercial Code of 1899 is of German origin (Kanda, 2015)

Figure 4: German Corporate Governance structure adopted from (Charkham, 1995)



The unique characteristic of this model is that the supervisory board is the decision making authority which is insider-centered, network-oriented and bank-based or it is a closed corporate governance structure, in contrast to the market-based Anglo-American structure (Prigge, 1998), while the management board is responsible for daily management of the company. The key players in this system are banks and employees/workers in contrast to the market based model in Anglo-Saxon countries. Disclosure requirements in the German model are less stringent than in the Anglo-Saxon model.¹⁹ For example, under this governance model companies are required to publish half-yearly financial reports, not quarterly reports as is relatively common in the Anglo-American model. The key implication of governance structure in this model is that it plays a less active role in the stock market, and the lender (the banks) can frame the governance mechanisms to a large extent (Mohiuddin, 2012).

¹⁹ However, since EU adoption of IFRS this difference has diminished.

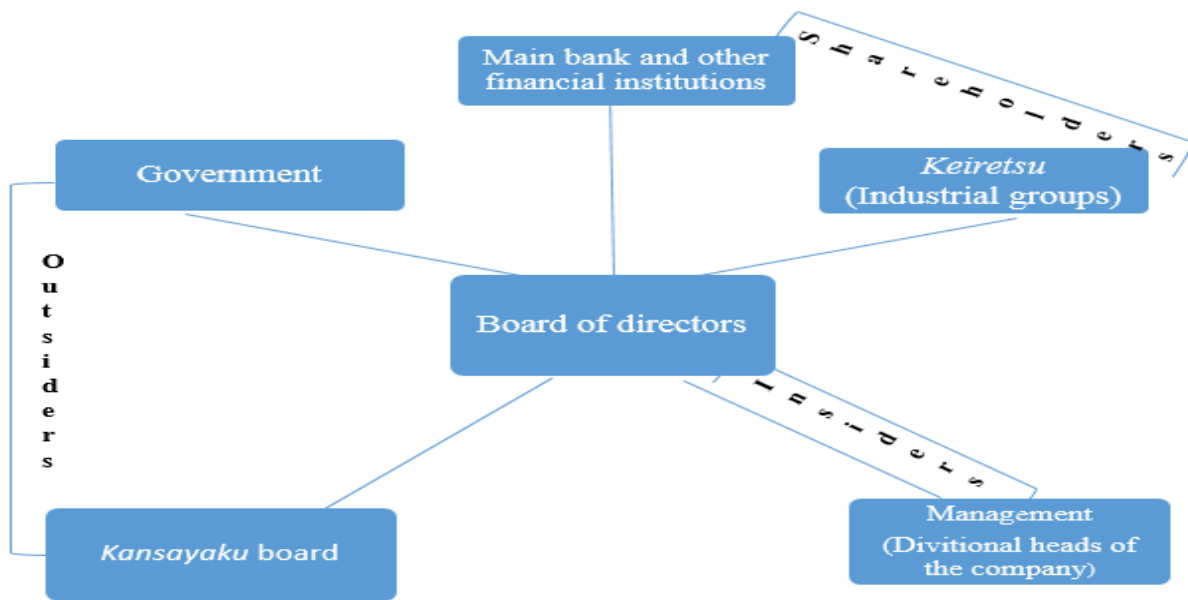
3.3.3 Japanese Model

Similar to the German model, the Japanese model is characterized by a high level of stock ownership concentrated in the hands of banks and a financial/industrial network (known as Keiretsu) (Gilson & Roe, 1993).²⁰ ‘Keiretsu’ refers to the industrial groups who have a trading relation with the company and also cross holdings of debt and equity (Berglöf & Perotti, 1994). Industrial groups who are often suppliers or customers (Gilson & Roe, 1993) provide equity capital to the company. The main bank (primary lender) provides loan and equity capital, services related to bond issues, equity issues, settlement accounts and related consulting services to the company. In that way, the main bank becomes the major and controlling shareholder. As a result, retail investors retain insignificant holdings of ownership and thereby are effectively excluded from the governance process. The Japanese government has also been active in influencing the governance structure of companies without owning shares. Specially in cases where the government has issued directives to merge companies to rescue the main bank and the group (Hoshi, 1997) and appoint retired government bureaucrats to the boards. However, recent legislation finalized in 2015, proposes that companies may choose one of the following three types of corporate organization: (1) Company with *Kansayaku* board, (2) Company with three Committees (Nomination, Audit and Remuneration), or (3) Company with Supervisory Committee (FSA, 2015).²¹ As 97.8 percent of listed companies in Japan have retained the structure of a company with a *Kansayaku* board. Most of the principles specified in the code apply to companies with *Kansayaku* board (Haghirian, 2016). Therefore, in the Japanese model, there are five players: banks (as major shareholders), associated companies (shareholders), government, *Kansayaku* board and management (see Figure 5).

²⁰ A common understanding about measurement of concentrated ownership is that a shareholder holds at least 20 percent of a company’s voting rights (Enriques & Volpin, 2007).

²¹ *Kansayaku board* refers to the audit board. This substitutes for independent directors. The *Kansayaku* board is comprised of outsiders elected by the shareholders (FSA, 2015).

Figure 5: Japanese Corporate Governance Structure



In Japanese companies, the board of directors is composed of the insider shareholders and management, that is, usually the division heads'. The banks place their representatives on the board of directors of the company in which they hold shares and also appoint the president of the board. However, in contrast to the German model, the board of a listed company is required to appoint at least one independent director or statutory auditor (Kanda, 2015). The Japanese model is based on internal control, and is largely influenced by strategic shareholdings by banks and financial institutions (Ungureanu, 2012). Unlike the Anglo-Saxon model, disclosure requirements in the Japanese model are comparatively less stringent and are similar to the German model. For example, Japanese listed companies are required to disclose half-yearly financial reports rather than quarterly reports like in the Anglo-Saxon model.²²

²² This type of differences may also recede as Japan moves to IFRS.

3.3.4 South Asian Practices of Corporate Governance: A Family Based Model

South Asian corporate governance systems are different from the above three models in terms of ownership structure. Many firms have significant family ownership. Khan (2004) has demonstrated that family members play a key role in accumulating funds in the initial stage of a firm. He has termed it a family based system of corporate governance that differs from the market based governance model. Corporate governance mechanisms in South Asian countries are significantly influenced by family members.

Many South Asian companies are mainly financed by banks and these influence the corporate governance mechanism in much the same way as in the bank-based German model. However, with the recent resurgence of South Asian capital markets a trend has developed to raise equity from the market through listing on stock exchanges. Consequently, there has been dilution in concentration of family ownership. Although the family based companies are often linked with banks (Singh, Singh, & Weisse, 2003) their governance mechanisms do not follow either the German or Japanese models. Instead, South Asian countries are closer to the Anglo-Saxon model. For example these countries prefer a one-tiered board in the company as in the Anglo-Saxon model and maximisation of shareholder value is their ultimate goal. The main features of the four different models of corporate governance are summarised in Table 3.2.

Table 3.2: The main features of four different corporate governance model²³

	Anglo-Saxon	Japanese	German	South Asian and Bangladesh practices/
Oriented towards	Shareholders and stock market	Banking market	Banking market	Shareholders and stock market
Considers	Shareholders' property rights	Stakeholders interests (keiretsu)	Stakeholders interests	Shareholders interests
Shareholding structure	Dispersed	Concentrated (cross possession of shares)	Concentrated	Family based and dispersed shareholders
Board of Directors	One tiered Board. Board of directors consisting of executive directors and non-executive directors.	One-tiered Board. Board of Directors consisting of employees, shareholders, independent director and statutory auditor.	Supervisory Board and Management Board	Board of Directors consisting of executive directors and non-executive directors
Control system	External	Internal	Internal	Hybrid

3.4 Summary

This chapter has discussed the definitions of corporate governance provided by different academics and institutions, and the different models of corporate governance as found across the globe. It is evident that the models are mainly influenced by country-specific conditions: financial market, economic and institutional factors, and the legal framework. None of these models of corporate governance is claimed as an ideal. However, different definitions and models of corporate governance provide a common understanding that the board of directors is central to protecting the interests of all stakeholders. The next chapter provides a detailed review of the literature on the impact of board quality, independent directors and their experience, duality of the chairman and CEO, and insider trading on company performance and value.

²³ Modified from Ungureanu, (2012).

CHAPTER FOUR: LITERATURE REVIEW

4.1 Introduction

This chapter provides an overview of the literature on overall and specific aspects of board quality and also insider trading. This chapter is organised as follow: the literature on overall board quality is reviewed in section 4.2, independence of directors in section 4.3, experience and independence of directors in section 4.4, duality of the chairman/CEO in section 4.5, board size in section 4.6, and section 4.7 provides an overview of the literature on insider trading. Finally, section 4.8 summarises this chapter.

4.2 Overall Board Quality

Prior studies have highlighted that success of a company depends on the quality of the board of directors since the board is the core element of the corporate governance structure and plays the central role in monitoring and controlling management (Fama & Jensen, 1983b; Baysinger & Butler, 1985; Adjaoud, Zeghal, & Andaleeb, 2007; Adams, Hermalin, & Weisbach, 2008). Scholars and many organisations have attempted to measure board quality using characteristics of board members and board practices, and financial performance and stock price (Van den Berghe & Levrau, 2004).

The OECD has offered definitions of board quality based on characteristics of the directors. They have considered the presence of a majority of independent directors who have relevant experience and qualifications, and separation of roles of the CEO and the chairman in a board (Kiel & Nicholson, 2003) as the key components in determining board quality. The Cadbury (1992) and Greenbury (1995) reports have also emphasized these components of the corporate governance mechanism in defining the quality of the board of directors (ICAEW, 2016).

Hayes and Lee (1998) revisited the model developed by Business Week in determining board quality to examine the future performance and other characteristics of companies with boards of directors considered to be the best and worst in the U.S. The model is based on scoring points for multiple directorships held by the board members, presence of outside director experience in the core business, past experience of the board members in similar companies, attendance of the directors at 75% or more of meetings, large board size (15 directors) and duality of the CEO and the chairman. For example, in 1997, the board of Campbell Soup was ranked as the best board that had only one insider on the board, compensation decisions were made independent of the CEO, and every director was required to buy at least 3000 shares in the firm. The board of Disney was ranked as the worst since they had 7 insiders on the 17 member-board and the CEO had dual duties (Business Week, 2002). However, inclusion of multiple directors and large board size in their model are probably limitations of the model because it can be argued that multiple directors are often not able to provide sufficient time to discharge their responsibilities. Moreover, a large board has been found to be ineffective in many studies because it suffers from coordination and communication problems (Lipton & Lorsch, 1992).

De Andres, Azofra, and Lopez (2005) studied the impact of board effectiveness on the value of 450 non-financial companies from Western Europe and North America. Similar to the Business Week model, they used board size, number of inside and outside directors, the number of board meetings per year, and board member compensation to examine board effectiveness. However, they ignored a key component of the corporate governance mechanism as recommended by the OECD, the World Bank and the 'Best code of Corporate Governance' as suggested by the Cadbury Report i.e. the separation of roles of the CEO and the Chairman in determining a board index. Some studies have considered independent directors and duality of CEO as the important

elements of board effectiveness to examine the association between board effectiveness and company performance (Abidin, Kamal, & Jusoff, 2009).

Li and Ang (2000) examined the impact of the number of directorships held by a director on director performance by analysing data relating to 1,195 directors of 121 publicly listed companies in the USA during 1989-1993. The study found that a board with a few outside directors was found to be more strongly devoted to supervising management activities than a board with no outside directors. However, they found that just the number of appointments of outside directors does not determine the effectiveness of the board. Contribution to board effectiveness depends on the director's experience in relevant businesses (Brickley, Coles, & Jarrell, 1997; Klein, 1998; Li & Ang, 2000; Diestre, Rajagopalan, & Dutta, 2014). This factor which was absent from their model. Obviously, one cannot expect a board to be effective just by the presence of independent directors if they do not have relevant business experience and fail to make meaningful contributions to the board.

Holder-Webb and Sharma (2010) conducted an experiment on 62 bank managers in Singapore to examine the cause and effect of the strength of corporate governance on lender decisions. In their study, the strength of the board was characterised by the number of independent directors, their knowledge of finance and accounting, relevant business qualifications and industry experience. Based on these characteristics they developed two types of board: strong and weak. The strong board had a majority of independent directors in the board (five independent directors of a seven-member board) of which three independent directors had finance and accounting knowledge, all independent directors had relevant business qualifications and two independent directors had relevant industry experience. Their model was developed in accordance with regulatory reforms in Singapore and also discussion with bank managers. They only focused on

the independent directors, and their qualifications and experience. The study did not include the separation of role of the CEO and the chairman in determining the strength of the board.

Sharma (2006) investigated the association between the effectiveness of a board of directors and non-professional investor judgment. The author performed an experiment on 82 MBA students as a proxy for non-professional investors. They constructed two different hypothetical board structures, namely strong and weak, operationalised by the number of non-executive directors on the board and their experience, qualifications and share ownership in the company. Apart from the ownership criterion their model is almost identical with that of Holder-Webb and Sharma (2010). This study, as with Holder-Webb and Sharma (2010), also excluded the issue of duality of the CEO and the Chairman.

El-Sayed Ebaid (2013) conducted an experimental study to examine the association between corporate governance mechanism and perceived earnings quality in Egypt. The study designed two board structures: strong and weak. A strong board had these attributes: large board size, majority of outside directors having financial literacy and regular board meeting at least four times per year. They did not consider the separation of the roles of the CEO and the chairman and of having experienced independent directors.

It is evident from the above literature that the measures used for board quality were often focused on the attributes of directors (Boeker, 1992; Daily, 1995; Li, 1997). They have commonly emphasized diverse range of skills and relevant experience of independent directors except the separation of the roles of the chairman and the CEO. Considering the prior literature, this study operationalizes the quality of board as characterised by independent directors with relevant business experience, qualifications, and separation of CEO and chairman duties and responsibilities.

4.3 Impact of Independent Directors

Fama and Jensen (1983a) suggest that board effectiveness in monitoring and controlling management activities depends on the level of independence of the board. Reflecting this view, a good number of studies have investigated the impact of the proportion of independent directors in the board.

Clarkson, Craswell, and Mackenzie (2008) investigated the association between board independence and target shareholder wealth of Australian companies. They found that the presence of an independent board in the target firm increased the initial bid premium by 21.1%, on average.²⁴ Their findings are consistent with the view of Fama and Jensen (1983a) that independent directors act in the interests of shareholders and are concerned for their reputation as professionals in decision control. The study estimated competence of the non-executive directors by average tenure on the company board. In a similar study, Cotter, Shivdasani, and Zenner (1997) investigated the role of independent directors of target companies during takeovers. They examined 169 tender offers in the USA during 1989-1992 and found that when a target board contains a majority of outside directors, the shareholders receive a return approximately 20 percentage points higher than that of a similar firm without a majority of outside directors. This finding suggests that outside directors do a better job of negotiating on behalf of shareholders than do insiders. Together, these two studies suggest that the board consisting of a majority of independent directors is an important factor in increasing the return to investors. Their findings further imply that competence of independent directors such as relevant knowledge and skills are critical to making a constructive contribution to the business.

²⁴ According to Clarkson, Craswell, and Mackenzie (2008), a board is able to act independently when it consists of a majority of non-executive directors.

Byrd and Hickman (1992) studied 128 tender-offer bids made by 111 US companies during the period 1980-1987 to investigate the link between the presence of independent directors and company performance. Their analysis showed that a company with 50% independent directors in the board can achieve higher performance. They also reported that stock price increases significantly when they make takeover bids. Results suggest that investor confidence increases in a company when they observe that independent directors play an important role in monitoring and controlling the activities of management.

Barnhart and Rosenstein (1998) investigated the joint effects of ownership structure and board composition on corporate performance of 321 S&P 500 companies in 1990. They analysed data using step wise regression and found that the joint effect of the proportion of independent directors and managerial ownership on company performance (Tobin's Q) was positive and significant. Their results indicate that company performance is positively related to the independence of the directors, which is consistent with the claims of Stulz (1988), and Morck, Shleifer, and Vishny (1988).

Setia-Atmaja, Haman, and Tanewski (2011) examined the association between board independence and earnings management. Using panel data over the period 2000-2004 of Australian family owned (but listed) companies they showed that the boards with a majority of independent directors had lower earnings management. The study further claimed that the owners of a family owned company are less likely to entrench and expropriate the assets of the company when the majorities of the directors are independent. Their findings reinforce the previous studies of Westphal (1998), Anderson and Reeb (2004) and Setia-Atmaja, Tanewski, and Skully (2009) that corporate governance by independent directors limits expropriation of wealth of the company and thus protects the interests of investors (Fama & Jensen, 1983b).

Dechow, Sloan, and Sweeney (1996) conducted a study on 92 US companies which were subject to enforcement actions by the SEC between 1982 and 1992 with regards to manipulation of financial statements.²⁵ The purpose of their study was to examine the link between earnings manipulation and internal governance of companies. The authors included the proportion of independent directors on the board as one of the key component of internal governance. They found that a company with a smaller percentage of independent directors in the board was more likely to manipulate earnings, which had led to an increase in the cost of capital. As a result of earnings manipulation the performance and stock price of the companies was adversely affected.

However, not all studies support value arising from independence of directors. Bhagat & Black (1999) argued that independent directors have an adverse effect on company performance because they are sometimes found to be ineffective. For example, General Motors, American Express, IBM, Kodak, Chrysler, Sears, Westinghouse and Borden performed badly for years despite having a majority of independent directors on their boards (Bhagat & Black, 1999). The authors examined the relationship between the degree of board independence and company performance by examining 928 large US public companies for the period 1985-1995. The evidence indicated that having a board with a majority of independent directors was not effective in enhancing company performance. Their findings perhaps indicate that an independent board has no effect on company performance if independent directors do not have relevant qualifications and experience to discharge their duties and responsibilities.

Dalton, Daily, Ellstrand, and Johnson (1998) conducted a meta-analysis of 54 empirical studies of board composition and 31 empirical studies on board structure to examine the relationship

²⁵The companies are those who were alleged to have violated Generally Accepted Accounting Principles (GAAP) by overstating earnings. Enforcement data were collected from SEC's 76 press release of Accounting and Enforcement Release (AAER).

with firm performance. They did not find a positive relationship between board independence and firm financial performance.

4.4 Impact of Experienced Independent Directors

Beasley (1996) investigated 150 US listed companies to examine the link between monitoring skills of independent directors in preparing financial reports and company earnings quality. Using logit regression analysis the author showed that independent directors who have relevant knowledge to monitor the preparation of financial reports reduce the probability of financial fraud. This result indicates that relevant knowledge held by independent directors helps reduce the likelihood of financial fraud and improves the quality of financial reporting.

Kang (2013) used independent director experience as a proxy for board quality to examine the relation between board quality and firm value. The study analysed governance quality of S&P 1500 firms during 2000-2010 and reported that the presence of independent directors who have relevant business experience of more than 5 years duration increases firm value (as measured by Tobin's Q). However, the study found no relation between board independence and firm performance after controlling for independent director experience. The findings of this study imply that the experience of an independent director in the relevant business is a key determinant of board quality because an experienced director has at least the potential to make a meaningful contribution to the company.

In a recent study, Diestre, Rajagopalan, & Dutta, (2014) examined the relationship between the influence of outside directors with market-specific experience and the probability of a pharmaceutical company making successful entry into a new market. Analysis of the board composition of 125 pharmaceutical companies for 2000-2006 in the US showed that the presence

of outside directors with relevant experience increased the probability of new-market entry by 60.2%. Their results indicate that the presence of experienced independent directors in the relevant business strengthens board quality and improves company performance. Klein (1998) argued that insider directors can contribute to improved company performance as a result of their superior understanding of the business. These findings reinforce the view that relevant knowledge and experience are important driving factors in enhancing the value of a company. The results also support the earlier findings of Brickley, Coles, and Jarrell, (1997), and Li and Ang (2000) who claimed that a retired CEO becoming an outside director in a selected company strengthens the effectiveness of the board because of his/her knowledge and expertise in that particular business.

The above discussion suggests that the mere symbolic presence of independent directors does not necessarily contribute to improved company performance. The experience of an independent director is an important characteristic of a board for improved company performance. In contrast, independent directors with limited relevant knowledge may adversely affect the monitoring of management activities. For example, JP Morgan incurred losses of billions of dollars as none of its independent directors had banking and trading experience (Cossin & Caballero, 2012). They did not realize the risks involved in credit swap trading due to their lack of relevant knowledge and skills. Therefore, it is observed that results are mixed on the simple association of the number of independent directors and company performance (Leung, Richardson, & Jaggi, 2014). However, improved performance may result when the independent directors are skilled and knowledgeable and can thus make a meaningful contribution to performance of a company.

This study attempts to explore the effect of board quality as determined by the relevant business experience of the independent directors, and separation of the roles of the chairman and CEO on investor decisions. The next section describes prior literature on the relationship between CEO duality and company performance.

4.5 Impact of Duality of the Chairman/CEO

Splitting the functions and responsibilities of the chairman and the CEO has been a controversial issue in corporate governance. When these two roles are held simultaneously by one person this results in direction from a single leader (Boyd, 1995), and may result in conflicts of interest (Fama & Jensen, 1983b; Rechner & Dalton, 1991). This concern stems from separation of ownership and management and thus potential control conflicts between the roles of the chairman (monitoring and control) and CEO (management) (Fama & Jensen, 1983b). Duality of the chairman and CEO constrains board independence and obstructs the board in executing its oversight and governance roles properly (Baliga, Moyer, & Rao, 1996). It gives the CEO power to dominate the board and management, which may lead to serving self-interest at the cost of investors. However, some argue that one person holding two positions is a sign of power accumulation that establishes a unity of command (Daily & Dalton, 1993).

Simpson and Gleason (1999) examined the impact of board structure and composition on the probability of financial distress of 287 banking companies. They collected data on financial distressed companies from SNL Quarterly Bank Digest and data on CEO duality from 1989 proxy statements.²⁶ They showed that there was a higher probability of financial distress when one person held both the position of Chairman and CEO. Their findings indicate that one person

²⁶SNL Securities determines an indicator termed 'SNL Safety Rating' which is similar to the CAMELS rating developed by federal regulators.

holding the two positions has adverse effects on company performance, investor protection, and confidence and trust in the board and management.

Daily and Dalton (1994) investigated 57 matched-pair USA bankrupt and non-bankrupt companies from 1972 to 1982 to examine the relationship between board leadership structure and corporate bankruptcy. Using logistic regression they found that there was duality in 53.8 percent of bankrupt companies and 37.5 percent in survival companies.²⁷ Their findings suggest that separation of the roles of the Chairman and CEO lead to a lower chance of bankruptcy.

Rechner and Dalton (1989) examined the relationship between duality and company performance analysing 141 companies from Fortune 500. They compared shareholder returns for 1978 to 1983 for companies with CEO duality with the returns of companies having a separate chairman and CEO. They found no significant differences in return over the sample period. However, they argued that the dual role represented a prima-facie case of conflict of interest. They suggest that an unethical Chairman /CEO would abuse power, which might impede company financial performance.

