

**CHARACTERISTICS OF BOARD OF DIRECTORS AND COST OF
DEBTS: A CASE OF UNITED ARAB EMIRATES
LISTED COMPANIES**

MUNEER RAJAB AWADH AOMRAH

UNIVERSITI UTARA MALAYSIA

Jun - 2011

DECLARATION

I certify that the substance of this thesis has never been submitted for any degree and is not currently being submitted for any other qualifications.

I certify that any assistance received in preparing this thesis and all sources used have been acknowledged in this thesis.

Muneer Rajab Awadh Amrah

803947

Othman Yeop Abdullah Graduate School of Business

University Utara Malaysia

06010 Sintok

Kedah

June, 2011

PERMISSION TO USE

In presenting this thesis in partial fulfillment of the requirements for a postgraduate degree from Universiti Utara Malaysia (UUM), I hereby agree that the Universiti Library may make it unreservedly available for inspection. I further agree that permission for copy of this thesis in any manner, in whole or in part, for scholarly purposes may be granted by my supervisor Dr. Nor Shaipah Abdul Wahab or, in her absence by the Dean of Othman Yeop Abdullah Graduate School of Business. It is understood that any copying or publishing or using of this thesis or parts thereof for financial gain shall not be allowed without any written permission. It is also understood that due recognition shall be given to me and to Universiti Utara Malaysia for any scholarly use which may be made of any material form this thesis.

Requests for the grant permission to copy or to make other use of material in this thesis, in whole or in part should be addressed to

Dean of Othman Yeop Abdullah Graduate School of Business

University Utara Malaysia

06010 Sintok

Kedah Darul Aman

ABSTRACT

Cost of debt provides signals not only on how the firms are financed but it also indicates managers' ability to increase the bottom line-income statement item. Thus, with a good corporate governance practice, firms are expected to experience optimum level of cost of debt. However, there is a general lack of studies that investigate this issue in the Gulf Council Countries (GCC), particularly the United Arab Emirates (UAE). Therefore, this research is conducted to investigate the relationship between characteristics of board of directors and cost of debts in UAE setting. The characteristics tested include board size, board independence, duality, board meetings, multiple directorships and major director ownership. This paper reports the results from a multivariate analysis on a dataset collected from the 2009 company annual reports of 62 non-financial UAE companies listed on the Dubai Financial Market and Abu-Dhabi Securities Exchange. The empirical results of this study found that the relationship between board size and board independence with cost of debts was in a negative direction but not significant. However, the results found that there was a positive relationship between CEO duality and cost of debts. Board meetings and multiple directorships of the board were the new variables discussed by this study, and the results found that there was a negative relationship between board meetings and multiple directorships with cost of debts. Although, the results of this study found a negative relationship between major director ownership and cost of debts, this relationship was not significant statistically.

Key words: Cost of debts, corporate governance, board of directors characteristics, United Arab Emirates.

ACKNOWLEDGEMENTS

In the name of ALLAH, the most gracious and most merciful

I would like to start by giving my thanks to Allah Almighty for giving me the strength and courage to reach this stage. I would also like to extend my respect to Prophet Muhammad, peace be upon him, the sole human inspiration worthy of imitation.

I owe a great deal of gratitude to Universiti Utara Malaysia for giving me the chance to pursue my higher education and to accomplish my purpose of getting this degree.

I would like to acknowledge the people who provided me with guidance and support to complete this very important part of my career. My first and foremost gratitude and utmost appreciation goes to my supervisor Dr. Nor Shaipah Abdul Wahab, for her thoughtful guidance, sagacious advices, valuable suggestions, and precious comments during construction my dissertation. Without her understanding, consideration and untiring advice, this dissertation would not have been completed successfully. Also, I would like to take this opportunity to express my appreciation to reviewer for reviewing this thesis.

My excessive gratefulness, heartfelt and sincere appreciation and thanks are also extended to my mother and father who I missed them so much and their unforgettable DOA'A spirit and financial supports and encouragement. To my dearest brothers and sister for their emotional support rendered throughout this endeavor. To my lovely wife and my daughter Aisha, a very special thanks to them for the never ending encouragement and support. Finally, to my entire family and friends who have constantly supported and motivated me to complete this thesis.