The recent study by Krause and Semadeni (2014) has provided further insight into the duality issue. They identified three types of separation of the roles in USA board practices, that is, (1) apprentice separation, (2) departure separation, and (3) demotion separation (Krause & Semadeni, 2014).²⁸ They analyzed 411 companies with separated boards to examine the link

²⁷Criteria for matching firms were (1) firm size, and (2) sales volume ranked by three digit Standard Industrial Classification (SIC) code categories collected from World's Directory or by four-digit SIC codes from Standard & Poor's (Daily and Dalton, 1994).

²⁸The term (1) apprentice separation denotes that the board drops the CEO's title as the chief executive officer but effectively remains in the position of chairman, (2) departure separation occurs when the firm fills the roles of chairman and CEO with two different individuals, and in contrast, (3) demotion separation happens when the CEO's position as the chair of the board is removed and an independent director is appointed as the new chairman (Krause & Semadeni 2014). According to their classification of separating roles of the CEO and the chairman, demotion separation is the strongest form of separation as the chairman is an independent director.

between company performance and different types of separation of the roles of the Chairman and CEO. Using multinomial logistic regression they found that demotion separation has a significantly stronger effect on company future performance, stock return, and analyst ratings than an apprentice separation or departure separation. Their findings indicate that demotion separation allows the board to be more independent than for the other two types of separation of the CEO and the chairman. The study sheds light on the importance of board independence and separation of the roles for board effectiveness.

In contrast to the above studies, Boyd (1995) proposed that CEO duality has a positive impact on return on investment (ROI). This suggests that potential conflict between the Chairman and CEO may negatively affects the performance of the company when the roles are held by two different individuals. However, the actions of regulators, recommendations of international organizations and most studies suggest that true separation of roles can enhance company performance and value.

4.6 Board Size and Company Performance

The issue of optimum board size has been examined in many studies and there are many different results. The evidence shows that board size usually ranges from very small (5 to 6) to very large (more than 30) depending on factors such as company size, nature of company business, ownership structure, governance framework, and institutional setting (Chaganti, Mahajan, & Sharma, 1985; Raheja, 2005; Guest, 2008; Ting, 2011; Chen & Al-Najjar, 2012). The Olivencia report in Spain presented in 1998 recommends that an optimal board size should be between 5 and 15 directors (García Lara, Osma, & Penalva, 2007). Jensen (1993) suggests that the board size should be seven or eight to make the board effective while Lipton and Lorsch (1992) contend

that the optimal size is eight or nine members. The results of empirical studies on the relation between board size and board effectiveness are mixed.

Yermack (1996), using data from 452 large U.S. industrial corporations between 1984 and 1991, documents a negative relationship between board size and firm performance, as measured by Tobin's Q and profitability. Similarly Conyon and Peck (1998), using data on listed companies from five European economies: UK, France, the Netherlands, Denmark and Italy over the period 1990-1995, found a negative relationship between board size and corporate performance as measured by return on equity and by stock market performance (ratio of market value of the firm to the book value of the firm assets). Similar results have also been found for small private firms (Eisenberg, Sundgren, & Wells, 1998). Most recently, Nath, Islam, & Saha (2015) conducted a study on listed pharmaceutical companies in Bangladesh to examine the association between board size and company performance (as measured by Tobin's Q). They analysed data of just 9 pharmaceutical companies for a period of 10 years (2005-2014) and found that board size is negatively related to company performance. Although the study analysed a small sample, the results are consistent with previous studies using large samples. Large boards suffer from coordination and communication problems (Lipton & Lorsch, 1992; Jensen, 1993); and the decision making process also becomes slow and complicated by the diverse opinions of the directors on a larger board (Sah & Stiglitz, 1991). In contrast, Coles, Daniel, & Naveen (2008) found that large boards were more capable of monitoring company management and add value because a large board has a high probability of having members with a wide range of types of experience. It is recognized that there are problems in examining the effect of board size on firm performance due to unobservable firm specific variables. Furthermore, the evidence is mixed partly because of the different methods used to examine the link between board size and firm performance across the various studies (Wintokia, Babajide, & Jeffry, 2007).

In the present experimental study, to examine the effect of corporate governance on investor investment decision making, board size has been kept constant across the eight scenarios of the experimental design.

4.7 Insider Trading

Investors make investment decisions based on information available in the market but information is often used by insiders for their own benefits or passed on by insiders to select external parties. The insiders or the select external parties can thus make abnormal returns using the private information. Such trading ('insider trading') is illegal and has drawn considerable attention from regulators.

Evidence from the empirical literature suggests that leakage of information from a company often occurs in the capital market.²⁹ Christophe, Ferri, and Hsieh (2010) analysed short-selling prior to the release of analyst downgrades in a sample of 670 downgraded NASDAQ stocks between 2000 and 2001 to examine the impact of leakage of information on trading behaviour in the market. They found abnormal changes both in buying and selling before analyst recommendations. The changes in trading behaviour indicates leakage of information based on which insiders trade in the market before analyst recommendations.

Li and Heidle (2004) investigated the relation between quoting behaviour and of market makers prior to public release of analysts' recommendations. They examined 3280 analysts'

²⁹Information leakage could be two kinds of business practice: trading based on non-public material information and analysts relations with executives at the firms they cover. Maug (2002) explains that trading on non-public information refers to selective disclosure of non-public information by a company's management to analysts. Analysts use the information for earnings forecasts. If the analysts advise their well-connected clients before the information is disclosed to the public this will be considered as unfair trading which is similar to insider trading. Therefore, these investors become wealthier just because of undue favour from the analysts. The second type of information leakages is related to co-dependence between the analysts and the managers of the firms they cover. Where the information is unfavourable the insider and related parties do not buy. Similarly, if the information is favourable, the insider and related parties therefore do not sell. Neither case can be detected.

recommendations for NASDAQ listed companies during the period from January 1, 1999 to July 31, 1999. The study found positive relationship between some market makers prior to public disclosure of the recommendations which indicates that leakage of information are stimuli of insider trading that impacts market behaviour.

Karpoff and Lee (1991) investigated insider trading before announcements of primary offerings of common stock, convertible debt, and straight debt.³⁰ They analysed data on common stock, straight debt, and convertible debt offerings of 83 firms, and 179 events of insider trading collected from CRSP during the period from 1972 to 1982 to examine manager involvement in trading before the issuance of new offering of securities. The study found that insiders sold their common stocks at least several months prior to the announcement of the issue of new common stocks and convertible debt. The findings indicate that insiders buy common stock and convertible bonds before announcement of offerings to make abnormal returns. Abnormal profit of insiders is in effect a transfer of wealth from outsider to insiders. Earning abnormal profits from insider trading is an exploitation of the inside information recognised in agency theory (Jensen & Meckling, 1979).

Dai, Fu, Kang, and Lee (2013) investigated how better corporate governance mechanisms can limit the ability of insiders to make abnormal profits. They used a large sample of insider trading transactions for companies listed on the NYSE, AMEX or NASDAQ during 1998 to 2011, and considered the following governance mechanisms: board independence, compensation structure, and institutional ownership (with the data collected from the RiskMetrics, S&P's ExecComp, and Thomson Reuter institutional holdings databases) to examine the effect of governance quality on insider profitability. Using OLS regression they found that governance quality was

³⁰Insiders is defined in this case as officers, directors, and owners of more than 10% of the company.

inversely related to the profitability of insiders. Their results suggest that higher quality governance can limit the potential for use of private information.

Seyhun (1986) examined the relationship between insider trading and insider profitability. They considered cumulative abnormal returns from the period 250 days prior to the event and then 100-300 days after the event and analysed data collected from the SEC on insider transactions in 790 public listed companies for 1975-1978. The study showed that director purchases earned 4.3% returns and their sales avoided losses of 2.2%, before information was disclosed publicly. The study explained that insiders had forecast the price trend of the company stock based on information they held due to their private relationship with board members and executives. The author asserted that insider traders gave value to the private information received in that way. In contrast to this finding, Azofra-Palenzuela, Fernández-Alonso, and Vallelado (2006) argue that contrarian investors act against their private information in a highly volatile market because contrarian investors perceive that other investors hold the same information.

4.8 Summary

This chapter has reviewed prior studies that have examined the relationship between board quality and company performance and value. The literature suggest that board quality as measured by experience and independence of directors and separation of the roles of the chairman and CEO, has a positive impact on company performance. However, review of the literature on the relationship between corporate governance overall and company performance indicates mixed findings. This could be due to the differences in institutional, legal and economic environment and other influences that could impact the effectiveness of corporate governance mechanisms in a particular jurisdiction. This study examines the effect of board quality on investor decisions but also examines the interaction effect of insider trading and corporate

governance on investor decisions. Therefore, this chapter also reviewed the literature on insider trading and the effect on investor decisions. Appendix D provides a summary of the key studies of this chapter and also key studies of the chapter five.

CHAPTER FIVE: THEORETICAL FRAMEWORK AND DEVELOPMENT OF HYPOTHESES

5.1 Introduction

The shareholders elect the board of directors who hire managers to run the day-to-day business of a company. In a publicly held company, managers who operate the business are not traditionally owners, although in some instances managers hold a small fraction of the company's stock. This gives rise to a number of questions as to how a board of directors and managers act in the best interests of investors, how trustworthy and reliable they are, whether financial statements reflect the true condition of the company, and whether the board and management are fair in dealing with disclosure requirements to prevent insider trading. The role of directors has been examined in a large body of literature from different theoretical perspectives such as agency theory, and signaling theory, and also other theoretical structures such as stakeholder theory, stewardship theory, transaction cost theory, resource dependency theory, political theory and efficient market theory (Borlea & Achim, 2013). However, this study is mainly guided by : (1) agency theory, and also (2) signaling theory to examine the influence of corporate governance on investor judgment in making investment decisions. Agency theory captures the role of the board of directors in monitoring management activities in the interests of shareholders/owners, including potential investors. Investor decisions are examined through the lens of signaling theory which explains how company signals on the quality of governance can assist in making investment decisions.

This chapter discusses these theories underpinning the hypotheses of this study (see Figure 7).

5.1.1 Agency Theory

Agency theory explains the relationship between owners and managers. Jensen and Meckling (1976) define the agency relationship as:

“one or more persons (the principals) engage another person (the agent) to act on their behalf which involves delegating some decision making authority to the agent” (p.308)

Shareholders delegate authority to the board to direct and control management with an expectation that the management will operate the business in a manner to achieve their goals (Abdullah & Valentine, 2009). This separation of ownership and control in a company (Jensen & Meckling, 1976) and the division of decision making and control activities in a company (Ross, 1973; Fama & Jensen, 1983b) create the agency conflict that is widely known as the principal-agent problem (Abdullah & Valentine, 2009).

Berle and Means (1932) first were to express concern over separation between ownership and control in large companies. They highlighted that the emergence of large companies leads to the hiring of professional management to operate the business on behalf of the owners. The ‘separation of ownership of a company from the management’ is the central issue that is addressed in agency theory Fama and Jensen (1983b); and (Cheffins and Bank (2009).

Berle and Means (1932) investigated the shareholding structure of the then top 200 nonfinancial corporations in the US to show how dispersed shareholders are separated from control in modern companies. They showed that diffuseness of ownership is greater in publicly held companies which makes management powerful while the owners effectively lose control in the company.

Berle and Means state:

“Those who control the destinies of the typical modern corporation own so insignificantly a fraction of the company’s stock that the returns from running the corporation profitably accrue to them in only a very minor degree. The stockholders, on the other hand, to whom the profits of the corporation go cannot be motivated by those profits to more efficient use of the property, since they have surrendered all disposition of it to those in control of the enterpriser” (Berle and Means 1932, p9).

Their views on separation of ownership and control are based on three foundations (Farooque, 2007) p.41:

- (1) Dispersed ownership (that is, any one shareholder typically owns only an insignificant fraction of the company’s stock);
- (2) Professional management has a small or no holding of the company’s stock;
- (3) Divergence of interests of shareholders and professional management.

With regards to management control, Berle and Means (1932) contended that control rights in companies are not associated with the ownership rather it is in the hands of management. Dispersed shareholders are the capital providers and residual claimants but lack direct control over the management decision making process. In particular, the interests of shareholders may largely be disregarded by managers.

According to agency theory, the agent agrees to work for the interests of the principal, and the principal, in turn, pays compensation and provides incentives to the agent. The board of directors can be regarded as the principal and management as the agent (see Figure 6). There could also be another agency relationship between the board and shareholders where the board itself an agent and the shareholders are the principal (Agrawal & Knoeber, 1996).

Jensen and Meckling (1976) view the firm as a nexus of contracts between individuals: investors, managers, suppliers, customers and creditors. These contractual relationships generate costs. In a publicly held company, the contract between the owners or board of directors (the principal) and management (the agent) is made for the latter to execute operational business decisions on behalf of the former. But the owners and management have divergent interests (Jensen & Meckling, 1976) which, in the presence of information asymmetry, results in the agency problem (Coase, 1977). The divergence of interests leads management to shirk their duties and expropriate the wealth of the owners (Jensen & Meckling, 1976; Shleifer & Vishny, 1997). Therefore, the owners and debt holders need to be cautious of the actions taken by insiders (Jensen & Meckling, 1976) and set up a system in a company to prevent managers from illegal and unethical activities.

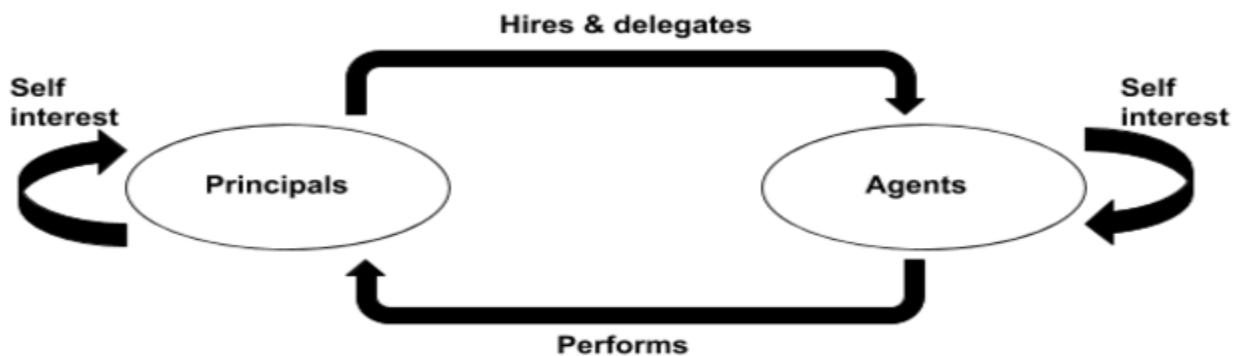
The principal can reduce agency costs by monitoring the actions of the agent and introducing incentives to align the interests of the agent with the interests of the principal (Hall, 1998). Management may also volunteer to restrict itself from certain actions that would be against the interests of the principal. This is referred to as bonding. Monitoring by the board can be strengthened by the appointment of audit and remuneration committees and interests can be aligned by devices such as managerial equity ownership (Farooque, 2007).³¹

Regulators can play an important role in mitigation of agency costs by specifying rules and regulations stating specific duties and responsibilities of the board and management in mitigating conflict of interest. For example, regulation may require a company to disclose information including timely financial information to the public and take enforcement actions against

³¹ However, in general, a point will be reached where the costs of additional monitoring or bonding (and incentives) is more than the expected reduction in agency costs and thus there will be remaining agency costs –termed residual loss. Total agency cost is the sum of monitoring cost, bonding cost and residual loss (Jensen & Meckling, 1976).

companies who fail to comply with the rules and regulations. These regulations, by specifying a strengthened framework, can significantly reduce the costs of contracting to mitigate agency costs.

Figure 6: Agency Theory Model (Abdullah & Valentine, 2009)



5.1.1.1 Information Asymmetry

The agency problem reflects information asymmetry between the owners and management. The term 'Information Asymmetry' was first introduced by Payne, Berle, and Means (1933) in explaining the problem of the separation of ownership and management. Separation of ownership and control (Berle & Means, 1968; Jensen & Meckling, 1976; Fama & Jensen, 1983b) and uneven distribution of information between managers and owners cause information asymmetry (Eisenhardt, 1989). This asymmetry can cause problems when there is divergence of interest between managers and owners.

Akerlof (1970) contributed to the theory of information asymmetry using the example in the automobile market. The theory was further extended by Spence (1973) on signaling through education in labour markets; and by Rothschild and Stiglitz (1976) on imperfect information in insurance markets (Rosser Jr, 2003). In the context of a publicly held company, managers hold

better knowledge about the company and its future prospects than do outside investors and this is of concern to current and potential shareholders in making investment decisions. Asymmetric information highlights two types of problems for investors: moral hazard and adverse selection which arise from information held by management and is hidden or opportunistic actions are taken by them (Darrough & Stoughton, 1986).

Adverse selection and moral hazard both reflect information asymmetry but adverse selection results from information held by the agent before the event whereas moral hazard relates to actions taken by the agent after the event. Adverse selection can be explained as misrepresentation of fact by an agent (Eisenhardt, 1989). Akerlof (1970) used the example of purchase of a second-hand car to explain that the adverse selection problem happens for the buyer as the buyer and seller have unequal information. This is referred to as the 'market for lemons' (Akerlof, 1970) and the result is that the buyer will pay only the average price. In the context of capital markets, when a company fails to disclose adequate information on performance to the market, investors will be unable to differentiate between the performance of that company and other companies and thus there will be adverse selection. The weak financial condition of Enron provides an example. This was known to the managers and some board members but was not reflected in the financial reports (Arnold & De Lange, 2004). Therefore, outsiders' (investors- principal) did not have the same degree of information as agents until they lost their investments.

Moral hazard occurs where information remains hidden to the principal or is unable to be perfectly anticipated by the principal. Eisenhardt (1989) describes moral hazard as negligence of the agent to put forth the agreed-upon effort for the interests of the principal. This can arise when the agent keeps information on their activities hidden or the agent shirks, for example, in the

discharge duties and responsibilities. Empirical studies indicate that efficient monitoring by the board can reduce the effect of information asymmetry, both in the form of adverse selection and moral hazard, but the monitoring is costly (Cormier, Ledoux, Magnan, & Aerts, 2010).

5.1.2 Signaling Theory

Signaling theory was originally developed to explain how asymmetric information is resolved in the job market (Spence, 1973). Spence asserts that employers do not have perfect information about the quality of a candidate for a job. Because of information asymmetry it is difficult to be sure of the quality of the employee at the time of hiring. Hence, the employee needs to convey his/her commitments and qualifications to the employer by action such as investment in education which is referred to as the ‘signaling function’ (Stiglitz, 2000). This concept has been applied in the corporate governance literature when actions by the board or the structure of the board can be regarded as signals of the quality of the company and thus mitigate the information asymmetry that exists for investors (Zhang & Wiersema, 2009; Connelly, Certo, Ireland, & Reutzel, 2011).

The theory is concerned with two key issues in the market: (1) the information gap between the parties (Spence, 2002; Connelly, Certo, Ireland, & Reutzel, 2011), and (2) how one party interprets and behaves in response to another party’s actions and behaviour (Connelly, Certo, Ireland, & Reutzel, 2011). The theory has been applied to explain the impact of signaling value of board characteristics, characteristics of top management teams (Certo, 2003), venture capitalists and angel investors (Elitzur & Gavius, 2003),³² board diversity (Miller & del Carmen Triana, 2009) on investor perception and company performance.

³² Angel investors are wealthy individuals who assist a start-up company’s business by seed financing. Venture capitalists invest if the company requires additional financing (Elitzur & Gavius, 2003).

In the finance literature, company debt (Ross, 1973) and dividends (Bhattacharya, 1979; Benartzi, Michaely, & Thaler, 1997; Mozes & Rapaccioli, 1998) have been modelled as signals of the quality and future prospects of a company. When a company is able to pay interest to bondholders and pay high dividends it provides a signal to investors about the quality of the company. A cut in dividends may have similar negative signaling value but it is not necessarily unambiguous as it may also indicate financing of attractive investment opportunities. In practice, the company often try to convey the quality of the company board and management through such ‘dissipative signals’- high or low level of dividend. This dissipative signal may originate, with the level of dividends, signaling costs for a company such as tax cost and new financing costs.

The impact of information asymmetry is usually discussed in the context of a single period model. However, the real world is not a single period and therefore the actions expected to be taken by an agent in a single period model might not be observed in the real world as the agents expect that a reckoning would take place at the beginning of the next period.

5.2 Development of Hypothesis

5.2.1 Quality of the board and investment decisions

The study first examines the association between board quality and investor decisions. The role of the board in controlling and monitoring management can be explained by agency theory – the presence of information asymmetry and divergent interests. The shareholders as principal appoint the board as an agent to perform tasks on their behalf. The purpose of appointing the board is to protect the interests of the shareholders (Jensen & Meckling, 1979; Porta, Lopez-de-Silanes, Shleifer, & Vishny, 1998; Jensen, 2003). The board monitors the day to day functions of management and exercises control over significant decisions to improve firm performance

and promote the interests of shareholders (Hillman & Dalziel, 2003). Through proper monitoring and control of management the board can promote the likelihood of high quality operating decisions and reduce the potential for manipulation of financial statements (Beasley, 1996; Klein, 2002; Anderson & Reeb, 2004).

As discussed in chapter 4, many studies have linked board quality, as characterised by independent director experience and true separation of roles of the CEO/chairman, with company performance and value. Although some studies have found that board quality has no effect (Hermalin & Weisbach, 1991; Bhagat & Black, 1999), many studies have reported that board quality has either a positive or negative effect on firm performance and value (Baysinger & Butler, 1985; Zahra & Pearce, 1989; Kaplan & Reishus, 1990; Byrd & Hickman, 1992; Kini, Kracaw, & Mian, 1995; Gompers, Ishii, & Metrick, 2003; Cremers & Nair, 2005; Johnson, Moorman, & Sorescu, 2009). Therefore, on balance, it is expected that a high quality board will constrain managers from serving their own interests, and thus promote firm value. Further, signaling theory suggest that a company with quality governance in place will signal better performance (Chiang & Chia, 2005), in particular, high profitability and market value (Bergh & Gibbons, 2011).

Hence the first hypothesis is:

H1: Investors will be more likely to invest in a company when board quality is strong, relative to when board quality is weak.

5.2.2 Association between board quality, reliability (representational faithfulness) of financial information and investment decisions

There have been debates among academicians, practitioners and accounting standard setters in understanding the meaning of ‘reliability’. Some define reliability as the ability of information to be confirmed by an external source while others define it as a high degree of consensus among independent measurers, and precision of measurement (Schipper, 2007).

Reliability has often been described in psychological studies as the degree to which measures are free from error and generate consistent results (Peter, 1979). This has been used in many academic studies to whether examine a phenomenon leads to the same results on repeated tests (Colbourn & Colbourn, 1987). From the viewpoint of statistics, reliability is the degree to which a statistical tool generates stable and consistent results (Haas, 1991). This study considers the term reliability in the context of financial reporting.

Maines and Wahlen (2006) view reliability as the degree to which a piece of accounting information is: (1) an accounting construct that objectively represents the underlying economic construct it purports to represent, and (2) a measurement that constructs without bias or error using the measurement attribute it purports to use. Similarly, Frederickson, Hodge, and Pratt (2006) described information as being reliable when it is verifiable, unbiased and measured with certainty. Richardson, Sloan, Soliman, and Tuna (2005) studied reliability based on the variance in recorded accruals where reduction in variance indicates enhanced reliability.

Previously, the Financial Accounting Standard Board (FASB) defined reliability as (FASB, 1980):

“The quality of information that assures that information is reasonably free from error and bias and faithfully represents what it purports to represent (p6)”

This definition was considered as a primary qualitative characteristics of financial information which had three components: representational faithfulness, verifiability and neutrality. The FASB and IASB observed user concerns over the concept of reliability including problems of common understanding on verifiability or freedom from material error, neutrality and precision (Downen, 2014). Whittington (2008) argued that reliability is better replaced by representational faithfulness, which implies a greater concern for capturing economic substance, and less with statistical accuracy. These different views were illustrative of the debate surrounding the meaning of reliability that prompted both IASB and FASB to revisit the concept of reliability in 2010 and shift from the term reliability to faithful representations (FASB, 2010b; Erb & Pelger, 2015; IASB 2015).

Under the new framework, reliability is no longer considered as a primary quality. Faithful representation has replaced reliability encompassing the main characteristics that the previous framework included as aspects of reliability. These comprise completeness, neutrality and freedom from error. It is observed in the new framework that standard setters have retained some components of reliability. However, Erb and Pelger (2015) have argued that this replacement has no material effect. Despite this disagreement, it is observed that ‘Faithful Representation’ has been recognised as one of the primary characteristics of the conceptual framework of financial reporting that plays a key role in making investment decisions. This study uses the term ‘reliability’ instead of the term ‘faithful representations’ in the experimental instrument, as individual investor would have greater familiarity with the term reliability.

Several studies have attempted to investigate the importance of reliability in making investment decisions. Frederickson, Hodge, and Pratt (2006) examined how accounting choice of stock option expense recognition influences investor assessment of the reliability of financial

statements and the impact on their investment decisions. Conducting a 2x2 between subjects experiment on 1000 accounting and finance graduates from major US business schools, they found that assessments of reliability under mandated recognition exceeded reliability assessments under voluntary recognition. They viewed voluntary footnote disclosures as being less reliable for users. Their results suggest that choice of a company's accounting policy has different effects on the perceived reliability of financial reporting.

Elliott, Jackson, and Smith (2006) examined the impact of reliability of financial information on decision making by non-professional investors. They conducted a 1x3 between subjects experiment on 154 graduate business students from a large state university in the US to examine how disclosures on estimates influence investor reliability perceptions and investment-related judgment. They found a significantly positive relation between sensitivity disclosures on estimates and investor perceptions of the reliability of the estimate. They also showed that the process of accounting estimates and related disclosures influences investor assessment of the reliability of financial statements and thus their investment decisions. Similarly, Bagnoli and Watts (2005) demonstrated that management discretionary choice of accounting policy provides a signal to the market about the reliability of the financial statements and the future value of the company. Their findings imply that the board, which is responsible for overseeing the process of preparing financial statements, is an important element in signaling to investors the reliability of financial statements. In other words, the quality of the board and of management serve as signals to investors in making investment decisions. These views are consistent with the claim of Zhang and Wiersema (2009) that the CEO signals the intrinsic quality of the company to potential investors through the quality of financial reporting.

Holder-Webb and Sharma (2010) conducted an experiment on 62 professional lenders in Singapore to examine the impact of the quality of board on lender perceptions of reliability of financial reports on thus on credit decisions. They showed that some characteristics of a board, such as board independence and director financial expertise, were important determinants of how lenders assessed the reliability of financial information. The study concluded that the perceived reliability positively influences credit decisions. These findings on reliability of financial reports have reinforced the earlier claims of Leftwich (1983), Smith Jr (1993), and Beaulieu (1994) that a creditor gives importance to the reliability of financial information and covenants in making lending decisions.

Hodge (2003) examined the effect of earnings quality on investor assessment of the reliability of audited financial statements and thus their investment decisions. They surveyed 414 individual investors who were members of the National Association of Investors Corporation (NAIC) in the USA.³³ The study found that when earnings quality declines over time, investor perceived reliability of audited financial statements decreases. Such investor perceptions are probably a reflection of the quality of the board that oversees the preparation of financial statements. Thus, it is expected that when board quality is strengthened, information quality will improve; in turn, investors will be better placed to assess company prospects and thus assess the value of the stock.

Investors are often faced with a high degree of uncertainty (Watts & Zimmerman, 1986) and information risk (Easley & O'hara, 2004) in making investment decisions. When individuals face uncertainty they give importance to the reliability of source of the information (Birnbbaum &

³³ NAIC investors perform fundamental analysis of stocks based on financial statements in making investment decisions (Hodge, 2003).

Stegner, 1979). Earlier, in accounting and psychology studies, it has been demonstrated that individuals give more importance to information from a reliable source (Hirst, Koonce, & Simko, 1995). In other words, reliable information stems from someone or something that is reliable. However, the reliability (or representational faithfulness) of accounting information is undermined when management prepares financial statements that primarily serve their own interest (Maines & Wahlen, 2006). The authors conclude that users are sensitive to the reliability of financial reports. These findings are significant to investors for two reasons : (1) how the governance mechanism is structured in the entity to reduce conflicts of interest, and (2) whether the board is capable of monitoring management to reduce the effect of information asymmetry. The board should provide effective monitoring of management in preparing financial reports because the board has fiduciary duties and responsibility to oversee company activities, including the preparation of financial statements. It follows from the above discussion that an effective board can better ensure fair and transparent financial statements. A higher quality board is more likely to reduce material errors and enhance the reliability of corporate financial information. Therefore, it is expected that a quality board is better able to ensure preparation of reliable financial reports, and investors will give more importance to financial reports overseen by a strong board (the reliable source) to make investment decisions.

Considering the above discussion, I hypothesize the following:

H2: The perceived reliability of reporting will be higher when board quality is strong, relative to when the board quality is weak.

H3: When perceived reliability of reporting increases, investors will be more likely to invest in a company.

5.2.3 Effect of insider trading on investor decisions

Insider trading can be both legal and illegal. Insider trading is legal when company insiders: officers, directors or employees—buy or sell stock in compliance with the relevant rules and regulations (Beams, Brown, & Killough, 2003). Illegal insider trading, on the other hand, refers to practices prohibited under securities laws where traders take advantage of private information at the expense of others who do not have access to it. The theory behind the prohibition of illegal insider trading is that it undermines investor confidence in the fairness and transparency of financial markets. Illegal insider trading is considered to be fraudulent because the insiders violate the trust or fiduciary duty that they owe to shareholders and the public at large.

Empirical studies suggest that investors earn abnormal returns from trading based on private information, and these trades influence price and volume significantly (Penman, 1982; Seyhun, 1986; Lakonishok & Lee, 2001). For example, Keown and Pinkerton (1981) showed that investors in target firms earned abnormal return prior to the first public announcement of planned mergers. They note that the price of a target firm stock gained on average about 40% to 50% before the actual takeover announcement. This suggests that certain investors had access to company inside information and used this information before the public announcement to earn abnormal returns. Only a subset of investors receive the benefits of illegal insider trading. On the contrary, if the information is publicly disclosed then it may be expected that investors in general will incorporate that information in pricing the stock. Thus current holders will likely benefit, but do so equally (Bhattacharya, Daouk, Jorgenson, & Kehr, 2000).

Giannetti and Simonov (2006) claim that investors who have relationships with company insiders and thus have access to private information are more likely to invest in that company. This finding implies that investors become more confident to invest as they are able to use private

information to earn a higher return at the expense of investors who have no inside information. The strength of governance structure of the company becomes immaterial to investors who have access to private information. This also suggests that had the investors not had access to private information, they likely would not have invested in a company having weak governance structure. Giannetti and Simonov (2006) further state that investors who do not have access to inside information are less likely to hold shares in a weak governance company as they might suffer the advantages gained by inside traders.

It is recognized from prior literature that good governance can reduce the likelihood of insiders from exploiting private information. An experienced competent and independent board can be effective in monitoring its own members and management to prevent insiders and their association from earning abnormal profits through illegal insider trading.

In accordance with the above discussion, this study hypothesizes that:

H4: Availability of insider information will increase the likelihood that investors invest in a company, relative to when insider information is absent.

5.2.4 Impact of insider trading perception on reporting reliability

Strong corporate governance enhances the quality of financial information (Agrawal & Chadha, 2005). Independent directors play a key role in this respect (Byrd & Hickman, 1992; Brickley, Coles, & Jarrell, 1997). Agrawal and Chadha (2005) explained that independent directors with financial expertise help to reduce the chance of restatement of financial statements. This indicates that independent directors who have financial expertise are capable of overseeing the reporting process, promoting integrity and preventing financial fraud, and thus increase the reliability of reporting. Similarly, Beasley (1996) and Dechow, Sloan, and Sweeney (1996)

suggest that independent directors who have relevant knowledge and experience are able to reduce financial fraud and earnings management, which has a positive impact on the reliability of financial information.

There is also evidence that earnings management encourages insider trading (Sawicki & Shrestha, 2008). For example, Baryeh, Yaari, and Dadalt (2012) reported that insiders purchase shares prior to massaging of the financial condition and performance of a company before a seasoned equity offering by the company. These findings suggest an inverse association between insider trading and the degree of reliability of the financial reports of a company. Thus given the positive effect of increasing board quality on investor perceptions of the reliability of financial reporting I hypothesize that:

H5: The favourable effects of increasing board quality on perceived reliability of financial reporting will be diminished when insider information is available, relative to when insider information is absent.

5.2.5 Association of trust in board, management and investment decisions

The basic concept of trust is discussed in the literature in the context of complexity, reliability, flexibility, predictability, credibility, complacency, consistency, security, accuracy, dependence, responsibility and uncertainty (Tweedale & Cutler, 2006). In an organization, trust is defined as a psychological state of mind in terms of perceived risk that originates from the uncertainty of an individual regarding another person's motives, intentions and expectations (Kramer & Cook, 2004). Mayer, Davis, and Schoorman (1995) define trust as:

“the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party” (p. 712).

Similarly, Robinson (1996) claims that trust is built when it is expected and believed that the actions of another person will be beneficial, favorable and not harmful to the interests of others. Kelly, Boardman, Goillau, and Jeannot (2003) define trust as the confidence placed in a person or thing. They conducted a meta-analysis of prior literature on trust and identified some essential elements in building trust such as, faithfulness, reliability, robustness, familiarity, usefulness, self-confidence, reputation, and explication of intention. According to their view, reliability of individuals builds trust in them. Similarly, Whittington (1999) states “Trust is assumed to mean confidence in the truthfulness and reliability of another party” p.182. Therefore, trust can be seen as the basis for individual risk-taking behavior based on favorable expectations regarding the intentions and actions of other people.

In the context of agency theory, Lukas and Schöndube (2012) explain that the degree of trust depends on previous decisions and actions of the principal and the agent. For example, in relation to the payment of bonuses to employees, an employee (the agent) cannot perfectly predict the bonus decisions of the employer (the principal). They can only believe in the likelihood of receiving a bonus given the previous decisions on bonus payments. Molm, Takahashi, and Peterson (2000) provide an explanation that trust is a nexus of feelings and commitments with the other party. It comprises individual belief and expectations on how the other party will behave. These explanations also imply that the level of trust is subject to experience from dealing with the other party.

From the economics and social psychology points of view, Lewis and Weigert (1985) suggest that competence and dutifulness of a person are key elements in building trust. Similarly, Kramer and Cook (2004) claim that competencies of individuals are important components in building trust in an organization since they can deal with complexity, resilience, optimism, energy, and

honesty. For the same reason, in a publicly held company, shareholders put their trust in the board and management to run the business to deliver maximum returns on investment. If shareholders have reasons to believe that the board and/or management engages in illegal insider trading, shareholder trust in the board and management would be low.

Competence of board members and management (which can be represented by some important factors such as integrity, knowledge and experience) is critical to develop investor trust in the board and management. For example, several studies have documented that investor judgment depends on trust (Harrison, Dibben, & Mason, 1997; Prowse, 1998a; Ryan & Buchholtz, 2001; Elliott, Hodge, & Sedor, 2011). It may be assumed that when individuals in a position of trust (i.e. board and management) appear to be lacking in competence, investors will lose trust in the board and management and, possibly, in the marketplace.

Hence, I propose the following hypotheses:

H6a: Investors will have more trust in the board when board quality is strong, relative to when board quality is weak.

H6b: Investors will have more trust in management when board quality is strong, relative to when the board quality is weak.

H7a: When trust in a board increases, investors will be more likely to invest in a company.

H7b: When trust in management increases, investors will be more likely to invest in a company.

5.2.6 Investor trust in a board and management in the presence of insider trading

Insider trading is illegal in stock markets because trading shares based on private information is a breach of fiduciary duty, trust and confidence. It weakens market integrity and fair dealing,

destroys investor trust and confidence thereby disrupting growth of the market. Since dispersed shareholders have limited control over company activities due to separation of control and ownership (Berle & Means, 1968), regulators worldwide attempt to combat insider trading by law.

Good corporate governance helps to ensure that management runs firms ethically and competently in the interests of shareholders. Ethical behavior by management and their ability to deliver on assurances are two important factors in building trust in them, especially in business relations (Child & Rodrigues, 2004). This discussion suggests that if some investors obtain access to non-public information the result will be low trust in management and the board.

Hence, the following hypotheses are proposed:

H8: Investors trust in management will be lower when some investors have access to insider information, relative to when insider information is absent.

H9: The favorable effects of increasing board quality on trust in management will be diminished when insider information is available, relative to when insider information is absent.

5.2.7 Financial condition and investor decisions

Financial reports are the formal records of the financial activities of a business and an overview of the financial condition of the company. The Financial Accounting Standards Board (FASB, 2010b) has emphasized in the Statement of Financial Accounting Concepts No. 1, as amended, that financial reporting assists investors in making investment decisions in the securities market (paragraphs 34-36). Similarly, IASB, 2010 has emphasized in para OB2-OB11 of Chapter 1 that one of the objectives of preparing financial information is to make investment decisions. Thus

one of the purposes of providing financial statements is to provide investors with information about the financial performance and financial position of a company. It is expected that investors will understand, analyse and determine whether the financial condition of a company is favourable or unfavourable and consider the company's comments on future prospects. Investors can form a view on the current and future value of the stock and hence from comparison with current market price, make their investment decisions.

Prior studies show that the stock price of companies reflects their financial condition. For example, Kross and Schroeder (1984) show that the stock price increases in response to the announcement of higher earnings and decreases for lower earnings. Further, Al-Ajmi (2009) claimed that investors consider corporate financial reports as the most important source of information in making investment decisions. The key financial information of companies such as earnings per share, earnings multiple, net asset value per share, dividends and other performance characteristics are value relevant and are closely related to stock returns (Penman & Sougiannis, 1998; Lawrence & Kercksmar, 1999). These findings indicate that investors give weight to historical data in making investment decisions.

Considering the above discussion, this study expects that investors will be more likely to invest in a company whose financial condition appears to be good as this will lead to the expectation that the stock price will increase in the future. Conversely, investors will be less likely to invest in a company whose financial condition is bad as they would expect that the price of the shares of such companies will decrease.

Hence I hypothesize that:

H10: Investors are more likely to invest in a company when the company's financial condition is good than when it is bad.

5.2.8 Relation between perceived reliability and trust

The literature indicates that good corporate governance requires board members of a company to be qualified, experienced, independent, reliable and trustworthy in directing and controlling management. Therefore, it is important to examine if there is any effect of reliability of financial statements on building trust. As discussed in the previous sections, reliability of source does matter in building trust; that is, it indicates that reliability and trust are interlinked.

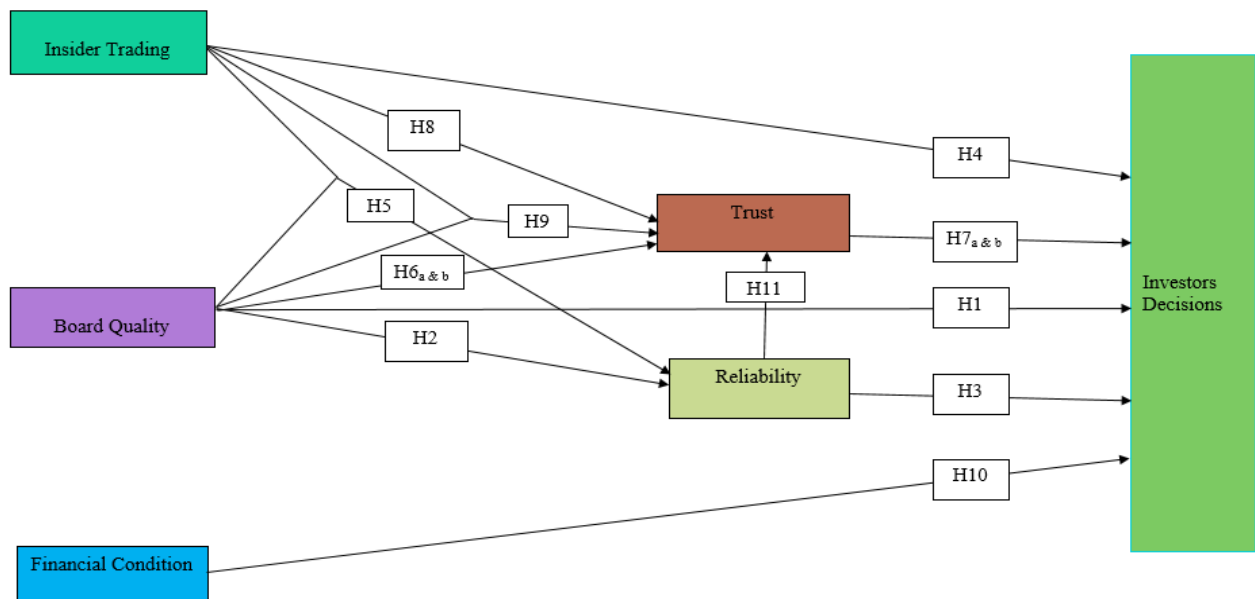
Considering the above views and the earlier discussion on trust one can infer that and reliability of the financial reports might have effect on investor trust in the board and management.

Hence, this study proposes that:

H11: When perceived reliability of reporting increases (decreases) investor trust in the board and management will also increase (decrease).

Figures 7 below provides a summary of the hypotheses developed above.

Figure 7: Theoretical Framework and Hypotheses



5.2.9 Mediating effects of trust and reliability on investment decisions

Investors want to have trust in the board and the financial statements in order to have the necessary confidence to invest in the company. However, this confidence may be significantly damaged if they find, a poor quality board, unreliable financial statements and the existence of insider trading. Loss of reliability and trust will decrease investor confidence and will ultimately affect investment decisions. Thus it is expected that trust and reliability have mediating effects on investor judgment. Hence, this study performs some additional analyses and proposes that:

- i. Trust in management will mediate the relationship between the quality of the board and decisions to invest.
- ii. Perceived reliability will mediate the relationship between the quality of the board and decisions to invest.
- iii. Perceived reliability will mediate the relationship between financial condition and decisions to invest.
- iv. Trust in management will mediate the relationship between the existence of insider trading and decisions to invest.
- v. Perceived reliability will mediate the relationship between the existence of insider trading and decisions to invest.

5.3 Summary

This chapter has discussed the theoretical framework for the study in terms of the relationship among board quality, insider trading and financial condition and investor decisions based on agency theory and signalling theory. The chapter has also discussed the expected links between the above three independent variables and investors trust in board and management and perceived reliability of financial reports of the company and their ultimate impact on investor decisions.

For ease of reference, a listing of the full set of hypotheses and mediation analyses is given in Appendix E.

CHAPTER SIX: METHODOLOGY

6.1 Introduction

This chapter presents a detailed description of the experimental methodology used in this study. It describes the experimental design, participants, experimental tasks, attention checks, debriefing and demographic questionnaire.

6.2 Experimental Design

The research design is a controlled laboratory experiment. The experiment is based on a 2×2×2 between-participants fixed effects factorial design yielding eight experimental conditions (Table 6). The objective of the between-subjects experiment is to determine whether differences exist between treatment conditions of the decision case designed for this study. The decision case involves a hypothetical energy company named ABC Ltd. The company is listed with both the Dhaka and Chittagong stock exchanges in Bangladesh. The shares of the company have been actively traded on these stock exchanges since 2000. There are no large block-holders in the company that dominate the ownership of the company. A reputable audit firm has been auditing financial statements of the company for the past three years.

Table 6: Experimental Conditions in 2×2×2 factorial design for the investors' judgment

Scenarios	Factors		
	Board Quality (Strong/Weak)	Financial Condition (Good/Bad)	Insider Trading (Present/Absent)
1	Strong	Good	Present
2	Strong	Good	Absent
3	Strong	Bad	Present
4	Strong	Bad	Absent
5	Weak	Good	Present
6	Weak	Good	Absent
7	Weak	Bad	Present
8	Weak	Bad	Absent

Three factors in the case are manipulated: (1) strong versus weak board; (2) good versus bad financial condition; and (3) insider trading present versus absent. Each scenario is distinguished by different combinations of board strength, financial condition and investor access to inside information of the company. The background information on ABC Ltd. is identical in each scenario, and the only differences between conditions are the manipulated independent variables (Appendix F provides the instrument of the study).

With respect to the ‘strong board’ the decision case states -“one independent director is a university teacher in Accounting and another is a retired government officer. Both independent directors meet the minimum experience requirements and are from the required professions, and thus satisfy the new regulations. Moreover, they both have prior experience that is relevant to ABC’s business”. On the other hand, in respect of the ‘weak board’ the case states: “one independent director is a university teacher in Accounting and another is a retired government officer. Both independent directors meet the minimum experience requirements and are from the required professions, and thus satisfy the new regulations. However, neither independent director has prior experience that is relevant to ABC’s business, and they are friends of executive management”.

Regarding the financial condition of the company, the case highlights key performance measures for three consecutive years such as, current ratio, quick ratio, debt to equity ratio, gross margin ratio, net income ratio, return on equity ratio, earning per share and net tangible assets per share. These key financial measures are important in making investment decisions (Akhter & Ahmed, 2013) and it is mandatory to disclose them under Bangladesh securities laws (BSEC, 2012). The company ‘in good financial condition’ has been improving its key measures during 2010-2012 and these are above the industry averages in 2012, while ‘in the bad financial condition’ the key

financial measures have been declining for the three consecutive years and these are below the industry averages in 2012.