I also would like to express my grateful appreciation to all my lecturers who have imparted me valuable knowledge and know-how during my studies for the MSc (International Accounting) programme.

My heartfelt appreciation to all those involved in making this thesis a reality and those who have contributed towards this profound learning experience.

I am blessed, thankful and appreciate of what I have conquered. To all those people, thank you so much.

Muneer Rajab Awadh Amrah

TABLE OF CONTENTS

Declaration	i
Permission to Use	ii
Abstract	iii
Acknowledgements	iv
Table of Contents	vi
List of Tables and Figures	viii
List of Abbreviations	x
CHAPTER ONE: INTRODUCTION	1
1.1 Background of Study.....	1
1.2 Problem Statement	4
1.3 Research Questions	7
1.4 Research Objectives	8
1.5 Significance of Study	8
1.6 Organization of Study	9
CHAPTER TWO: LITERATURE REVIEW	10
2.0 Introduction	10
2.1 Cost of Debts	10
2.2 Corporate Governance Mechanisms and Cost of Debts.....	11
2. .1 Board of Directors and Cost of Debts.....	13
2.2.1.1 Board Size and Cost of Debts	14
2.2.1.2 Independence of Board Members	17
2.2.1.3 CEO Duality.....	21
2.2.1.4 Board of Directors' Meetings.....	21
2.2.1.5 Multiple directorships	23
2.2.1.6 Major Director Ownership	27
2.2.2 Other Corporate Governance Mechanisms and Cost of Debts	28
2.3 Summary	28
CHAPTER THREE: RESEARCH FRAMEWORK AND METHODOLOGY 33	33
3.0 Introduction	33
3.1 Theoretical Framework	33
3.1.1 Agency Theory	33
3.2 Hypotheses Development.....	37

3.2.1 Board Size.....	37
3.2.2 Board Independence	37
3.2.3 CEO Duality	38
3.2.4 Board of Directors Meetings	39
3.2.5 Multiple directorships	42
3.2.6 Major Director Ownership.....	42
3.3 Research Design	43
3.3.1 Data Collection.....	44
3.3.2 Regression Model	45
3.3.3 Operational Definition and Measurement of the Variables	45
3.3.4 Data Analysis.....	48
3.3.4.1 Descriptive Statistics.....	48
3.3.4.2 Correlation Analysis	48
3.3.4.3 Multiple Regression	48
CHAPTER FOUR: FINDINGS AND DISCUSSION.....	49
4.0 Introduction	49
4.1 Descriptive Statistics	49
4.2 Correlation Analysis.....	49
4.3 Multiple Regression	52
4.3.1 Assumption of Multiple Regressions.....	53
4.3.1.1 Normality Test	53
4.3.1.2 Multicollinearity Test.....	53
4.3.2 Multiple Linear Regression Analysis	55
4.4 Discussion	56
4.5 Summary	56
CHAPTER FIVE: CONCLUSION	59
5.0 Introduction	59
5.1 Summary	59
5.2 Contributions of Study	59
5.3 Limitations of Study.....	64
5.4 Future Researches.....	64
REFERENCES.....	66

LIST OF FIGURE AND TABLES

Figure 3.1 Research Framework	36
Table 3.1 Summary of Predictor Variables.....	47
Table 4.1 Summary of Descriptive Statistics.....	49
Table 4.2 Correlation Matrix for All the Dependent and Independent Variables.....	51
Table 4.3 Normality Tests.....	53
Table 4.4 Variance Inflation Factor	54
Table 4.5 Summary of the Regressions Model	55
Table 4.6 Coefficients of Multiple Regression Analysis	56
Table 4.7 Summary of the Hypothesis Results	58

LIST OF ABBREVIATIONS

CEO : Chief Executive Officer.

UAE : United Arab Emirates.

DCM : Dubai Capital Market.

ADX : Abu Dhabi Securities Exchange.

GCC : Gulf Council Countries.