With regards to ‘absence of insider trading’ of the company’s shares the case states - “your cousin is an old friend of one of the members of the executive management team of ABC Ltd, but he never receives any tips or inside information about ABC Ltd from management. Your cousin has stated that he intends to purchase shares of ABC Ltd”. On the other hand, for the ‘presence of insider trading’ the case states - “your cousin is an old friend of one of the members of the executive management team of ABC Ltd. Your cousin has informed you that he was given inside information from his manager friend about a secret new joint venture with a Japanese company, and the manager informed him that this venture is certain to increase ABC’s share price in the near future. Your cousin has stated that he intends to purchase shares of ABC Ltd”.

The experimental materials also include questions relating to participants’ demographics and general information about the participants: age, gender, education, profession and trading experience.

6.3 Participants

MBA students are usually considered good proxies for individual investors if the tasks are high in integrative complexity. According to Elliott, Hodge, Kennedy, & Pronk (2007), it is appropriate to conduct an experiment on MBA students since they collect and integrate information similarly to non-professional investors. In addition, students have been found to be suitable substitutes for relatively unsophisticated individual investors (Libby, Bloomfield, & Nelson, 2002). However, students have not been found as good as individual investors in terms of making investment decisions. Therefore, it is suggested that, subject to availability, individual

investors are the most preferred participants on which to run an experimental study (Elliott, Hodge, Kennedy, & Pronk, 2007).

Following the recommendation of Elliott, Hodge, Kennedy, & Pronk (2007), the participants in this study were 307 individual investors who regularly trade on the Bangladesh stock markets. It is expected that investors are likely to be more experienced in terms of making an investment decision than MBA students. In addition, the majority of investors in Bangladesh trade at the trading room of stockbrokers and merchant bankers by watching the display of trading on a large monitor. Hence, a good number of investors were available to conduct the experiment under controlled conditions in a limited number of locations. The individual investors were selected from the clients of the top five stockbrokers of the Dhaka and Chittagong Stock Exchanges and merchant bankers, in terms of annual trade volume. Prior to the experiment, the Human Ethics Committee of Victoria University of Wellington approved the instrument, on 21st November 2013, to run the experiment for the study.

6.4 Experimental Tasks

Participants were randomly assigned to one of the eight scenarios and given a questionnaire in two separate envelopes. Envelope 1 included background information, the board structure of ABC Ltd, financial information and participants' access to insider information along with relevant seven-point itemized interval questionnaires that capture the dependent variable. Envelope 2 included attention check questions, additional seven-point itemized interval questions relating to their responses given to the questionnaire in Envelope 1, and a demographic questionnaire.

Based on the information provided about the company, participants were asked to indicate their likelihood of choosing to invest in ABC shares on a seven-point itemized interval scale. The lowest value of '1' was accounted for as 'not at all likely' and the highest value of '7' was for 'very likely'. They were also asked to predict the change in share price of the company in the next year by rating on a seven-point itemized interval scale anchored by significant decline '1' and significant increase '7'. After making their judgment, participants completed five more questions on a seven-point itemized interval scale concerning: reliability of financial information, trust in the board of directors and management, director and management involvement in insider trading, and the financial condition of the company. Participants read the case and answered questions relating to their investment decisions, perception of reliability of the financial statements of the company, trustworthiness of the board, perception of the strength of the board and of management, financial condition, and insider trading.

Having completed the questionnaire provided in envelope 1, participants were asked to open envelope 2 to answer attentions checks, debriefing and demographic questions. Finally, they were asked to return the envelopes to a box placed in the back of the room.

6.5 Attention Checks

Attention checks were performed to determine whether the participants understood the case materials and recognized their treatment conditions. If a participant receiving the strong board scenario indicated that the board is weak, this made it clear that the participant did not attend to the manipulation of the board strength. Similarly, if a participant received the good financial condition scenario indicated that the company financial condition is bad, the participant is considered as not having followed the manipulation of financial condition. Regarding the insider trading treatment condition, if a participant receiving the scenario of presence of insider trading

indicated absence of insider trading this shows that the participant did not attend to the manipulation of insider trading. Consistent with the prior study of Rose, Mazza, Norman, and Rose (2013), the participants, who failed to answer the attention check questions correctly were not included in the statistical tests of the hypotheses.

6.6 Debriefing Items and Demographic Questions

After completing the experiment, the participants were asked to respond to five general questions on a seven-point itemized interval scale to understand: (1) the extent to which they consider the strength of the board in investment decision making, (2) the extent to which they consider the company's financial condition in making investment decisions, (3) the extent to which they believe that board members influence the future share price of a firm, (4) their perception of the governance quality if friends and relatives of management are able to acquire insider information, and (5) their perception of the impact of insider trading on the long term value of the firm. Finally, the participants were asked to answer demographic questions such as age, gender, education, occupation and number of years of experience in trading of shares.

6.7 Statistical Tools

The study uses SPSS and AMOS software to conduct the descriptive analysis and the various statistical analyses to test the hypotheses.

6.8 Summary

This chapter has discussed the research methodology that includes experimental design, participants for the experiment, tasks of the participants, and the questionnaire that captured the dependent variables of this study. This chapter has also discussed the attention checks performed to identify if the participants had carefully read the case material and understood it. Finally, the chapter presented debriefing items that related to their general perception of the strength of governance and insider trading, and the impact of various factors on firm value and stock price. The results of the study are reported in the next chapter.

CHAPTER SEVEN: RESULTS ANALYSES

7.1 Introduction

This chapter presents descriptive statistics, results of attention and attention checks, preliminary tests, hypothesis tests, mediation tests and supplemental analyses. The chapter also includes the results obtained from Structural Equation Model (SEM) analysis.

7.2 Participants

A total of 320 individual investors were requested to participate in the study of which 307 individual investors agreed to participate. However, 15 participants did not complete the task and 34 participants failed to answer the attention check questions correctly. These 49 participants who either did not complete or incorrectly answered the attention check questions are not included in the analyses. Therefore, the final sample comprised responses from 258 individual investors.

Table 7.2 shows the demographic profile of the responding participants. Panel A shows that the number of years of investment experience in the stock market has a mean of 8.08 years with standard deviation 5.59 years and a range from 0.50 to 35 years. Panel B shows that most of these participants are male (93.4%), seventy five percent of the participants are from private business firms, and about 85% have university degrees.

Table 7.2: Participants**Panel A: Investment experience in stock market**

Statistics	Years
Minimum	0.50
Maximum	35
Mean	8.08
Median	6
Standard deviation	5.59

Panel B: Profile of participants

Gender	Number	Percentage
Male	241	93.4%
Female	17	6.6%
Total	258	100%
Occupation		
Private business	124	48.1%
Private servant ³⁴	70	27.1%
Other	64	24.8%
Total	258	100%
Education		
Bachelor degree	95	36.8%
Master degree	124	48.1%
Other	39	15.1%
Total Number	258	100%

³⁴ Private servant refers to individual employed in a private business firm.

7.3 Attention Checks

To ensure that participants understood the manipulations they were presented in the experiment, the study conducts attention checks after participants made the judgment on investing in the company and indicated the degree of trust in the board and management and reliability of the financial report. The participants were asked to answer four attention checks questions relating to the three independent variables: (1) the board was weak or strong (2) insider trading was absent or present, (3) the company financial condition was declining or improving. Any participants who failed to recognize their treatment condition were considered to have failed the attention check.

For example, if a participant received a scenario stating the board quality condition as *“One independent director is a university teacher in Accounting and another is a retired government officer. Both independent directors meet the minimum experience requirements and are from the required professions, and thus satisfy the new regulations. However, neither independent director has prior experience that is relevant to ABC’s business, and they are friends of executive management”* and *“The CEO and Chairman of the Board are different individuals, but the CEO is not able to work independently since the Chairman dominates the CEO”,* but the participant specified that the scenario stated *“One independent director is a university teacher in Accounting and another is a retired government officer. Both independent directors meet the minimum experience requirements and are from the required professions, and thus satisfy the new regulations. Moreover, both independent directors have prior experience that is very relevant to ABC’s business”* and/or *“The CEO and Chairman of the Board are different individuals, and the CEO is able to work independently”* then the participant would have failed the attention check.

As another example, suppose that a participant received a scenario stating the insider trading condition as *“Your cousin is an old friend of one of the members of the executive management*

team of ABC Company. Your cousin has informed you that he was given inside information from his manager friend about a secret new joint venture with a Japanese company”, but the participant specified that the scenario stated “Your cousin is an old friend of one of the members of the executive management team of ABC Company but never gets any inside information of ABC which has impact on price”, then the participant would have failed the attention check. Similarly, regarding the financial condition, suppose that if a participant received a scenario stating improving financial condition but the participant specified it as declining financial condition, then the participant would have failed the attention check.

A total of 34 participants failed to answer attention checks correctly, indicating that they did not understand the treatment conditions or possibly did not read the experimental materials. Furthermore, 15 participants did not complete the experiment. Consistent with standard practice in experimental research, these two types of participants, a total of 49, were excluded from the analyses.

Further analyses were conducted to determine whether manipulations of board quality, insider trading, and financial condition successfully altered the underlying constructs of interest. Results of these attention checks show that all manipulations were successful. Table 7.3 shows that participants who received the strong board manipulation perceived the board to be significantly stronger [$t=49.18, p < 0.05$, Mean=4.94] than did participants who received the weak board case (Mean=4.24). Participants who received the case with the presence of insider trading perceived that managers are significantly more involved in insider trading ($t=31.54, p < 0.05$, Mean=4.53) than did the participants who received the case with absence of insider trading (Mean=3.40). Finally, the participants who received the case with good financial condition believed that the company’s financial condition was better ($t=22.11, p < 0.05$, Mean=4.94) than the participants

who received the case with the weaker financial condition (Mean=3.50). Therefore, overall the attention check results indicate that the experimental manipulations were successful.

Table 7.3: Attention Checks

Attention Checks	Scenarios	Mean value	Std. Dev.	<i>t-value</i>	p-value
Board Quality	Strong	4.94	1.70	49.18	0.001
	Weak	4.24	1.73		
Insider trading	Absent	3.40	1.90	31.54	0.001
	Present	4.53	1.99		
Financial Condition	Good	4.94	1.52	22.11	0.001
	Bad	3.50	1.51		

7.4 Preliminary Testing

Prior to hypotheses testing I ran a MANOVA model, where the independent variables were , board quality, insider trading and financial condition of the company (and interaction terms), and the dependent variables are the participant's age, years of experience, educational qualification and occupation. This MANOVA examines if the demographic measures vary significantly across the three treatment conditions (i.e. board quality, insider trading and financial condition). The results, reported in Table 7.4, show that none of the demographic items were significant in the model (all $p > 0.05$) except that the years of experience is statistically significant with the financial condition manipulation ($p = 0.029$).³⁵ It indicates that there is a potential for investment experience to influence analyses that examine the effects of financial condition on the dependent measures. Therefore, I retained this variable in the model used to test the hypotheses in order to control for any influence of years of experience. I also run series of ANCOVA model to examine whether any demographic variables could influence the hypothesis

³⁵ Cut-off point of p-value is 5%

tests where the dependent variable was the investment decision and independent variables were board quality, insider trading and financial condition by including the demographic characteristics as covariates. Years' experience was only statistically significant in the ANCOVA model with the investment decision as the dependent variable.

Table 7.4: Tests of Between-Subjects Effects (MANOVA)

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	Age	2.670 ^a	7	.381	.746	.633
	Education	2.032 ^b	7	.290	.361	.924
	occupation	16.444 ^c	7	2.349	1.076	.380
	Nyears_experience	329.352 ^d	7	47.050	1.527	.158
Intercept	Age	1737.886	1	1737.886	3398.012	.000
	Education	2986.949	1	2986.949	3711.194	.000
	occupation	4443.864	1	4443.864	2034.759	.000
	Nyears_experience	17016.874	1	17016.874	552.417	.000
Board	Age	.156	1	.156	.305	.582
	Education	.650	1	.650	.807	.370
	occupation	.106	1	.106	.049	.825
	Nyears_experience	.026	1	.026	.001	.977
FinancialCondition	Age	.068	1	.068	.134	.715
	Education	.003	1	.003	.003	.954
	occupation	1.124	1	1.124	.515	.474
	Nyears_experience	147.699	1	147.699	4.795	.029
InsiderTarding	Age	.035	1	.035	.069	.793
	Education	.045	1	.045	.056	.814
	occupation	2.248	1	2.248	1.029	.311
	Nyears_experience	4.110	1	4.110	.133	.715
Board * FinancialCondition	Age	.503	1	.503	.983	.322
	Education	.426	1	.426	.530	.467
	occupation	5.407	1	5.407	2.476	.117
	Nyears_experience	81.643	1	81.643	2.650	.105
Board * InsiderTarding	Age	.677	1	.677	1.324	.251
	Education	.029	1	.029	.037	.849
	occupation	6.590	1	6.590	3.018	.084
	Nyears_experience	52.790	1	52.790	1.714	.192
FinancialCondition * InsiderTarding	Age	.121	1	.121	.237	.627
	Education	.729	1	.729	.905	.342

	occupation	.645	1	.645	.295	.587
	Nyears_experience	13.514	1	13.514	.439	.508
Board *	Age	.888	1	.888	1.737	.189
FinancialCondition	Education	.000	1	.000	.000	.983
* InsiderTrading	occupation	.049	1	.049	.022	.881
	Nyears_experience	50.147	1	50.147	1.628	.203
Error	Age	127.861	250	.511		
	Education	201.212	250	.805		
	occupation	545.994	250	2.184		
	Nyears_experience	7701.106	250	30.804		
Total	Age	1907.000	258			
	Education	3239.000	258			
	occupation	5075.000	258			
	Nyears_experience	24888.250	258			
Corrected Total	Age	130.531	257			
	Education	203.244	257			
	occupation	562.438	257			
	Nyears_experience	8030.458	257			

- a. R Squared = .020 (Adjusted R Squared = -.007)
- b. R Squared = .010 (Adjusted R Squared = -.018)
- c. R Squared = .029 (Adjusted R Squared = .002)
- d. R Squared = .041 (Adjusted R Squared = .014)

7.5 Hypotheses Testing

7.5.1 Hypotheses relating to the direct effects of board quality, insider trading and financial condition on investment decisions

I first ran an ANCOVA to test the three hypotheses which proposed direct effects of the three independent variables of interest on investor decisions. Independent variables for these hypotheses (H1, H4 & H10) are *Board*, *Insider trading*, and *Financial condition* respectively, and the dependent variable is investor decisions. Results of a 2×2×2 (Board×Insider trading×Financial condition) ANCOVA are presented in Table 7.5.1 and descriptive statistics

are presented in Table 7.5.2.³⁶

The effect for *strong board quality* on investors decisions (Mean= 4.82) is higher than the effect for *weak board quality* (Mean= 4.17). Hypothesis 1 (H1) predicts that investors will be more likely to invest in a company when board quality is strong, relative to when board quality is weak. The results indicate that *board quality* has a statistically significant effect on investor decisions ($F=8.707, p < 0.05$). Thus, H1 is supported.

Hypothesis 4 (H4) posits that the presence of favorable insider information will increase the likelihood that availability of insider information will increase the likelihood that investors invest in a company, relative to when insider information is absent. However, *insider trading* is not statistically significant ($F=0.224, p= 0.636$), and thus, H4 is not supported.

The effect of *financial condition* on investing is stronger when *financial condition* is good (Mean= 5.13) than when *financial condition* is bad (Mean= 3.77). Hypothesis 10 (H10) predicts that investors are more likely to invest in a company when the company's financial condition is good than when it is bad. *Financial condition* is statistically significant ($F=42.57, p < 0.05$). Thus, H10 is supported.

³⁶ Cut-off point of p-value is 5%

Table 7.5.1: Tests of Between-Subjects Effects (ANCOVA) regarding hypotheses (H1, H4 & H10)

Dependent Variable: Investment decision

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Hypotheses
Corrected Model	158.248 ^a	8	19.781	6.820	.000	
Intercept	1350.000	1	1350.000	465.442	.000	
Nyears_experience	9.705	1	9.705	3.346	.069	
Board	25.254	1	25.254	8.707	.003	H1
Insider Trading	.650	1	.650	.224	.636	H4
Fin Conditions	123.474	1	123.474	42.570	.001	H10
Board * Insider Trading	.809	1	.809	.279	.598	
Board * Fin Conditions	1.009	1	1.009	.348	.556	
Insider Trading * Fin Conditions	.018	1	.018	.006	.937	
Board * Insider Trading * Fin Conditions	2.830	1	2.830	.976	.324	
Error	722.217	249	2.900			
Total	6132.000	258				
Corrected Total	880.465	257				

a. R Squared = .180 (Adjusted R Squared = .153)

Table 7.5.2: Descriptive analysis of hypotheses (H1, H4 & H10)

Dependent Variable: Investment decision

Independent variables	Treatment condition	Mean	Standard deviation	Number of participants
Board quality	Strong	4.82	1.71	137
	Weak	4.17	1.95	121
Insider trading	Absence	4.60	1.82	124
	Presence	4.43	1.89	134
Financial condition	Good	5.13	1.54	141
	Bad	3.78	1.92	117

7.5.2 Hypotheses relating to the effect of board quality on perceived reliability of financial reports, and joint effect of board quality and insider trading on reliability of financial reports.

I use ANOVA to test the hypotheses regarding the direct impact of *board quality* on perceived reliability of financial reports (H2), and the joint effect of *board quality and insider trading* on the perceived reliability of financial reports (H5). The results are presented in Table 7.5.3.

Table 7.5.3: Tests of Between-Subjects Effects (ANOVA) regarding hypotheses (H2 & H5)

Dependent Variable: Perceived reliability

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Hypotheses
Corrected Model	92.538 ^a	7	13.220	5.327	.000	
Intercept	4607.059	1	4607.059	1856.313	.000	
Board	16.160	1	16.160	6.511	.011	H2
Insider Trading	1.532	1	1.532	.617	.433	
Financial Condition	70.124	1	70.124	28.255	.000	
Board * Insider Trading	.575	1	.575	.232	.631	H5
Board * Financial Condition	2.567	1	2.567	1.034	.310	
Insider Trading * Financial Condition	.013	1	.013	.005	.943	
Board * Insider Trading * Financial Condition	.789	1	.789	.318	.573	
Error	620.458	250	2.482			
Total	5549.000	258				
Corrected Total	712.996	257				

a. R Squared = .130 (Adjusted R Squared = .105)

The mean reliability when the board was strong was higher (4.57) than when the board was weak (4.06) (see Table 7.5.4). Hypothesis 2 (H2) predicts that the perceived reliability of reporting will be higher when board quality is strong, relative to when the board quality is weak. ANOVA results show that *board quality* is statistically significant ($F=6.511$, $p < 0.05$), which indicates that board quality affects investors' perceived reliability of financial reports. Thus, hypothesis (H2) is supported.

Table 7.5.4: Descriptive analysis of hypothesis (H2)

Dependent variable: Perceived reliability

Independent variables	Treatment condition	Mean	Standard deviation	Number of participants
Board quality	Strong	4.57	1.57	137
	Weak	4.06	1.73	121

Hypothesis 5 (H5) predicts that the favourable effects of increasing board quality on perceived reliability of financial reporting will be diminished when insider information is available, relative to when insider information is absent. Results show that interaction effect of *board quality and insider trading* on perceived reliability of financial information is not significant ($F=.232$, $p=0.631$), which indicates that there is no interaction effect of board quality (strong or weak) and insider trading (present or absent) on investors perceived reliability on financial reports. Hence, hypothesis 5 (H5) is not supported.

7.5.3 Hypothesis regarding the impact of perceived reliability of financial reports on investment decisions.

Hypothesis 3 (H3) predicts that when perceived reliability of reporting increases, investors will be more likely to invest in a company. It is expected that a quality board is able to ensure preparation of reliable financial reports, and investors will give more importance to financial reports overseen by a strong board (the reliable source) in making investment decisions. ANOVA results show that perceived reliability is statistically significant ($F=113.04$, $p < 0.05$) (see Table 7.5.5). The results thus support hypothesis (H3) that when investors perceive that the financial report is reliable, investors are more willing to make an investment in the company.

Table 7.5.5: Tests of Between-Subjects Effects regarding hypothesis (H3)

Dependent Variable: Investment decision

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Hypothesis
Corrected Model	269.696 ^a	1	269.696	113.042	.000	
Intercept	113.323	1	113.323	47.499	.000	
Perceived Reliability	269.696	1	269.696	113.042	.000	H3
Error	610.769	256	2.386			
Total	6132.000	258				
Corrected Total	880.465	257				

a. R Squared = .306 (Adjusted R Squared = .304)

7.5.4 Hypotheses relating to the effect of the board quality on trust in board and management, insider trading on investors trust in board's management and interaction effect of board quality and insider trading on investors trust in management

Table 7.5.8 shows that the mean value of trust in the board was 4.15 when the board was strong and it was 3.59 when the board was weak. Similarly, Table 7.5.9 shows that the mean value of trust in management was 4.51 when the board was strong and it was 3.96 when the board was weak. Hypotheses 6a (H6a) and 6b (H6b) state that investors will have more trust in a company's board and management respectively when the board quality is strong, relative to when the board quality is weak. It is posited that when individuals in a position of trust (on the board) appear to be lacking in quality, investors will lose trust in the board or management. I performed separate ANOVAs and found that *board quality* has a statistically significant effect on trust in board and management respectively [(F=8.358, $p<0.05$); (F=7.791, $p<0.05$)] (see Table 7.5.6 & 7.5.7). Therefore, hypotheses 6a and 6b are supported, which indicates that *board quality* (strong or weak) affects investors' trust both in the company's board and in management.

Table 7.5.6: Tests of Between-Subjects Effects regarding hypothesis (H6a)

Dependent Variable: Trust in Board

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Hypotheses
Corrected Model	83.640 ^a	7	11.949	4.750	.000	
Intercept	3717.347	1	3717.347	1477.785	.000	
Board	21.025	1	21.025	8.358	.004	H6a
Financial Condition	47.150	1	47.150	18.744	.000	
Insider Trading	7.929	1	7.929	3.152	.077	
Board * Financial Condition	.202	1	.202	.080	.777	
Board * Insider Trading	2.577	1	2.577	1.024	.312	
Financial Condition * Insider Trading	.429	1	.429	.171	.680	
Board * Financial Condition * Insider Trading	1.716	1	1.716	.682	.410	
Error	628.871	250	2.515			
Total	4604.000	258				
Corrected Total	712.512	257				

a. R Squared = .117 (Adjusted R Squared = .093)

Table 7.5.7: Tests of Between-Subjects Effects regarding hypotheses (H6b, H8 & H9)

Dependent Variable: Trust in Management

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Hypotheses
Corrected Model	74.598 ^a	7	10.657	4.163	.000	
Intercept	4488.980	1	4488.980	1753.437	.000	
Board	19.946	1	19.946	7.791	.006	H6b
Financial Condition	38.545	1	38.545	15.056	.000	
Insider Trading	6.399	1	6.399	2.500	.115	H8
Board * Financial Condition	3.750	1	3.750	1.465	.227	
Board * Insider Trading	.566	1	.566	.221	.639	H9
Financial Condition * Insider Trading	4.481	1	4.481	1.750	.187	
Board * Financial Condition * Insider Trading	.574	1	.574	.224	.636	
Error	640.026	250	2.560			
Total	5379.000	258				
Corrected Total	714.624	257				

a. R Squared = .104 (Adjusted R Squared = .079)

Table 7.5.8: Descriptive analysis of hypothesis (H6a)

Dependent variable: Trust in Board

Independent variables	Treatment condition	Mean	Standard deviation	Number of participants
Board quality	Strong	4.15	1.60	137
	Weak	3.59	1.73	121

Table 7.5.9: Descriptive analysis of hypothesis (H6b)

Dependent variable: Trust in Management

Independent variables	Treatment condition	Mean	Standard deviation	Number of participants
Board quality	Strong	4.51	1.52	137
	Weak	3.96	1.78	121

Insider trading does not have a statistically significant effect on investors' *trust in management* ($F=2.50$, $p=0.115$) (see Table 7.5.7). Thus, hypothesis 8 (H8), which proposes that “Investors trust in management will be lower when some investors have access to insider information, relative to when insider information is absent” is not supported.

Similarly, the interaction effect of board and insider trading (*board * Insider trading*) on trust in management was not significant ($F=0.221$, $p=0.639$) (see Table- 7.5.7), which indicates that there is no interaction effect of board quality (strong or weak) and insider trading (present or absent) on investors' trust in management.

7.5.5 Hypotheses relating to the effect of investors' trust in the board and management on investment decisions

Hypothesis 7a (H7a) predicts that when trust in a board increases, investors will be more likely to invest in a company and, similarly, hypothesis 7b (H7b) predicts that when trust in the management increases, investors will be more likely to invest in a company. I run two separate ANOVAs, which show that both *trust in the board* and *trust in management* have statistically

significant effects on *investment decisions* [(F=80.47, $p < 0.05$); (F=79.29, $p < 0.05$)] respectively (see Tables 7.5.10 & 7.5.11). Thus, these two hypotheses are supported.

Table 7.5.10: Tests of Between-Subjects Effects regarding hypothesis (H7a)

Dependent Variable: Investment decision

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Hypothesis
Corrected Model	210.578 ^a	1	210.578	80.473	.000	
Intercept	230.040	1	230.040	87.911	.000	
Trust in Board	210.578	1	210.578	80.473	.000	H7a
Error	669.887	256	2.617			
Total	6132.000	258				
Corrected Total	880.465	257				

a. R Squared = .239 (Adjusted R Squared = .236)

Table 7.5.11: Tests of Between-Subjects Effects (ANOVA) regarding hypothesis (H7b)

Dependent Variable: Investment decision

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Hypothesis
Corrected Model	208.219 ^a	1	208.219	79.293	.000	
Intercept	168.394	1	168.394	64.127	.000	
Trust in Management	208.219	1	208.219	79.293	.000	H7b
Error	672.246	256	2.626			
Total	6132.000	258				
Corrected Total	880.465	257				

a. R Squared = .236 (Adjusted R Squared = .234)

7.5.6 Hypothesis relating to the effect of perceived reliability of financial reports on investors' trust

Hypothesis 11 (H11) proposes that when perceived reliability of the financial reporting of a company increases (decreases) investor trust in the board and management will also increase (decrease). Here, the dependent variable is investors' trust that represents investors trust in both board and management because trust builds through the overall governance structure i.e. board and management (Barney & Hansen, 1994). Investor trust is measured from the responses asking

the participants (1) if they trust ABC Company's board to protect the interest of shareholders, and (2) if they trust the management of ABC Company to accurately represent the financial position of the firm.

ANOVA results (Table 7.5.12) show that the perceived reliability of financial reports has a statistically significant effect on trust ($F=180.839, p < 0.05$). This results support the hypothesis that when investors perceived reliability of financial reports of the company increases (decreases) their trust in the board and management increases (decreases).

Table 7.5.12: Tests of Between-Subjects Effects (ANOVA) regarding hypothesis (H11)

Dependent Variable: Trust in board and management

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Hypothesis
Corrected Model	946.445 ^a	1	946.445	180.839	.000	
Intercept	328.422	1	328.422	62.752	.000	
Perceived reliability	946.445	1	946.445	180.839	.000	H11
Error	1339.807	256	5.234			
Total	19363.000	258				
Corrected Total	2286.252	257				

a. R Squared = .414 (Adjusted R Squared = .412)

7.6. Tests of Mediation Effects

This study also posits the following mediation effects:

- i. Trust in management will mediate the relationship between the quality of the board and decisions to invest.
- ii. Perceived reliability will mediate the relationship between the quality of the board and decisions to invest.
- iii. Trust will mediate the relationship between financial condition and decisions to invest.

- iv. Perceived reliability will mediate the relationship between financial condition and decisions to invest.
- v. Trust in management and perceived reliability will mediate the relationship between the existence of insider trading and decisions to invest.

To test these predictions I performed a series of regressions following the procedures outlined by Baron and Kenny (1986), which is widely applied for mediation analysis. They suggest a four-step approach consisting of three simple regressions and one multiple regression analysis (see Table 7.5.13 and Figure 8).

Table 7.5.13: Baron's Four Steps Model for Mediation analyses

Steps	Regression analysis	Effect
Step 1	Conduct a simple regression analysis with X predicting Y to test for path (c) alone, $Y = \alpha_1 + \beta_1 X + e$.	Total effect Path (c): β_1
Step 2	Conduct a simple regression analysis with X predicting M to test for path (a) alone, $M = \alpha_2 + \beta_2 X + e$.	Direct effect Path (a): β_2
Step 3	Conduct a simple regression analysis with M predicting Y to test for path (b) alone, $Y = \alpha_3 + \beta_3 M + e$.	Direct effect Path (b): β_3
Step 4	Conduct a multiple regression analysis with X and M predicting Y to test for path (c') alone, $Y = \alpha_4 + \beta_4 X + \beta_5 M + e$.	Direct effect Path (c'): β_4
Indirect or Mediated Effect		$\beta_1 - \beta_4$

where $X =$ the independent variable

$Y =$ the dependent variable

$M =$ the mediating variable

$\alpha_1, \alpha_2, \alpha_3$ and $\alpha_4 =$ Intercept parameters (regression coefficient)

$\beta_1 =$ Regression coefficient when X is independent and Y is dependent variable
that is, Total effect

$\beta_2 =$ Regression coefficient when X is independent and M is dependent
variable that is, Direct effect

$\beta_3 =$ Regression coefficient when M is independent and Y is dependent
variable that is, Direct effect

$\beta_4 =$ Regression coefficient of the variable X when M is Mediating variable
and Y is the criterion variable that is Direct effect

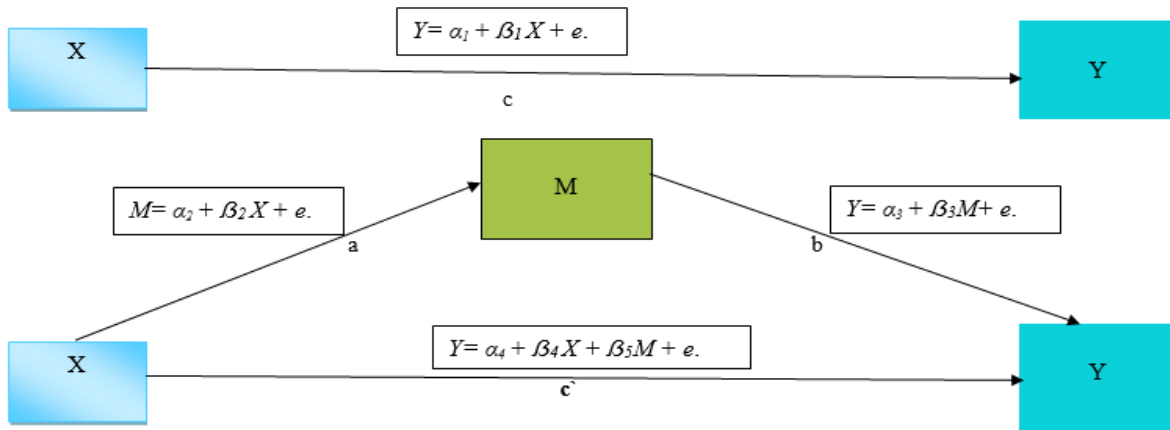
$\beta_5 =$ Regression coefficient of the mediating variable M

If one or more of the first 3 steps does not show significant relationships between the variables (i.e. X on Y, X on M and M on Y) , there is possibly no mediation effect (Baron & Kenny, 1986).

If there are significant relationships it may be concluded that there may be some form of mediation effect of M (β_2) on the dependent variable Y. Where the relationships are significant, a full mediation effect is indicated in step 4 if the coefficient β_4 on the variable X is not significant after controlling for M. If β_4 is still significant after controlling for M in step 4, this indicates that M has a partial mediation effect.

The above four regressions models are presented in Figure 8.

Figure 8: Regressions Model for Mediation Analyses



7.6.1 Trust in management as a mediator between board quality and investment decisions

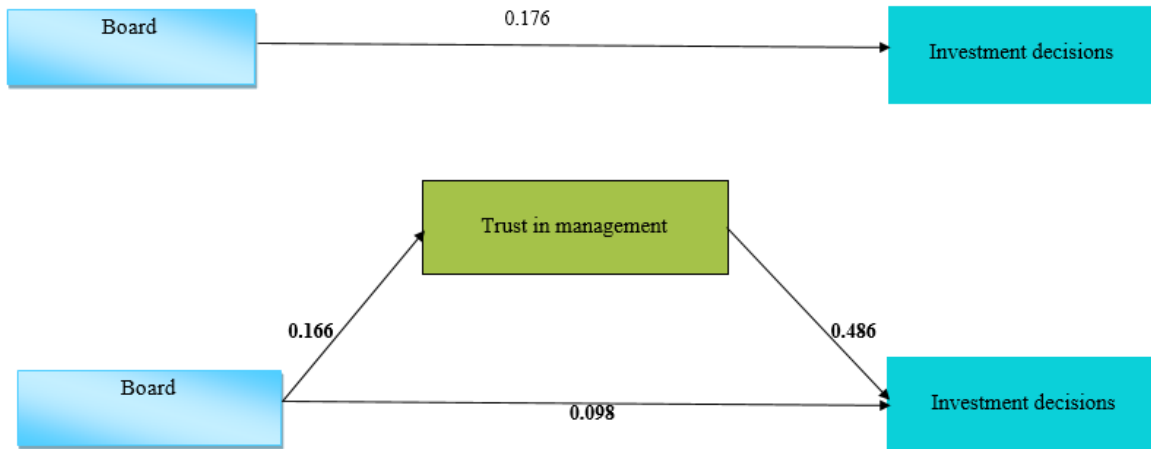
The results in Table 7.5.14 show that (1) *board quality* significantly accounts for variation in investment decisions ($\beta_1=0.176$, $t=2.864$, $p<0.05$); (2) *board quality* significantly accounts for variation in trust in management ($\beta_2=0.166$, $t=2.687$, $p<0.05$); (3) *trust in management* significantly accounts for variation in investment decisions ($\beta_3=0.486$, $t=8.905$, $p < 0.05$); and (4) the effect of *board quality* on investment decisions is no longer significant at 5% level when controlling for *trust in management* ($\beta_4=0.098$, $t=1.784$, $p=0.076$). However, the effect of *trust in management* when controlling for *board quality* is significant ($\beta_5=0.470$, $t=8.524$, $p < 0.05$). These results are consistent with the total observed effect of board quality on investment decisions being fully due to the mediating effect of *trust in management* ($\beta_1-\beta_4 = 0.078$, $p<0.01$).³⁷ The regression models of these analysis are presented in Figure 9.

³⁷ To test the significance level of the indirect or mediating effect I ran a structural equation model (SEM). The results can also be obtained from a SEM analysis which also provides the significance value for the mediating effect (in this case, $p = 0.004$).

Table 7.5.14: Analysis of Trust in management as a mediator between board quality and investment decisions

Steps	Regression analysis	Effect	t- statistics	<i>P-value</i>
Step 1	<i>InvestmentDecision</i> = $\alpha_1 + \beta_1 BoardQuality + e.$	Total effect: $\beta_1 = 0.176$	2.864	<i>0.005</i>
Step 2	<i>TrustManagement</i> = $\alpha_2 + \beta_2 BoardQuality + e.$	Direct effect: $\beta_2 = 0.166$	2.687	<i>0.008</i>
Step 3	<i>InvestmentDecision</i> = $\alpha_3 + \beta_3 TrustManagement + e.$	Direct effect: $\beta_3 = 0.486$	8.905	<i>0.000</i>
Step 4	<i>InvestmentDecision</i> = $\alpha_4 + \beta_4 BoardQuality + \beta_5 TrustManagement + e.$	Direct effect: $\beta_4 = 0.098$	1.784	<i>0.076</i>
		Direct effect: $\beta_5 = 0.470$	8.524	<i>0.000</i>
Indirect or Mediated effect $\beta_1 - \beta_4 = \mathbf{0.078}$				<i>0.004</i>

Figure 9: Regressions Model to analyse the mediation effect of trust in management between the board and investment decisions



7.6.2 Perceived reliability as a mediator between board quality and investment decisions.

The results in Table 7.5.15 show that (1) *board quality* significantly accounts for variation in investment decisions ($\beta_1=0.176$, $t=2.864$, $p<0.05$); (2) *board quality* significantly accounts for

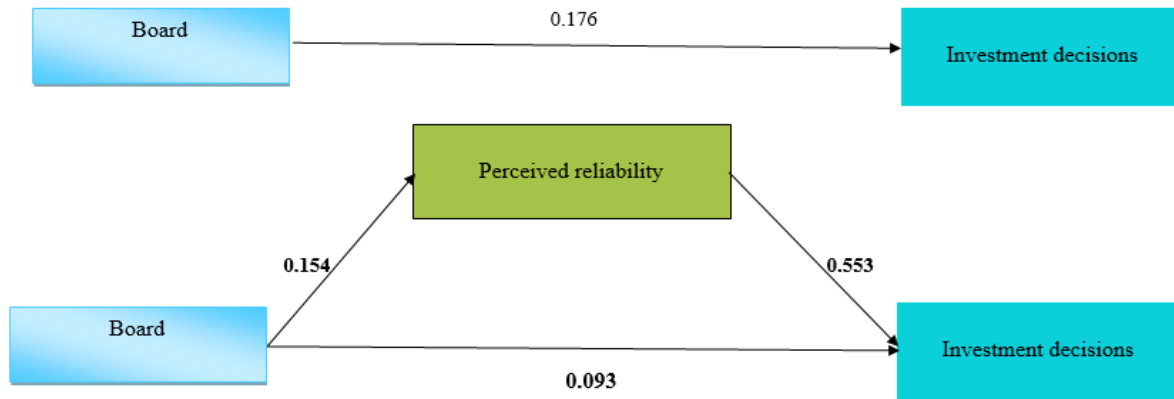
variation in perceived reliability of financial reports ($\beta_2=0.154$, $t=2.486$, $p<0.05$); (3) perceived reliability significantly accounts for variation in investment decisions ($\beta_3=0.553$, $t=10.632$, $p<0.05$); and (4) the effect of *board quality* on investment decisions is no longer significant when controlling for *perceived reliability* ($\beta_4=0.093$, $t=1.781$, $p=0.076$). However, the effect of *perceived reliability* on investment decisions when controlling for *board quality* is significant ($\beta_5=0.539$, $t=10.277$, $p<0.05$). These results are consistent with the total observed effect of board quality on investment decisions being fully due to the mediation effect of *perceived reliability* ($\beta_1-\beta_4 = 0.083$, $p<0.01$).³⁸ The regression models of these analysis are presented in Figure 10.

Table 7.5.15: Analysis of Perceived Reliability as a mediator between board quality and investment decisions.

Steps	Regression analysis	Effect	t- statistics	P-value
Step 1	$InvestmentDecision = \alpha_1 + \beta_1 BoardQuality + e.$	Total effect: $\beta_1 = 0.176$	2.864	0.005
Step 2	$PerceivedReliability = \alpha_2 + \beta_2 BoardQuality + e.$	Direct effect: $\beta_2 = 0.154$	2.486	0.014
Step 3	$InvestmentDecision = \alpha_3 + \beta_3 PerceivedReliability + e.$	Direct effect: $\beta_3 = 0.553$	10.632	0.000
Step 4	$InvestmentDecision = \alpha_4 + \beta_4 BoardQuality + \beta_5 PerceivedReliability + e.$	Direct effect: $\beta_4 = 0.093$	1.781	0.076
		Direct effect: $\beta_5 = 0.539$	10.277	0.000
Indirect or Mediated effect $\beta_1 - \beta_4 = \mathbf{0.083}$				0.004

³⁸ The results can also be obtained from a SEM analysis which provides the significance value for the mediating effect (in this case, $p = 0.004$).

Figure 10: Regressions Model to analyse the mediation effect of perceived reliability as a mediator between board quality and investment decisions.



7.6.3 Trust as a mediator between financial condition and investment decisions.

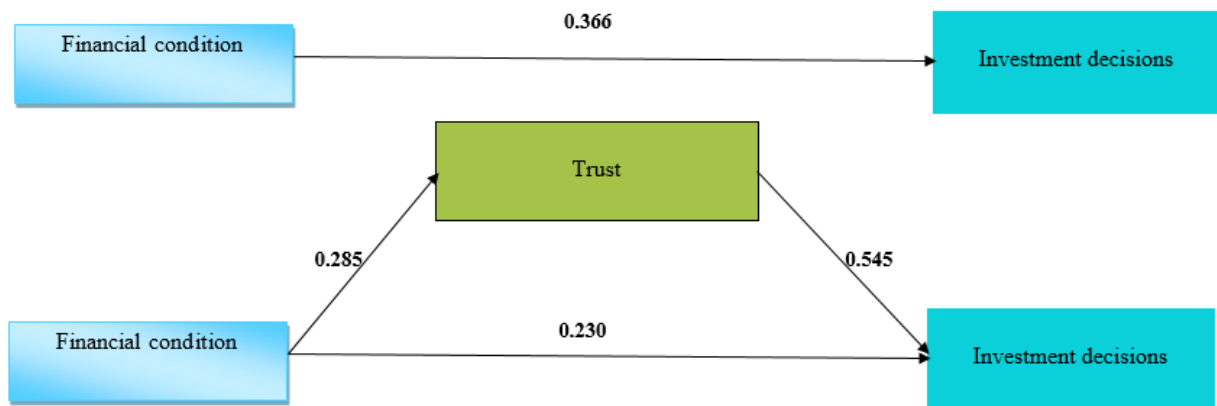
The regression results in Table 7.5.16 show that (1) *financial condition* significantly accounts for variation in investment decisions ($\beta_1=0.366$, $t=6.294$, $p<0.05$); (2) *financial condition* significantly accounts for variation in trust in the board and management ($\beta_2=0.285$, $t=4.753$, $p<0.05$); (3) *trust in board and management* does significantly account for variation in investment decisions ($\beta_3=0.545$, $t=10.397$, $p<0.05$); and (4) the effect of *financial condition* on investment decisions when controlling for trust ($\beta_4=0.230$, $t=4.342$, $p<0.05$) and the effect of *trust* on investment decisions when controlling for financial condition is also significant ($\beta_5=0.480$, $t=9.072$, $p<0.05$). These results are consistent with the observed total effect of *financial condition* on investment decisions being partially due to a direct effect (β_4) and partially mediating effect of *trust* ($\beta_1-\beta_4 = 0.136$, $p<0.01$).³⁹ The regression models for these analyses are presented in Figure 7.5.16.

³⁹ The results can also be obtained from a SEM analysis which provides the significance value for the mediating effect (in this case, $p = 0.003$).

Table 7.5.16: Analysis of Trust as a mediator between financial condition and investment decisions

Steps	Regression analysis	Effect	t-statistics	P-value
Step 1	$InvestmentDecision = \alpha_1 + \beta_1 FinancialCondition + e.$	Total effect: $\beta_1 = 0.366$	6.294	0.000
Step 2	$Trust = \alpha_2 + \beta_2 FinancialCondition + e.$	Direct effect: $\beta_2 = 0.285$	4.753	0.000
Step 3	$InvestmentDecision = \alpha_3 + \beta_3 Trust + e.$	Direct effect: $\beta_3 = 0.545$	10.397	0.000
Step 4	$InvestmentDecision = \alpha_4 + \beta_4 FinancialCondition + \beta_5 Trust + e.$	Direct effect: $\beta_4 = 0.230$	4.342	0.000
		Direct effect: $\beta_5 = 0.480$	9.072	0.000
Indirect or Mediated effect $\beta_1 - \beta_4 = \mathbf{0.136}$				0.003

Figure 11: Regressions Model to analyse the mediation effect of trust as a mediator between financial condition and investment decisions.



7.6.4 Perceived reliability of the financial reports as a mediator between financial condition and investment decisions.

The regression results in Table 7.5.17 show that (1) *financial condition* does significantly account for variation in investment decisions ($\beta_1=0.366$, $t=6.294$, $p<0.05$); (2) *financial*

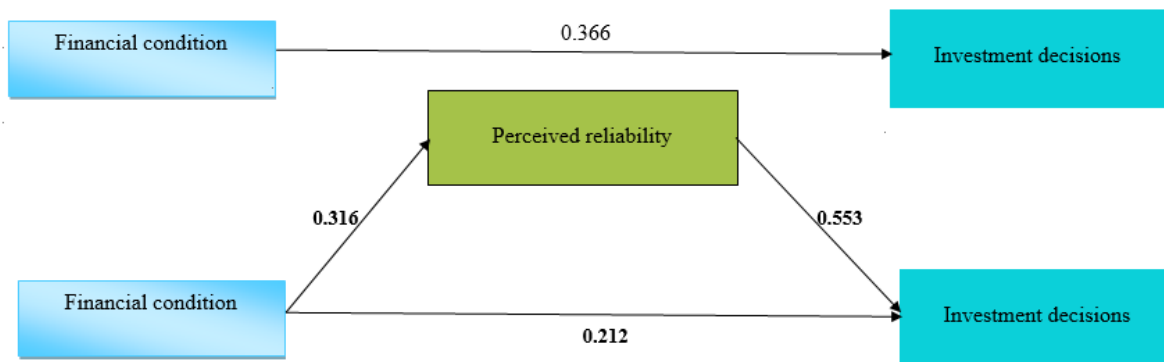
condition does significantly account for variation in perceived reliability of financial reports ($\beta_2=0.316$, $t=5.336$, $p<0.05$); (3) *perceived reliability* of financial reports does significantly account for variation in investment decisions ($\beta_3=0.553$, $t=10.632$, $p<0.05$); and (4) the effect of *financial condition* on investment decisions when controlling for *perceived reliability* of financial reports ($\beta_4=0.212$, $t=3.978$, $p<0.05$) and the effect of *perceived reliability* on investment decisions when controlling for *financial condition* is also significant ($\beta_5=0.486$, $t=9.116$, $p<0.05$). These results are consistent with the observed total effect of *financial condition* on investment decisions being partly due to a direct effect (β_4) and partly due to a mediating effect of *perceived reliability* ($\beta_1-\beta_4 = 0.154$, $P<0.01$)⁴⁰. The regression models of these analyses are presented in Figure 12.

Table 7.5.17: Analysis of Perceived Reliability as a mediator between financial condition and investment decisions

Steps	Regression analysis	Effect	t-statistics	<i>P-value</i>
Step 1	<i>InvestmentDecision</i> = $\alpha_1 + \beta_1$ <i>FinancialCondition</i> + <i>e.</i>	Total effect: $\beta_1 = 0.366$	6.294	<i>0.000</i>
Step 2	<i>PerceivedReliability</i> = $\alpha_2 + \beta_2$ <i>FinancialCondition</i> + <i>e.</i>	Direct effect: $\beta_2 = 0.316$	5.336	<i>0.000</i>
Step 3	<i>InvestmentDecision</i> = $\alpha_3 + \beta_3$ <i>PerceivedReliability</i> + <i>e.</i>	Direct effect: $\beta_3 = 0.553$	10.632	<i>0.000</i>
Step 4	<i>InvestmentDecision</i> = $\alpha_4 + \beta_4$ <i>FinancialCondition</i> + β_5 <i>PerceivedReliability</i> + <i>e.</i>	Direct effect: $\beta_4 = 0.212$	3.978	<i>0.000</i>
		Direct effect: $\beta_5 = 0.486$	9.116	<i>0.000</i>
Indirect or Mediated effect β_1 - $\beta_4 = 0.154$				<i>0.002</i>

⁴⁰ The results can also be obtained from a SEM analysis which provides the significance value for the mediating effect (in this case, $p = 0.002$).

Figure 12: Regressions Model to analyse the mediation effect of perceived reliability of the financial reports as a mediator between financial condition and investment decisions.



7.6.5 Trust in management and perceived reliability as mediators between insider trading and investment decisions

The analysis of hypothesis 4 (H4), as reported in section 7.5.1 above, shows that *insider trading* does not have a significant effect on investment decisions ($F=.224$, $p= 0.636$). Therefore, it indicates that *trust in management* and *perceived reliability* do not have a mediating effect.

7.7 Debriefing Analysis

There were five debriefing questions which were asked to aid in understanding the participants' responses to the main questionnaire. A summary of descriptive statistics is presented in Table 7.5.18. The first debriefing item asked: "To what extent did you consider the strength of the board when deciding whether or not to invest in ABC's shares?" (on a 7-point itemized interval scale anchored by 'very little' (1), 'average' (4) and 'a great amount' (7)). The mean (standard deviation) value of the response is 4.16 (1.74) which indicates that on average the investors give average value to the strength of the board in making investment decisions.

Table 7.5.18: Descriptive analyses of Responses to the Debriefing Questions

	<u>Mean</u>	<u>Std. Deviation</u>
1. To what extent did you consider the strength of the board when deciding whether or not to invest in ABC's shares? ('1' = very little, 4= average, 7= a great amount).	4.16	1.74
2. To what extent did you consider the company's financial condition when deciding whether or not to invest in ABC's shares? ('1' = very little, 4= a moderate amount, 7= a great amount).	4.66	1.78
3. In general, to what extent do you believe that board members influence the future share price of a firm? ('1' = very little, 4=a moderate amount, 7= a great amount).	4.43	1.80
4. In general, if friends and relatives of management are able to acquire insider information, what does this indicate about governance quality? ('1' = governance is poor, 4= governance is average, 7= governance is very strong).	2.33	1.73
5. In general, what effect does insider trading of a firm's shares have on the long-term value of the firm? ('1' = very negative effect, 4= no effect, 7= very positive effect).	2.58	1.87

The second question asked the participants to what extent they considered financial condition in deciding to invest in ABC's shares ('1' = very little, '4' = a moderate amount, and '7' = a great amount). The mean (standard deviation) is 4.66 (1.78) which indicates that the participants moderately considered the financial conditions to invest in ABC's shares. This also implies that financial reports help investors make investment decisions. The third item asked the participants the following: In general, to what extent do you believe that board members influence the future share price of a firm? ('1' = very little, '4' = a moderate amount and '7' = a great amount). The mean (standard deviation) is 4.43 (1.80) which indicates that participants believed that board members have moderate influence on the share price of a firm. The fourth debriefing questions

was: In general, if friends and relatives of management are able to acquire insider information, what does this indicate about governance quality? ('1' = governance is poor, '4' = governance is average, and '7' = governance is strong). The mean (standard deviation) is 2.33 (1.73). The results suggest that the participants perceived governance quality to be poor if friends and relatives of management are able to acquire inside information. The final item stated: In general, what effect does insider trading of a firm's shares have on the long-term value of the firm? ('1' = very negative effect and '7' = very positive effect). The mean (standard deviation) is 2.58 (1.87) which indicates that participants perceive that insider trading of a company's shares has some negative effect on the long term value of the company.

Overall, the results of debriefing questions indicate that participants perceive that the theoretical constructs I manipulate have the capacity to influence the dependent constructs of interest, which is consistent with the results of hypotheses tests reported earlier. However, in contrast to the results reported in the tests of the hypotheses on insider trading, the debriefing result indicates that insider trading has some negative impact on the long term value of the firm.

7.8 Structural Equation Model (SEM) analysis

Earlier I tested for direct effects and mediation effects with individual ANCOVA and ANOVA models, as reported in previous sections. The results supported all hypotheses, with the exception of hypotheses regarding the effects of insider trading. In order to examine the effects of interest in a more holistic model, I used SEM analysis to estimate the full research model. Figure 13 and Table 7.5.19 display the model and results of estimation. A chi-square of 3.2 (1 degree of freedom) and Root Mean Square Error of Approximation (RMSEA) of 0.093 indicate that the model provides a good fit to the data (Kline, 2015).

The model yields results consistent with all of the individual tests previously performed including mediation tests, with one exception. The effect of board quality on investment decision is not statistically significant ($p > 0.05$) in the full structural model. This is consistent with the findings that the impact of board quality on investor decisions is fully mediated by perceived reliability of financial reports and trust in management. The combined mediation effects appear to eliminate the direct effect of board quality on investment decisions.

Figure 13: Structural Equation Model; ** Significant at $\alpha < 0.05$ (two tail)

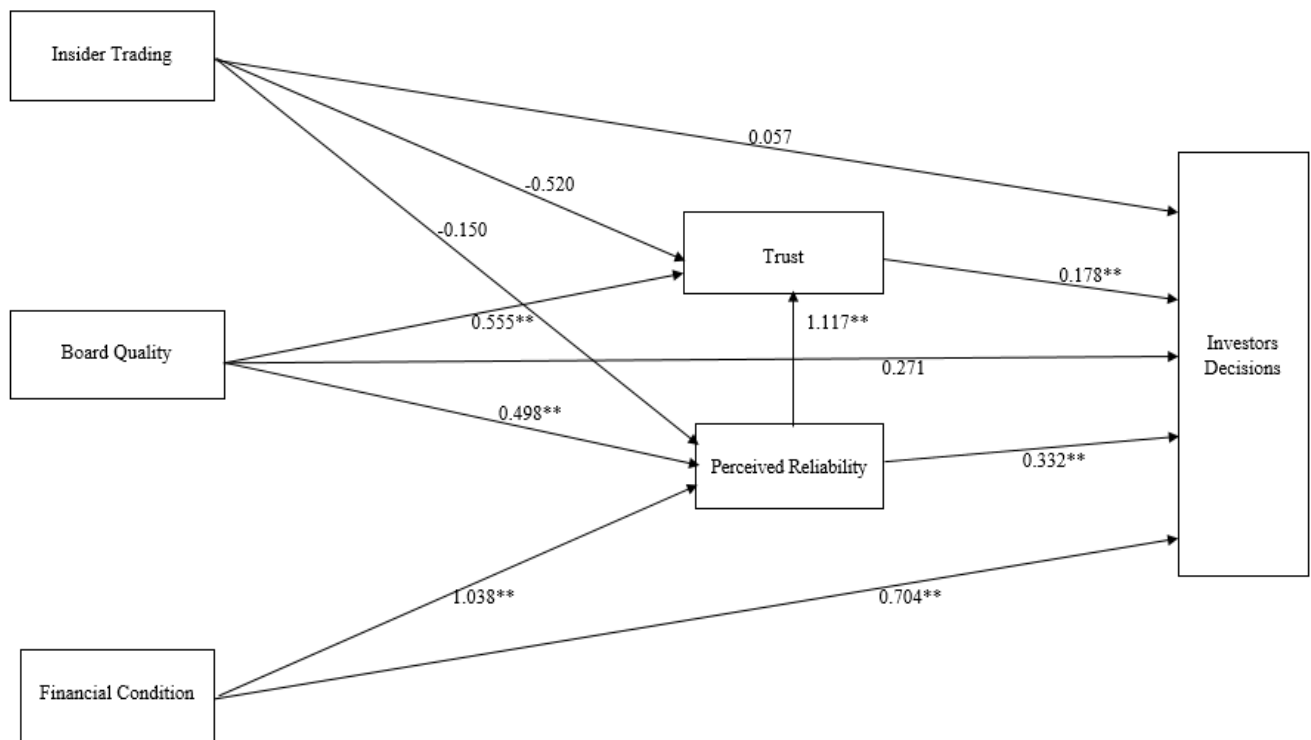


Table 7.5.19: Regression Weights (outcome of Structural Equation Model analyses)

Dependent variable	Independent variable	Estimate	S.E.	C.R.	P Level
Perceived Reliability	<--- Board	.498	.195	2.557	**
Perceived Reliability	<--- Insider Trading	-.150	.195	-.771	.441
Perceived Reliability	<--- Financial Condition	1.038	.195	5.310	**
Trust	<--- Board	.555	.285	1.950	**
Trust	<--- Insider Trading	-.520	.281	-1.849	.064
Trust	<--- Perceived Reliability	1.117	.086	13.052	**
Investment Decision	<--- Financial Condition	.704	.189	3.727	**
Investment Decision	<--- Board	.271	.182	1.486	.137
Investment Decision	<--- Insider Trading	.057	.180	.318	.750
Investment Decision	<--- Perceived Reliability	.332	.072	4.586	**
Investment Decision	<--- Trust	.178	.040	4.502	**

CHAPTER EIGHT: DISCUSSION

8.1 Introduction

The new corporate governance guidelines in Bangladesh reflect the importance of improving the independence and effectiveness of the board. To improve board quality and to promote effective corporate governance the guidelines require independent directors to have certain qualifications and experience and separation of the roles and responsibilities of the chairman and CEO. The primary objective of effective governance is to improve company performance and to protect the interests of investors (Fama & Jensen, 1983a). Board quality is assumed to be an important factor for investors in making investment decisions in a company. However, board quality may suffer where the independent directors lack relevant business experience and when there is not true separation of responsibilities of the chairman and CEO. Insider trading and poor financial condition may undermine the impact of good corporate governance on investor decision making. In this complex situation, I examine the effects of corporate governance guidelines on investor decisions, and also whether investors attribute value to corporate governance and financial condition when making investment decisions in an emerging market where insider trading is common. In addition, I examine whether investor perception of the reliability of financial statements and their level of trust in the board and management mediate the effect of board quality, insider trading and financial condition on investment decisions. I also examine if investor perception of the reliability of financial information impacts their level of trust in the board and management.

This study, using real investors as subjects, tests whether the new corporate governance guidelines have been useful for investors in their decision making. The results of this study indicate that investors rate the quality of corporate governance in making investment decisions as it increases investor perceived reliability of financial reports and also their level

of trust in board and management. However, the impact of board quality on investment decisions is fully mediated by investors' perceived reliability of financial reports and trust in board and management.

The results indicate that investors give high importance to the company's financial condition in making decisions irrespective of the presence of insider trading and (low) board quality. However, the results also indicate that the effect of financial condition is partially mediated by perceived reliability of financial reports and investor trust in board and management. The results show that insider trading does not affect investor decisions, and therefore, investor trust and perceived reliability of financial reports do not have mediating effect on insider trading. The results also suggest that trust in board and management increases when perceived reliability of financial reports increases.

The findings of this study are discussed further in the following sections. This chapter is organized as follows: Section 8.2 discusses the impact of board quality on investor decisions, section 8.3 discusses the impact of insider trading on investor decisions, section 8.4 discusses the effect of financial condition on investor decisions, section 8.5 provides a discussion on the impact of perceived reliability of financial reports and trust in board and management on investor decisions, and section 8.6 discusses the additional analyses performed, viz, debriefing and SEM analyses. Finally, section 8.7 summarizes the chapter.

8.2 Impact of board quality on investment decisions

Prior literature suggests that board quality, as indicated by the relevant business experience of the independent directors, has a positive relationship with firm value (Kang, 2013). Similarly, true separation of the roles of the chairman and CEO can enhance company performance and

value (Simpson & Gleason, 1999). High board quality signals likelihood of better performance and higher market value, thus helping investors to make decisions (Bergh & Gibbons, 2011; Chiang & Chia, 2005). Consistent with these expectations, the results of the study show that board quality has a significant positive impact on investor decisions (Sharma, 2006). The results are consistent with the argument that good quality corporate governance can reduce conflict between the agent (management) and principal (investors) of a company, prevent managers from misappropriation of assets and improve company performance (Fama & Jensen, 1983b), and thus encourage investors to make investment in that company. However, the results suggest that the impact of board quality on investor decisions is not simple direct. Rather the impact is mediated by perceived reliability of financial reports and trust in management.

8.3 Impact of insider trading on investor decisions, investor trust in management, and perceived reliability of financial reports

The results show that the impact of insider trading on investor decisions is not statistically significant. This is contrary to the findings of Giannetti and Simonov (2006) that investors who have relationships with company insiders and have access to private information are more likely to invest in that company. The results are also inconsistent with the findings of previous studies which showed that investors earn abnormal profit using private information (Keown & Pinkerton, 1981; Lakonishok & Lee, 2001; Penman, 1982; Seyhun, 1986). The results also show that insider trading does not have a significant effect on investor trust in management. The results are surprising but there are a number of possible explanations. Investors may simply pay no attention to inside information in a securities market such as exists in Bangladesh because insider trading is perceived to be rife. They probably believe that their success in investment is always tempered by the greater success of insiders and therefore disclosure of a particular form/instance of inside information will not sway their judgment. Furthermore they may believe that other

investors might have the same information and, in any case, it may not be reliable. Another plausible explanation for this result is that contrarian investors behave anomalously in a highly volatile market.⁴¹ They refuse to follow their own information and make decisions irrationally. However, the results possibly indicate that further investigation is required to examine investor reactions to insider trading in an emerging market.

The study also finds that the interaction effect of insider trading and board quality is not significant to the perceived reliability of financial reports. This suggests that insider information does not diminish the favorable effects of increasing board quality on perceived reliability of financial reports. Similarly, the interaction effect of board quality and insider trading on investor trust in management is not significant.

8.4 Impact of financial condition on investor decisions

The results demonstrate that the financial condition of the company has a significant effect on investor decisions. Investors appear to expect that the stock price will increase in the future if the current financial condition is favorable. The results are consistent with the findings of prior studies (Al-Ajmi, 2009; Lawrence & Kercksmar, 1999; Penman & Sougiannis, 1998). The result is partly a direct effect and partly a mediated effect of perceived reliability of financial reports. The mediation by perceived reliability supports one of the important objectives of FASB (2010a) and IASB (2010) which emphasised reliable financial information to reflect the true financial condition of the company, thus helping investors make decisions.

⁴¹ Contrarian behaviour is significant when the market is highly volatile. Contrarian investors act against their own private information (Azofra-Palenzuela, Fernández-Alonso, and Vallelado, 2006). The Bangladesh capital market is identified as highly volatile (Chowdhury, Mollik, & Akhter, 2006).

8.5 Impact of reliability of financial reports, and trust in board and management on investor decisions

The board is responsible for providing effective monitoring of management in preparing financial reports. A higher quality board can better ensure fair and transparent financial statements by reducing material errors and enhancing the reliability of corporate financial information, thus helping investors make sound investment decisions. Consistent with these views, the results of this study show that board quality has a significant positive impact on the perceived reliability of financial reports. The results show that perceived reliability of financial reports is significant to investor decisions indicating that investors are more likely to invest in a company when they perceive that the financial reports are reliable. These results are consistent with the previous literature that good corporate governance signals the quality of financial reporting, and reduces conflicts of interest and information asymmetry which assists investors in making their investment favorable decisions (Hirst, Koonce, & Simko, 1995; Hodge, 2003; Holder-Webb & Sharma, 2010; Maines & Wahlen, 2006; Zhang & Wiersema, 2009). The study further reveals that perceived reliability of financial reports has a significant effect on investor trust in the board and management. Consistent with these results the study finds that investor trust in the board and management has a significant effect on investor decisions. The results further confirm the views of prior studies that trust influences investor judgment in making investment decisions (Elliott, Hodge, & Sedor, 2011).

This study finds that perceived reliability of financial reports and investor trust in management fully mediate the influence of board quality on investment decision and partially mediates the influence of financial condition on investment decisions. However, the results suggest that insider trading is not significant to investment decisions and therefore perceived reliability of financial reports and investor trust in board and management do not have a mediating effect on insider trading and investment decisions.

8.6 Additional Analyses

The study also analysed the debriefing items addressed in five general questions which the participants answered after completing the main experimental questionnaire. The results reveal that (1) investors give average value to the strength of the board in making decisions, (2) the financial condition of the company is a key determinant in making investment decisions, (3) investors believe that the quality of the board influences the share price of a company, (4) they perceive that governance quality is poor when friends and relatives of management are able to acquire inside information from management and (5) insider trading has an some negative effect on the long term value of the company. These results confirm that the independent constructs considered in this study, other than insider trading, have the capacity to influence the dependent constructs of interest.

Finally, the study employs SEM to analyze the full research model to see the effects of independent variables. The model produces results consistent with all of the individual tests of hypotheses and mediation tests. It is important to note that the results reveal that the model provides a good fit to the experimental data.

8.7 Summary

This chapter summarizes the results of the descriptive analysis of the experimental data and analyses using MANOVA, ANCOVA, ANOVA, regression and SEM. The analyses provide evidence on the direct impacts on investor decisions of board quality, insider trading and financial condition and also the relationship between board quality, and perceived reliability and trust with investor decisions. Regression analyses provided evidence of the mediating effect of reliability and trust on the effect of board quality and financial condition on investor decisions. SEM analysis shows the simultaneous effect of the independent variables on investor decisions and the model provides a good fit to the experimental data.

CHAPTER NINE: CONCLUSION

9.1 Introduction

The primary aim of this study was to examine the association between the quality of corporate governance and investor decisions under varying levels of insider trading and financial condition. The study also examines whether investors' perception of the perceived reliability of financial reports and trust in the board and management mediate the effects of board quality, financial condition, and insider trading on investor decisions. This chapter is organized as follows: section 9.2 describes the main contributions of the study and the opportunities for future research, and section 9.3 discusses the limitations of the study.

9.2 Contributions and Future Research

Prior literature on the relevance of corporate governance mechanisms shows that the strength of corporate governance influences expected firm performance and thus the market value of a company. This study contributes to understanding of the role of board of director quality by examining (1) the effects of board quality at different levels of insider trading and financial condition of the company and (2) the mediating roles of perceived reliability and trust in board and management. The study confirms that board quality matters to investment decisions. More important, the results indicate that the relationship between board quality and investor decisions is fully mediated by perceived reliability of financial reports and investor trust in management and the board. Within the context of the experiment, insider trading is not relevant to investment decision making in the Bangladesh securities markets. As expected, financial condition does influence investors' decisions, and the influence of financial condition is partially mediated by perceived reliability and trust in board and management.

The research involved an experimental study of actual investors in an emerging economy to examine the effects of governance quality on investor decisions, and to my knowledge, this is the first such experimental study on the Bangladesh capital market. The findings of this study should be useful to regulators in understanding the complexities of implementing corporate governance guidelines.

The theoretical model and instrument will also be useful for further studies in other developed and developing countries, particularly where insider trading is regarded by investors as being a concern and to investigate the impact of other corporate governance factors on investors and financial analysts. The research results strongly suggest that future research on the effects of governance on investors should include investor perceptions of financial statement reliability and investor trust in board and management. Furthermore, the research has practical implications such as the potential for good governance mechanisms to increase investors' trust in management and the board, which are both critical to firms.

The study yields a number of opportunities for further research. In particular, the role of insider trading deserves additional investigation. The finding that the level of insider trading did not influence investors' decisions to invest in a firm was contrary to expectations, and further research focusing on insider trading may help to explain the result obtained. Of particular interest is whether investors in markets where insider trading is not common or in highly developed markets react differently to insider trading relative to investors in Bangladesh. An additional issue concerns compliance with guidelines on corporate governance in terms of compliance in substance and compliance in form only and how investors might use cues in the investment environment to distinguish between these forms. For example, in respect of separation of the chairman and CEO roles do investors also look for clues as to the actual relationship between the individuals holding these positions to determine compliance in substance or merely form.

9.3 Limitations

This study is subject to a number of limitations. First, experimental studies have a common limitation on generalizability. This study is focused on the emerging Bangladesh market, where the corporate governance framework is underdeveloped, and trading on inside information is common. The results may not be applicable to other countries due to different economic and regulatory environments, in particular the relative prevalence of insider trading.

Second, although actual investors completed the experimental task, the task was a hypothetical case. Like all laboratory experiments, the task lacks some of the complexities of real-world decisions such as the differences in investment decision making processes of individual investors when investing their own or their client's money (Guthrie, 2008). However, the simplicity of the case materials and random assignment of treatments to participants ensures high levels of internal validity, which is essential to studying the causal effects of governance factors.

Finally, the study considers only two board attributes, the relevant experience of independent directors and the separation of the roles of the chairman and CEO, to investigate the effects of board quality. There are many other factors that influence board and governance quality, the effects of which may differ from the effects of the two factors considered in this study. It is possible that other corporate governance mechanisms may influence investor decisions differently, and the effects of different governance mechanisms on investors' decisions may not be mediated by investor perceived reliability of financial information and investor trust in board and or management.

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Appendix A: Major Regulatory Reforms

- The Securities and Exchange Ordinance, 1969 was amended with a view to protect the interest of the investors and to develop the capital market;
- The Securities and Exchange Commission Act, 1993 was amended for more empowerment of the BSEC;
- The Exchanges Demutualization Act, 2013 was enacted to good governance practices in the Stock Exchanges by separating the trading rights from its ownership and management;
- Amended the Securities and Exchange Rules, 1987;
- Amended the Securities and Exchange Commission (Insider Trading) Rules, 1995;
- Amended the Credit Rating Companies Rules, 1996;
- Amended the Securities and Exchange Commission (Merchant Banker and Portfolio Manager) Rules, 1996;
- Amended the Securities and Exchange Commission (Stock broker, Stock dealer and Authorized Representative) Rules, 2000;
- Amended the Securities and Exchange Commission (Mutual Fund) Rules, 2001;
- Amended the Securities and Exchange Commission (Issue of Capital) Rules, 2001;
- Amended the Securities and Exchange Commission (Over-the-Counter) Rules, 2001;
- Amended the Securities and Exchange Commission (Substantial Share Holding, Acquisition, Takeover) Rules, 2002;
- Amended to the Depository (User) Regulations, 2003;
- Amended to the Securities and Exchange Commission (Rights Issue) Rules, 2006;
- The Securities and Exchange Commission (Private Placement of Debt Securities) Rules, 2012;
- The Bangladesh Securities and Exchange Commission (Research Analysis) Rules, 2013;

- The Bangladesh Securities and Exchange Commission (Alternative Investment) Rules, 2015;
- The Bangladesh Securities and Exchange Commission (Public Issue) Rules, 2015;
- The Bangladesh Securities and Exchange Commission (Exchange Traded Fund) Rules, 2016; and
- Dhaka and Chittagong Stock Exchange (Listing) Regulations, 2015.

Other Regulatory Reforms

- Guidelines for re-valuation of assets and liabilities of state owned companies was issued in April 2011;
- An Order dated 27 July 2011 is issued stating that any issuer company shall not appoint an auditor as its statutory auditor for a consecutive period exceeding three years;
- The stock exchanges were directed to establish corporate finance departments on July 2011 to strengthen monitoring of governance practices in the listed companies;
- Issued guidelines in respect of private placement of shares on 02 October 2011;
- Issued an order dated 22 November 2011 which states that all sponsors/promoters and directors of a listed company shall all time jointly hold minimum 30% (thirty percent) shares of the paid-up capital of the company. Each director other than independent director (s) of any listed company shall hold minimum 2% (two percent) shares of the paid up capital;
- Issued a directive dated 23 November 2011 to merchant bankers allowing them to raise 49% capital of total paid up capital from investors other than the parent company.
- Issued a notification on 23 November 2011 to exempt the foreign institutional and non-resident Bangladeshi investors from the 10% capital gain tax on investment in the securities markets.

- Issued a notification on 23 November 2011 stating that banks' investments in their subsidiary companies would not be included as their exposure to capital market; the brokerage commission for transaction in the capital market has been reduced from 0.1% to 0.05%;
- A uniform face value of Tk.10 was determined for all the listed Companies and Mutual funds from 04 December 2011;
- Issued new corporate governance guidelines on 07 August 2012;
- The Bangladesh Bank, Bangladesh Securities and Exchange Commission, and Insurance Development and Regulatory Authority signed an MoU on 23 September 2012 for Coordinated Surveillance and Supervision;
- BSEC installed new surveillance software to detect irregularities in the capital market on 17 December 2012;
- Guidelines for revaluation of assets was issued on 18 August 2013;
- As per Notification dated 18 August 2013, the companies who wants to issue right shares must comply with the corporate governance guidelines, 2012 ;
- The Government constituted special tribunal on 07 January 2014 for quick disposal of capital market related cases;
- Final report on risk based supervision and risk based capital to develop the vulnerability management of the market intermediaries was framed on 1 October 2014;
- A guidelines was framed for auditor panel on 14 October 2014;
- As per BSEC Notification issued on 13 November 2014, the Annual General Meeting (AGM) of a listed company shall be held within the city, town or locality in which the registered office of the company is situated;
- BSEC established its own training centre on 17 November 2015 to impart the capital market related training;

- A panel of auditors was approved with effect from 01 August 2015;
- An order regarding publication of price sensitive information was published on 15 February 2016; and
- A guideline for financial derivatives was issued on 20 June 2016.

Appendix B: List of Securities Laws in Bangladesh

Ordinance:

- Securities and Exchange Ordinance, 1969 (Ord. No. XVII of 1969)

Acts:

- The Securities and Exchange Commission Act, 1993
- The Companies Act, 1994
- Depository Act, 1999
- The Banking Company Act, 1991
- The Insurance Act, 2010

Rules:

- The Securities and Exchange Rules, 1987
- The Securities and Exchange Commission (Meeting Related) Rules, 1994
- The Securities and Exchange Commission (Prohibition of Insider Trading) Rules, 1995
- The Securities and Exchange Commission (Merchant Banker and Portfolio Manager) Rules, 1996
- The Credit Rating Companies Rules, 1996
- The Margin Rules, 1999
- The Securities and Exchange Commission (Stock Dealer, Stock Broker and Authorized Representative) Rules, 2000
- The Securities and Exchange Commission (Market Maker) Rules, 2000
- The Securities and Exchange Commission (Mutual Fund) Rules, 2001
- The Securities and Exchange Commission (Issue of Capital) Rules, 2001
- The Securities and Exchange Commission (Over-The-Counter) Rules, 2001

- The Securities and Exchange Commission (Substantial Share Acquisition and Takeover) Rules, 2002
- The Securities and Exchange Commission (Security Custodial Service) Rules, 2003
- The Securities and Exchange Commission (Asset Backed Securities) Rules, 2004
- The Securities and Exchange Commission (Rights Issue) Rules, 2006
- The Securities and Exchange Commission (Private Placement of Debt Securities) Rules, 2012
- The Bangladesh Securities and Exchange Commission (Research Analysts) Rules, 2013
- The Bangladesh Securities and Exchange Commission (Public Issue) Rules, 2015
- The Bangladesh Securities and Exchange Commission (Alternative Investment) Rules, 2015

Regulations:

- Listing Regulations of Stock Exchanges
- Trading Regulations of Stock Exchanges
- Securities and Exchange Commission (Appeal) Regulations, 1995
- Settlement of Stock Exchange Transactions Regulations, 1998
- Investors' Protection Fund Regulations, 1999
- Stock Exchange (Board and Administration) Regulations, 2000
- Stock Exchange (Member's Margin) Regulations, 2000
- CSE (Internet Based Trading Services) Regulations, 2002
- Depository Regulations, 2000
- Depository (User) Regulations, 2003
- Depository (User) Regulations, 2003
- The BSEC (Corporate Governance) Guideline, 2012

Appendix C: The BSEC (Corporate Governance) Guidelines, 2012

No. SEC/CMRRCD/2006-158/134/Admin/44: Whereas, the Securities and Exchange Commission (herein after referred to as the “Commission”) deems it fit that the consent already accorded by the Commission, or deemed to have been accorded by it, or to be accorded by it in future, to the issue of capital by the companies listed with any stock exchange in Bangladesh, shall be subject to certain further conditions, on 'comply' basis, in order to enhance corporate governance in the interest of investors and the capital market;

Now, therefore, in exercise of the power conferred by section 2CC of the Securities and Exchange Ordinance, 1969 (XVII of 1969), the Commission hereby supersedes its earlier Notification No. SEC/CMRRCD/2006-158/Admin/02-08 dated 20th February, 2006 and imposes the following further conditions to the consent already accorded by it, or deemed to have been accorded by it, or to be accorded by it in future, to the issue of capital by the companies listed with any stock exchange in Bangladesh:

Provided, however, that these conditions are imposed on 'comply' basis. The companies listed with any stock exchange in Bangladesh shall comply with these conditions in accordance with the condition No. 7.

The Conditions:

1. BOARD OF DIRECTORS:

1.1 Board's Size

The number of the board members of the company shall not be less than 5 (five) and more than 20 (twenty):

Provided, however, that in case of banks and non-bank financial institutions, insurance companies and statutory bodies for which separate primary regulators like Bangladesh Bank, Insurance Development and Regulatory Authority, etc. exist, the Boards of those companies shall 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 shall 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 shall comply with the following:-

- (i) At least one fifth (1/5) of the total number of directors in the company's board shall be independent directors.
- (ii) For the purpose of this clause "independent director" means a director-
 - a) who either does not hold any share in the company or holds less than one percent (1%) shares of the total paid-up shares of the company;
 - b) who is not a sponsor of the company and is not connected with the company's any sponsor or director or shareholder who holds one percent (1%) or more shares of the total paid-up shares of the company on the basis of family relationship. His/her family members also should not hold above mentioned shares in the company:

Provided that spouse, son, daughter, father, mother, brother, sister, son-in-law and daughter-in-law shall be considered as family members;

- c) who does not have any other relationship, whether pecuniary or otherwise, with the company or its subsidiary/associated companies;
 - d) who is not a member, director or officer of any stock exchange;
 - e) who is not a shareholder, director or officer of any member of stock exchange or an intermediary of the capital market;
 - f) who is not a partner or an executive or was not a partner or an executive during the preceding 3 (three) years of the concerned company's statutory audit firm;
 - g) who shall not be an independent director in more than 3 (three) listed companies;
 - h) who has not been convicted by a court of competent jurisdiction as a defaulter in payment of any loan to a bank or a Non-Bank Financial Institution (NBFI);
 - i) who has not been convicted for a criminal offence involving moral turpitude.
- (iii) the independent director(s) shall be appointed by the board of directors and approved by the shareholders in the Annual General Meeting (AGM).
- (iv) the post of independent director(s) can not remain vacant for more than 90 (ninety) days.
- (v) the Board shall lay down a code of conduct of all Board members and annual compliance of the code to be recorded.
- (vi) the tenure of office of an independent director shall be for a period of 3 (three) years, which may be extended for 1 (one) term only.

1.3 Qualification of Independent Director (ID)

- (i) Independent Director shall be a knowledgeable individual with integrity who is able to ensure compliance with financial, regulatory and corporate laws and can make meaningful contribution to business.
- (ii) The person should be a Business Leader/Corporate Leader/Bureaucrat/University Teacher with Economics or Business Studies or Law background/Professionals like Chartered Accountants, Cost & Management Accountants, Chartered Secretaries. The independent director must have at least 12 (twelve) years of corporate management/professional experiences.
- (iii) In special cases the above qualifications may be relaxed subject to prior approval of the Commission.

1.4 Chairman of the Board and Chief Executive Officer

The positions of the Chairman of the Board and the Chief Executive Officer of the companies shall be filled by different individuals. The Chairman of the company shall be elected from among the directors of the company. The Board of Directors shall clearly define respective roles and responsibilities of the Chairman and the Chief Executive Officer.

1.5 The Directors' Report to Shareholders

The directors of the companies shall include the following additional statements in the Directors' Report prepared under section 184 of the Companies Act, 1994 (Act No. XVIII of 1994):-

- (i) Industry outlook and possible future developments in the industry.
- (ii) Segment-wise or product-wise performance.
- (iii) Risks and concerns.
- (iv) A discussion on Cost of Goods sold, Gross Profit Margin and Net Profit Margin.
- (v) Discussion on continuity of any Extra-Ordinary gain or loss.
- (vi) Basis for related party transactions- a statement of all related party transactions should be disclosed in the annual report.
- (vii) Utilization of proceeds from public issues, rights issues and/or through any others instruments.
- (viii) An explanation if the financial results deteriorate after the company goes for Initial Public Offering (IPO), Repeat Public Offering (RPO), Rights Offer, Direct Listing, etc.
- (ix) If significant variance occurs between Quarterly Financial performance and Annual Financial Statements the management shall explain about the variance on their Annual Report.
- (x) Remuneration to directors including independent directors.

- (xi) 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.
- (xii) Proper books of account of the issuer company have been maintained.
- (xiii) 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.
- (xiv) International Accounting Standards (IAS)/Bangladesh Accounting Standard (BAS)/International Financial Reporting Standards (IFRS)/Bangladesh Financial Reporting Standards (BFRS), as applicable in Bangladesh, have been followed in preparation of the financial statements and any departure there-from has been adequately disclosed.
- (xv) The system of internal control is sound in design and has been effectively implemented and monitored.
- (xvi) 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.
- (xvii) Significant deviations from the last year's operating results of the issuer company shall be highlighted and the reasons thereof should be explained.
- (xviii) Key operating and financial data of at least preceding 5 (five) years shall be summarized.
- (xix) If the issuer company has not declared dividend (cash or stock) for the year, the reasons thereof shall be given.
- (xx) The number of Board meetings held during the year and attendance by each director shall be disclosed.
- (xxi) The pattern of shareholding shall be reported to disclose the aggregate number of shares (along with name wise details where stated below) held by:-
 - a) Parent/Subsidiary/Associated Companies and other related parties (name wise details);
 - b) Directors, Chief Executive Officer, Company Secretary, Chief Financial Officer, Head of Internal Audit and their spouses and minor children (name wise details);
 - c) Executives;
 - d) 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 5 (five) salaried employees of the company, other than the Directors, Chief Executive Officer, Company Secretary, Chief Financial Officer and Head of Internal Audit.

- (xxii) In case of the appointment/re-appointment of a director the company shall disclose the following information to the shareholders:-
 - a) a brief resume of the director;

- b) nature of his/her expertise in specific functional areas;
- c) names of companies in which the person also holds the directorship and the membership of committees of the board.

2. CHIEF FINANCIAL OFFICER (CFO), HEAD OF INTERNAL AUDIT AND COMPANY SECRETARY (CS):

2.1 Appointment

The company shall appoint a Chief Financial Officer (CFO), a Head of Internal Audit (Internal Control and Compliance) and a Company Secretary (CS). The Board of Directors should clearly define respective roles, responsibilities and duties of the CFO, the Head of Internal Audit and the CS.

2.2 Requirement to attend the Board Meetings

The CFO and the Company Secretary of the companies shall attend the meetings of the Board of Directors, provided that the CFO and/or the Company Secretary shall not attend such part of a meeting of the Board of Directors which involves consideration of an agenda item relating to their personal matters.

3. AUDIT COMMITTEE:

- (i) The company shall have an Audit Committee as a sub-committee of the Board of Directors.
- (ii) The Audit Committee shall 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.
- (iii) The Audit Committee shall be responsible to the Board of Directors. The duties of the Audit Committee shall be clearly set forth in writing.

3.1 Constitution of the Audit Committee

- (i) The Audit Committee shall be composed of at least 3 (three) members.
- (ii) The Board of Directors shall appoint members of the Audit Committee who shall be directors of the company and shall include at least 1 (one) independent director.
- (iii) All members of the audit committee should be “financially literate” and at least 1

(one) member shall have accounting or related financial management experience.

Explanation: The term “financially literate” means the ability to read and understand the financial statements like Balance Sheet, Income Statement and Cash Flow Statement and a person will be considered to have accounting or related financial management expertise if (s)he possesses professional qualification or Accounting/ Finance graduate with at least 12 (twelve) years of corporate management/professional experiences.

- (iv) 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 shall 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.
- (v) The company secretary shall act as the secretary of the Committee.
- (vi) The quorum of the Audit Committee meeting shall not constitute without at least 1 (one) independent director.

3.2 Chairman of the Audit Committee

- (i) The Board of Directors shall select 1 (one) member of the Audit Committee to be Chairman of the Audit Committee, who shall be an independent director.
- (ii) Chairman of the audit committee shall remain present in the Annual General Meeting (AGM).

3.3 Role of Audit Committee

Role of audit committee shall include the following:-

- (i) Oversee the financial reporting process.

- (ii) Monitor choice of accounting policies and principles.
- (iii) Monitor Internal Control Risk management process.
- (iv) Oversee hiring and performance of external auditors.
- (v) Review along with the management, the annual financial statements before submission to the board for approval.
- (vi) Review along with the management, the quarterly and half yearly financial statements before submission to the board for approval.
- (vii) Review the adequacy of internal audit function.
- (viii) Review statement of significant related party transactions submitted by the management.
- (ix) Review Management Letters/ Letter of Internal Control weakness issued by statutory auditors.
- (x) When money is raised through Initial Public Offering (IPO)/Repeat Public Offering (RPO)/Rights Issue the company shall disclose to the Audit Committee about the uses/applications of funds by major category (capital expenditure, sales and marketing expenses, working capital, etc), on a quarterly basis, as a part of their quarterly declaration of financial results. Further, on an annual basis, the company shall prepare a statement of funds utilized for the purposes other than those stated in the offer document/prospectus.

3.4 Reporting of the Audit Committee

3.4.1 Reporting to the Board of Directors

- (i) The Audit Committee shall report on its activities to the Board of Directors.
- (ii) The Audit Committee shall 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;

- d) any other matter which shall be disclosed to the Board of Directors immediately.

3.4.2 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 shall 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 6 (six) months from the date of first reporting to the Board of Directors, whichever is earlier.

3.5 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 3.4.1 (ii) above during the year, shall be signed by the Chairman of the Audit Committee and disclosed in the annual report of the issuer company.

4. 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.
- (vii) Any other service that the Audit Committee determines.

- (viii) No partner or employees of the external audit firms shall possess any share of the company they audit at least during the tenure of their audit assignment of that company.

5. SUBSIDIARY COMPANY:

- (i) Provisions relating to the composition of the Board of Directors of the holding company shall be made applicable to the composition of the Board of Directors of the subsidiary company.
- (ii) At least 1 (one) independent director on the Board of Directors of the holding company shall be a director on the Board of Directors of the subsidiary company.
- (iii) The minutes of the Board meeting of the subsidiary company shall be placed for review at the following Board meeting of the holding company.
- (iv) The minutes of the respective Board meeting of the holding company shall state that they have reviewed the affairs of the subsidiary company also.
- (v) The Audit Committee of the holding company shall also review the financial statements, in particular the investments made by the subsidiary company.

6. DUTIES OF CHIEF EXECUTIVE OFFICER (CEO) AND CHIEF FINANCIAL OFFICER (CFO):

The CEO and CFO shall certify to the Board that:-

- (i) They have reviewed financial statements for the year and that to the best of their knowledge and belief:
 - a) these statements do not contain any materially untrue statement or omit any material fact or contain statements that might be misleading;
 - b) these statements together present a true and fair view of the company's affairs and are in compliance with existing accounting standards and applicable laws.
- (ii) There are, to the best of knowledge and belief, no transactions entered into by the company during the year which are fraudulent, illegal or violation of the company's code of conduct.

7. REPORTING AND COMPLIANCE OF CORPORATE GOVERNANCE:

- (i) The company shall obtain a certificate from a practicing Professional Accountant/Secretary (Chartered Accountant/Cost and Management Accountant/Chartered Secretary) regarding compliance of conditions of Corporate Governance Guidelines of the Commission and shall send the same to the shareholders along with the Annual Report on a yearly basis.

Explanation: Chartered Accountant means Chartered Accountant as defined in the Chartered Accountants Act, 1949 (Act No. XXXVIII of 1949); Cost and Management Accountant means Cost and Management Accountant as defined in the Cost and Management Accountants Ordinance, 1977 (Ordinance No. LIII of 1977); Chartered Secretary means Chartered Secretary

- (ii) 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

Notification shall be complied within 31 December 2012.

By order of the Securities and Exchange Commission

Prof. Dr. M. Khairul Hossain
Chairman.

Appendix D: Summary of Key Literature⁴²

Impact of Independent Director on firm performance				
Author(s)	Title and <i>Journal</i>	Research Objectives	Sample	Results/Findings
Barnhart & Rosenstein (1998)	Board composition, managerial ownership, and firm performance: An empirical analysis. <i>Financial Review</i>	To examine the effect of ownership structure and board composition on corporate performance.	321 S&P 500 companies in 1990.	Positive relationship between board independence and company performance.
Baysinger & Butler (1985)	Corporate governance and the board of directors: Performance effects of changes in board composition. <i>Financial Review</i>	To examine the effect of board composition on firm performance.	Board composition of 266 major US business companies over the period of 1970-80.	Board independence has minor impact on firm performance.
Beasley (1996)	An empirical analysis of the relation between the board of director composition and financial statement fraud. <i>The Accounting Review</i>	To examine the effect of independent directors in monitoring the preparation of financial reports and the effect on reported earnings.	150 US publicly listed companies during 1982-1991.	Independent directors with relevant knowledge are able to oversee the process and quality of financial reporting with enhancing quality of reporting and reduced probability of managers committing financial fraud.
Bhagat & Black (1999)	The uncertain relationship between board composition and firm performance. <i>The Business Lawyer</i>	To examine the impact of independent directors on company performance.	928 large US listed companies during 1985-1995.	No convincing evidence that a majority of independent directors on the board enhances company performance.
Byrd & Hickman (1992)	Do outside directors monitor managers? : Evidence from tender offer bids. <i>Journal of Financial Economics</i>	To examine the association between presence of independent directors and firm performance and stock returns.	128 tender offers made by 111 US companies during 1980-1987.	Having 50% independent directors on the board has a positive impact on firm performance and stock returns.

⁴² All the studies summarized here are fully referenced in the reference section of the thesis.

Clarkson, Craswell, & Mackenzie (2008)	The effect of board independence on target shareholder wealth. <i>Australian Accounting Review</i>	To examine the effects of independent directors on the bid premiums offered to target firm shareholders during a takeover.	272 Australian listed companies subject to takeover bids between 1997 and 2004.	The presence of independent directors in the target firm increased the bid premium.
Cotter, Shivdasani, & Zenner (1997)	Do independent directors enhance target shareholder wealth during tender offers?, <i>Journal of Financial Economics</i>	To examine the link between independent directors of a target company and shareholder gains from a tender offer.	Tender offers of 169 US listed companies during 1989-1992.	Target shareholder gains were higher for targets with an independent board.
Dalton, Daily, Ellstrand, & Johnson (1998)	Meta-analytic reviews of board composition, leadership structure, and financial performance. <i>Strategic Management Journal</i>	To examine the relationship between board independence and firm performance.	Meta-analysis of 54 empirical studies on board composition and 31 empirical studies on board structure.	No relationship between board independence and firm financial performance.
Dechow, Sloan, & Sweeney (1996)	Causes and consequences of earnings manipulation: An analysis of firms subject to enforcement actions by the SEC. <i>Contemporary Accounting Research</i>	To examine the relationship between board structure and earnings manipulation.	92 firms subject to enforcement actions by the SEC between 1982 and 1992	Companies with a lower proportion of independent directors on the board are more likely to manipulate the earnings of the company
Diestre, Rajagopalan, & Dutta (2014)	Constraints in acquiring and utilizing directors' experience: An empirical study of new-market entry in the pharmaceutical industry. <i>Strategic Management Journal</i>	To examine the influence of independent directors with relevant experience on the chance of entering into a new market in the pharmaceutical industry.	125 pharmaceutical companies who entered into specific new markets during 2000-2006 in US.	The presence on the board of outside directors with relevant experience increases the probability of new-market entry by 60.2%.

Hermalin & Weisbach (1991)	The effects of board composition and direct incentives on firm performance. <i>Financial Management</i>	Investigated the link between board composition and board structure on firm performance.	142 NYSE firms in 1971, 1974, 1977, 1981 and 1983.	Found no significant relationship between firm governance and financial performance.
Kang (2013)	Experienced Independent Directors. <i>SSRN 2240650</i> .	To examine the relationship between independent directors' experience and firm value.	1500 S&P firms during 2000-2010.	Presence of independent directors with more than 5 years of relevant business experience increases the firm value as increased by Tobin's Q. There was no relation between board independence and firm performance after controlling for the experience of independent directors.
Impact of Duality of CEO and Chairman				
Author(s)	Title and Journal	Research Objectives	Sample	Results/Findings
Boyd (1995)	CEO duality and firm performance: A contingency model. <i>Strategic Management Journal</i>	To investigate the relationship between CEO duality and company performance by integrating the agency and stewardship perspectives on duality.	192 US companies in 12 industries using 1989 and 1980 editions of <i>Moody's</i> manual.	The relationship between CEO duality and performance varied systematically across Dess and Beard's (1964) environmental dimensions. Partial support for both agency and stewardship perspectives.
Brickley, Coles, & Jarrell (1997)	Leadership structure: Separating the CEO and Chairman of the Board. <i>Journal of Corporate Finance</i>	To examine the relationship between CEO duality and company value.	661 US companies for 1988.	Companies with CEO duality have lower market to book ratio than companies with separation.

Daily & Dalton (1993)	Board of directors leadership and structure: Control and performance implications. <i>Entrepreneurship Theory and Practice</i>	To examine the impact of CEO duality and board composition on company performance.	186 small US listed companies from 8 industries in 1987.	The separation of the roles of CEO and chairman has no significant relationship with return on assets, and return on equity, and market performance indicators such as the price/earnings ratio.
Daily & Dalton (1994)	Bankruptcy and corporate governance: The impact of board composition and structure. <i>Academy of Management Journal</i>	To examine the relationship between board leadership and corporate bankruptcy.	57 matched-pair US bankrupt and non-bankrupt companies during 1972 to 1982.	There was CEO duality in 53.8 percent of bankrupt companies and 37.5 percent in survival companies which suggests that with separation of the roles there would be a lower chance of bankruptcy.
Krause & Semadeni (2014)	Last dance or second chance? Firm. performance, CEO career horizon, and the separation of board leadership roles. <i>Strategic Management Journal</i>	To investigate the link between company performance and board independence for three types of separation of CEO's role (1) apprentice separation, (2) departure separation, and (3) demotion separation.	411 separated board of US companies between 2003 and 2006.	Demotion separation has a significantly stronger effect on company future performance, stock return, and analysts' ratings than for apprentice or departure separation.
Rechner & Dalton (1989)	The impact of CEO as board chairperson on corporate performance: evidence vs. rhetoric. <i>The Academy of Management Executive</i>	To examine the relationship between CEO duality and company performance.	141 Fortune 500 companies during 1978-1983.	No significant impact of CEO duality on performance.

Simpson & Gleason (1999)	Board structure, ownership, and financial distress in banking firms. <i>International Review of Economics & Finance</i>	To examine the association between the ownership, structure of the board of directors, and control mechanisms and the likelihood of financial distress of banking companies.	287 US banks for the year 1993.	Showed that there is a higher probability of financial distress with CEO duality.
Wan & Ong (2005)	Board Structure, Process and Performance: evidence from public-listed companies in Singapore. <i>Corporate Governance: An International Review</i>	To examine the effect of board structure as determined by independence of directors and CEO duality on firm performance.	424 Singapore incorporated companies.	When top management of the company and the board comprise of different individuals then the groups can monitor each other with resulting higher levels of effort, higher presence and usage of knowledge, skills in the board and management of the company.
Board Size				
Author(s)	Title and Journal	Research Objectives	Sample	Results/Findings
Conyon & Peck (1998)	Board size and corporate performance: evidence from European countries. <i>The European Journal of Finance</i>	To examine the effects of board size on corporate performance.	Listed companies from five European countries: UK, Netherlands, France, Denmark and Italy over the period 1990-1995.	Board size negatively impacts company performance.
Eisenberg, Sundgren, & Wells (1998)	Larger board size and decreasing firm value in small firms. <i>Journal of Financial Economics</i>	To examine the association between board size and firm performance.	Random sample of 900 small companies from Finland during 1992 to 1994.	Board size has negative impact on firm profitability, as measured by industry - adjusted return on assets.

Nath, Islam, & Saha (2015)	Corporate Board Structure and Firm Performance: The Context of Pharmaceutical Industry in Bangladesh. <i>International Journal of Economics and Finance</i>	To examine the association between board composition and firm performance in Bangladesh	9 pharmaceutical companies in Bangladesh for the 10 year period (2005-2014).	Board size negatively impacts company performance.
Yermack (1996)	Higher market valuation of companies with a small board of directors. <i>Journal of Financial Economics</i>	To examine the relationship between board size and firm value.	452 large US listed companies between 1984 and 1991.	Negative relationship between board size and firm value.
Leakage of Information and Insider Trading				
Author(s)	Title and Journal	Research Objectives	Sample	Results/Findings
Azofra-Palenzuela, Fernández-Alonso, and Vallelado (2006)	An Experimental Study of Herding and Contrarian Behavior among Financial Investors.	To examine the relation between investors behaviour and existence of anomalies in capital market.	Laboratory Experiment on 40 students of Economics at the Univesidad Jaume I in Castellón (Spain).	Investors refuse own information signals and make decisions against their private information in a highly volatile market.
Christophe, Ferri, & Hsieh (2010)	Informed trading before analyst downgrades: Evidence from short sellers. <i>Journal of Financial Economics</i>	To examine the impact of leakage of information on trading behaviour.	670 downgraded NASDAQ stocks between 2000 and 2001.	Abnormal changes both in price and volume shortly before analysts' recommendations.
Dai, Fu, Kang, & Lee (2013)	Internal corporate governance and insider trading. <i>Erasmus University Working Paper</i>	To examine how better governance mechanisms can constrain insider from making abnormal profits using private information.	A large sample of 11,310 firm year observations and 463,527 insider transactions on securities listed on the NYSE, AMEX or NASDAQ during 1998 to 2011.	Quality of internal governance has the inverse impact on profitability of trading by insiders such as officers and directors.

Karpoff & Lee (1991)	Insider trading before new issue announcements. <i>Financial Management</i>	To examine presence of insider trading before announcements of primary offerings of common stock, convertible debt, and straight debt.	Data on common stock, straight debts and convertible debt offerings by 233 companies during the period 1972 to 1982.	Insider trading occurs around these corporate announcements and analyst recommendations.
Lakonishok & Lee (2001)	Are insider trades informative? <i>Review of Financial Studies</i>	To examine the information content of insider trades.	Insider trading returns for all companies traded on the NYSE, AMEX and Nasdaq from 1975-1995.	Development of profitable trading strategies on insider trades is difficult. For large stocks, strategies are of limited value and for small stocks costly.
Li & Heidle (2004)	Information leakage and opportunistic behaviour before analyst recommendations: An analysis of the quoting behaviour of Nasdaq market makers. <i>Paper presented at the AFA 2004 San Diego Meeting</i>	To investigate the relation between quoting behaviour and of market makers prior to public release of analysts' recommendations.	3280 analysts' recommendations for NASDAQ listed companies during the period from January 1, 1999 to July 31, 1999	Positive relationship between some market makers prior to public disclosure of the recommendations.
Maug (2002)	Insider trading legislation and corporate governance. <i>European Economic Review</i>	To examine the relationship between insider trading legislation and corporate governance.	Mathematical model.	If insider trading is permitted for large shareholders, there is a high possibility that these shareholders will dominate and force managers to share private information and as a result the large shareholders gain wealth from smaller shareholders.
Seyhun (1986)	Insiders' profits, costs of trading, and market efficiency. <i>Journal of Financial Economics</i>	To examine the relationship between insider trading and profitability.	Insider trading transactions in 790 public listed companies during 1975-1981.	Director's purchases earned 4.3% returns and their sales avoided losses of 2.2%.

Impact of Reliability				
Author(s)	Title	Research Objectives	Sample	Results/Findings
Beasley (1996)	An empirical analysis of the relation between the board of director composition and financial statement fraud. <i>The Accounting Review</i>	To examine the effect of independent directors in monitoring the preparation of financial reports and the effect on reported earnings.	150 US publicly listed companies during 1982-1991.	Independent directors who have relevant knowledge are able to oversee the process and quality of financial reporting, reduce the probability of committing financial fraud being committed by managers, and thus increase the reliability of financial reporting.
Elliott, Jackson, & Smith (2006)	Estimate-Related Disclosures and Investors' Reliability Judgments. <i>Researchgate. Net</i>	To examine the effect of reliability of accounting estimates on non-professional investors.	1x3 between subjects' experiment on 154 graduate business students from a large US state university.	Significant positive relation between estimate-related sensitivity disclosures and investor's perceptions of the reliability of the estimate. The process of estimation and disclosure influences investors' reliance on the estimates in making investment decision.
Frederickson, Hodge, & Pratt (2006)	The evolution of stock option accounting: Disclosure, voluntary recognition, mandated recognition, and management disavowals. <i>The Accounting Review</i>	How accounting for stock options influence the judgment and decisions of relatively sophisticated financial statements users.	2x2 between subjects experiment on 1000 accounting and finance graduates from a major US business school.	Users' reliability assessments under mandated recognition exceeds their reliability assessments under voluntary recognition.

Hodge (2003)	Investors' perceptions of earnings quality, auditor independence, and the usefulness of audited financial information. <i>Accounting Horizons</i> .	To examine the impact of earning quality on investors assessment of the reliability of financial report.	Surveyed 414 individual investors in the US market in 2003.	When earnings quality declines over time, investor perceived reliability of audited financial statements decreases.
Holder-Webb & Sharma (2010)	The effect of governance on credit decisions and perceptions of reporting reliability. <i>Behavioral Research in Accounting</i>	To examine the relationship between board's strength of an applicant company and lenders perceived reliability of financial information and their lending decision.	2x2 within participant experiment on 62 professional lenders in Singapore. The experiment was conducted in the second quarter of 2003.	Board strength positively impacts investors perceived reliability of financial information, thus in turn, positively impacts lending decisions.
Impact of Trust				
Author(s)	Title	Research Objectives	Sample	Results/Findings
Elliott, Hodge, & Sedor (2011)	Using online video to announce a restatement: Influences on investment decisions and the mediating role of trust. <i>The Accounting Review</i>	To examine how trust in the board affects investor decisions.	Experiment on 80 professional managers with 9 years' work experience.	Announcing a restatement online via video is likely to increase investor trust; and investor trust increases when CEO apologizes and accepts responsibility for the restatement.
Hewitt, Hodge, & Pratt (2015)	How suspicious of the Earnings Management and its Underlying Motive Affect Investors' Trust in Managers and Willingness to Invest in the Firm. <i>SSRN 2245204</i> .	To examine the relationship between trust and investment decisions.	2x2 between-subjects experiment on 185 experienced business professionals.	The method of earnings management only affects investors willingness to invest in a firm when the motive underlying the earnings management does not breach investor trust in management.
Sako (1998)	Does trust improve business performance? <i>Organizational Trust: A Reader</i>	To examine the relationship between trust and business performance in terms of transaction costs,	Survey of 1415 first-tier component suppliers in the automobile industry in Japan, US and Europe	Trust significantly reduces cost of suppliers and increases company performance.

		future returns and continuous improvement and learning.	during 1993 and 1994.	
Slemrod (2002)	Trust in public finance. <i>National Bureau of Economic Research.</i>	To examine the effect of trust on tax evasion.	25 capitalist countries in the 1990 World Value Survey.	Countries where there is high trust or confidence in government are less likely to have tax evasion.
Ryan & Buchholtz (2001)	Trust, risk, and shareholder decision making: An investor perspective on corporate governance. <i>Business Ethics Quarterly,</i>	To examine how trust influences investors in evaluation risk of investments.	Meta-analysis	Trust determines the level of perceived risk and individual's risk taking propensity for trading.
Whittington (1999)	Trust in financial reporting. <i>Pacific Accounting Review,</i>	To examine the role of trust in financial reporting.	Meta-analysis.	The directors-shareholders agency relationship heightens the need for trustworthy and truthful financial reporting in accordance with generally accepted accounting practice and implementation of the notion of 'true and fair' view audits by independent auditors.

Appendix E: List of Hypotheses and Mediation analyses

Hypotheses:

H1: Investors will be more likely to invest in a company when board quality is strong, relative to when board quality is weak.

H2: The perceived reliability of reporting will be higher when board quality is strong, relative to when the board quality is weak.

H3: When perceived reliability of reporting increases, investors will be more likely to invest in a company.

H4: Availability of insider information will increase the likelihood that investors invest in a company, relative to when insider information is absent.

H5: The favourable effects of increasing board quality on perceived reliability of financial reporting will be diminished when insider information is available, relative to when insider information is absent.

H6a: Investors will have more trust in the board when board quality is strong, relative to when board quality is weak.

H6b: Investors will have more trust in management when board quality is strong, relative to when the board quality is weak.

H7a: When trust in a board increases, investors will be more likely to invest in a company.

H7b: When trust in management increases, investors will be more likely to invest in a company.

H8: Investors trust in management will be lower when some investors have access to insider information, relative to when insider information is absent.

H9: The favorable effects of increasing board quality on trust in management will be diminished when insider information is available, relative to when insider information is absent.

H10: Investors are more likely to invest in a company when the company's financial condition is good than when it is bad.

H11: When perceived reliability of reporting increases (decreases) investor trust in the board and management will also increase (decrease).

Mediating analyses:

- i. Trust in management will mediate the relationship between board quality and investors' decisions.
- ii. Perceived reliability of financial reports will mediate the relationship between board quality and investors' decisions.
- iii. Perceived reliability of financial reports will mediate the relationship between financial condition and investors' decisions.
- iv. Trust in management will mediate the relationship between the availability of inside information and investors' decisions
- v. Perceived reliability of financial reports will mediate the relationship between the existence of insider information and investors' decisions .

Appendix F: Instrument

Investor Decisions

INSTRUCTIONS FOR COMPLETING QUESTIONNAIRE

Thank you for participating in this study. You do not need to provide your name or reveal your identity in this study. Your participation, information and opinions will remain **anonymous**; and will be kept **strictly confidential** and reported only in aggregated/non-attributable form. Your information will be used only for this research. After completing the task you should put your envelopes back in the study material pack and deposit in the box placed in the back of the room. Return of the questionnaire is deemed to be consent to your participation in this study.

The first envelope contains the following information about a company called ABC.

- Background information
- Regulatory requirements of board structure
- Information about the board structure of the company
- Financial highlights for the years 2010, 2011 & 2012

You will be asked to evaluate the company as a potential investment opportunity. The second envelope contains demographic questions and additional questions about ABC Company.

Please open Envelope No. 1 to begin the questionnaire

Background information

Regulatory Requirements

The Bangladesh SEC issued new corporate governance guidelines in August 2012 that became effective in December 2012. The guidelines were intended to improve governance quality by creating new requirements related to board size, the number of independent directors, directors' educational qualifications, directors' professional experience, and the duality of the CEO and the board chairman. The compulsory requirements for board structures of listed companies in Bangladesh are described in Table 1.

Table 1

Board Structure Component	Requirements
Board size	The number of board members shall not be less than 5 (five) nor more than 20 (twenty).
Total number of independent directors'	At least 1/5 th of the total number of directors must be independent.
Qualification of independent directors'	The independent directors shall be elected from the following professional categories: <ol style="list-style-type: none">1. Business Leader2. Corporate Leader3. Bureaucrat4. University Teacher with Economics or Business Studies or Law background5. Chartered Accountants6. Cost & Management Accountants7. Chartered Secretaries
Experience	All independent directors must have at least 12 years of professional experience.
Duality	The Chairman of the Board and the Chief Executive Officer shall be different individuals.

Description of ABC Company

ABC Company is an energy company, listed with both Dhaka and Chittagong Stock Exchanges. The shares of the company have been actively traded at the stock exchanges since 2000. There are no large block holders in the company that dominate the company's ownership. A reputable audit firm has been auditing the company's financial statements for the past three years.

ABC Company's Board Structure

(Strong board)

ABC Company established a new board in August 2012 after the issuance of the new corporate governance guidelines. The new board meets the legal requirements. The company's current board composition is as follows:

1. Total number of directors on the board is 8.
2. Total number of independent directors is 2.
3. One independent director is a university teacher in Accounting and another is a retired government officer. Both independent directors meet the minimum experience requirements and are from the required professions, and thus satisfy the new regulations. Moreover, they both have prior experience that is relevant to ABC's business.
4. The CEO and Chairman of the Board are different individuals, and the CEO is able to work independently.

(Weak board)

ABC Company established a new board in August 2012 after the issuance of the new corporate governance guidelines. The new board meets the legal requirements. The company's current board composition is as follows:

1. Total number of directors on the board is 8.
2. Total number of independent directors is 2.
3. One independent director is a university teacher in Accounting and another is a retired government officer. Both independent directors meet the minimum experience requirements and are from the required professions, and thus satisfy the new regulations. However, neither independent director has prior experience that is relevant to ABC's business, and they are friends of executive management.
4. The CEO and Chairman of the Board are different individuals, but the CEO is not able to work independently since the Chairman dominates the CEO.

Financial Highlights

Financial highlights of the company for the past three years are provided in Table 2

(Good condition)

Table 2

	2010	2011	2012	Industry Average ratio in 2012
Current ratio (Times)	1.20	1.40	1.60	1.5
Quick ratio (Times)	0.90	0.95	1.10	1.00
Debt to equity ratio (Times)	0.06	0.07	0.08	0.08
Gross margin ratio	15%	17%	21%	20%
Net income ratio (after tax)	12.50%	14.50%	16.50%	16%
Return on equity ratio	14.75%	16.50%	18.75%	18%
Earnings per share	6.50	8.50	9.50	9
Net tangible assets per share	14	16	18	17

(Bad condition)

Table 2

	2010	2011	2012	Industry Average ratio in 2012
Current ratio (Times)	1.60	1.40	1.20	1.5
Quick ratio (Times)	1.10	0.95	0.90	1.00
Debt to equity ratio (Times)	0.08	0.07	0.06	0.08
Gross margin ratio	21%	17%	15%	20%
Net income ratio (after tax)	16.50%	14.50%	12.50%	16%
Return on equity ratio	18.75%	16.50%	14.75%	18%
Earnings per share	9.50	8.50	6.50	9
Net tangible assets per share	18	16	14	17

Other Information about ABC Company

(Presence of Insider trading)

Your cousin is an old friend of one of the members of the executive management team of ABC Company. Your cousin has informed you that he was given inside information from his manager friend about a secret new joint venture with a Japanese company, and the manager informed him that this venture is certain to increase ABC's share price in the near future. Your cousin has stated that he intends to purchase shares of ABC Company.

(Absent of Insider trading)

Your cousin is an old friend of one of the members of the executive management team of ABC Company, but he never receives any tips or inside information about ABC from management. Your cousin has stated that he intends to purchase shares of ABC Company.

Questions

Base only upon the case materials you have read, please answer the following questions:

1. **What is the likelihood that you would choose to invest in ABC Company?** (Please circle one)

1-----2-----3-----4-----5-----6-----7

Not at all likely

Moderately likely

Very likely

2. **What do you believe will happen to ABC Company's stock price over the next year?**

1-----2-----3-----4-----5-----6-----7

Significant decline

No change

Significant increase

3. **Do you believe that the financial information of ABC Company is reliable?**

(Please circle one)

1-----2-----3-----4-----5-----6-----7

Not reliable at all

Moderately reliable

Very reliable

4. **Do you trust ABC Company's directors to protect the interest of shareholders?**

(Please circle one)

1-----2-----3-----4-----5-----6-----7

No trust

Moderate trust

Complete trust

5. **What is your perception of the quality of ABC Company's board of directors?**

(Please circle one)

1-----2-----3-----4-----5-----6-----7

Very low quality

Average quality

Very high quality

6. **Do you trust the management of ABC Company to accurately represent the financial position of the firm?** (Please circle one)

1-----2-----3-----4-----5-----6-----7

No trust

Moderate trust

Complete trust

7. Do you believe that the directors of ABC Company are involved in insider trading?

1-----2-----3-----4-----5-----6-----7

Definitely no

Possibly

Definitely yes

8. Do you believe that the managers of ABC Company are involved in insider trading?

1-----2-----3-----4-----5-----6-----7

Definitely no

Possibly

Definitely yes

9. Rate the financial condition of ABC company.

1-----2-----3-----4-----5-----6-----7

Very poor

Average

Very good

When you have completed all of the questions in Envelope No.1, please return the completed materials to Envelope No. 1 and then open Envelope No. 2.

Questions (related to ABC Ltd)

Please answer all questions.

1. **Which of the following statements about your cousin were included in the case materials** (check one box to indicate your response)

☐ Your cousin is an old friend of one of the members of the executive management team of ABC Company. Your cousin has informed you that he was given inside information from his manager friend about a secret new joint venture with a Japanese company, and the manager informed him that is venture is certain to increase ABC's share price in the near future. Your cousin has stated that he intends to purchase shares of ABC Company.

☐ Your cousin is an old friend of one of the members of the executive management team of ABC Company but never gets any inside information of ABC which has impact on price. Your cousin has stated that he intends to purchase shares of ABC Company.

2. **What was the trend in ABC Company's financial condition over the last three years** (Please tick the appropriate box)

☐ Declining

☐ Improving

3. **Which of the following statements about the independent directors were included in the case material** (check one box to indicate your response)

☐ One independent director is a university teacher in Accounting and another is a retired government officer. Both independent directors meet the minimum experience requirements and are from the required professions, and thus satisfy the new regulations. However, neither independent director has prior experience that is relevant to ABC's business, and they are friends of executive management.

☐ One independent director is a university teacher in Accounting and another is a retired government officer. Both independent directors meet the minimum experience requirements and are from the required professions, and thus satisfy the new regulations. Moreover, both independent directors have prior experience that is very relevant to ABC's business.

4. **Which of the following statements about the CEO were included in the case material** (check one box to indicate your response)

☐ The CEO and Chairman of the Board are different individuals, but the CEO is not able to work independently since the Chairman dominates the CEO.

☐ The CEO and Chairman of the Board are different individuals, and the CEO is able to work independently.

- [illegible]

- 1-----2-----3-----4-----5-----6-----7
- Very little A moderate amount A great amount

- 1-----2-----3-----4-----5-----6-----7
- Very little A moderate amount A great amount

- 1-----2-----3-----4-----5-----6-----7
- Governance is very poor Governance is average Governance is very strong

- 1-----2-----3-----4-----5-----6-----7
Very negative effect No effect Very positive effect

Demographic Information

Please answer all questions by ticking the appropriate boxes:

1. Your age (in years)

Under 20	<input type="checkbox"/>
20-35	<input type="checkbox"/>
36-50	<input type="checkbox"/>
51-65	<input type="checkbox"/>
Over 65	<input type="checkbox"/>

2. Gender

Female	<input type="checkbox"/>
Male	<input type="checkbox"/>

3. Your highest education

SSC	<input type="checkbox"/>
HSC	<input type="checkbox"/>
Bachelor Degree	<input type="checkbox"/>
Masters degree	<input type="checkbox"/>
PhD	<input type="checkbox"/>
Professional Degree	<input type="checkbox"/>
Diploma	<input type="checkbox"/>
Others (specify)	<input type="checkbox"/>

4. Your occupation

Student	<input type="checkbox"/>
Retired public servant	<input type="checkbox"/>
Retired private servant	<input type="checkbox"/>
Private servant	<input type="checkbox"/>
Private business	<input type="checkbox"/>
Academician	<input type="checkbox"/>
Physician (Doctor)	<input type="checkbox"/>
	<input type="checkbox"/>

5. Number of years of experience in trading of shares (please write the number of years in the box)

Thank you for your participation. Please return the completed materials to Envelope No. 2 and then put both envelopes in the study material pack and then deposit in the box.