GDP : Gross Domestic Product.

OECD : Organization for Economic Co-operation and Development.

WWW : World Wide Web.

NED : Non-Executive Directors.

SPSS : Statistical Package for Social Science.

VIF : Variance Inflation Factor.

CHAPTER ONE

INTRODUCTION

1.1 Background of Study

Internal capital is one of important financial sources for companies regardless of their size and legal form. It represents about 40 percent of total funding even among the most successful companies in the world. The other source of financing is through external borrowing which companies sometimes raise to increase its capital. This method helps companies to expand its business or to ensure the smooth running of the business (Abdulhafedh, 2006). Braunstein (2002) argues that companies that can borrow have much greater value than those companies that source their financing internally and several models have evaluated companies that used mixed financing as having more weight in the marketplace than companies use internal funds.

It should however, be noted that excessive debts by companies lead to increase risks and would sometimes affect their operating profits and eventually will affect the shareholder's wealth. Cost of debts is one of the burdens a company will be exposed to as it raises its debt exposure; this cost is reflected in the interest charged on the money borrowed, which is the amount of money the company pays for the privilege of using borrowed money to expand its business. Moreover, cost of debt is the interest that is paid on bank loans, bond options, and similar types of financial transactions (Ertugrul & Hegde, 2008).

It is well recognized that cost of debts is considered an important issue for all companies due to several reasons. Firstly, companies can manage their finance effectively when they obtain the best interest rate. Secondly, calculating the cost of debt capital as it applies to incurring more debt can assist companies to weigh the

benefits of the potential action with the liabilities. Finally, evaluating properly the cost of debt will assist companies to determine effectively on whether to issue a bond to finance upcoming projects (Warga & Welch, 1993). Bhojraj and Sengupta (2003) indicate that companies can get low cost debts through a reduction in default risk due to reduced agency problems and improved monitoring of managerial actions when companies have stronger corporate governance.

Corporate governance is the set of mechanisms or procedures that control an organization in achieving its goals which is to maximize the long-term benefits of shareholders. Good corporate governance is vital to protect not only the interests of shareholders, but also others such as customers, suppliers, employees, and the government in ensuring that firms are accountable for their actions (Vinten, 1998).

Corporate governance mechanisms are classified into internal and external disciplining mechanism. The internal disciplining mechanism includes board of directors, large and institutional shareholders, insider ownership, compensation packages, debt policy, and dividend policy. Meanwhile, external disciplining mechanism includes takeover threats, product market competition, managing labour market and mutual monitoring by managers, security analysts, the legal environment, and the role of reputation (Farinha, 2003).

One of the important elements of internal corporate governance mechanisms is the board of directors (Fama & Jensen, 1983). According to Limpaphayom and Connolly (2006), the role of board of directors in overseeing management is needed to check on management and to make sure that the management has complied with all rules. Board of directors' characteristics such as board size, board composition, CEO duality, board meetings, multiple directorships and board ownership and others are

argued to play a role in influencing cost of debts (Lipton & Lorsch, 1992; Anderson, Mansi, & Reeb, 2004; Ashbaugh, Collins, & LaFond, 2006; Ertugrul & Hegde, 2006; Piot, Missonier & Piera, 2007; Donato & Tiscini, 2009).

The United Arab Emirates government has played a significant role to protect investors, debt holders and other parties. Hence, in May 2006 the government of UAE through the Emirates Securities and Commodities Authority, promulgated the code of corporate governance for listed companies and subsequently updated it in 2010. Compliance with the code is mandatory for joint stock public companies in the UAE, as well as companies listed on the Abu Dhabi Securities Exchange and Dubai Financial Market.

This study chose the sample of UAE listed companies on Abu Dhabi Securities Exchange and Dubai Financial Market to investigate the relationship between board of directors' characteristics and cost of debts because United Arab Emirates is one of gulf countries that has an open economy with one of the highest per capita income in the world and a sizable annual trade surplus. In 2009, its GDP, as measured by purchasing power parity, stood at US\$400.4 billion. The GDP per capita is currently the third in the world and second in the Middle East, after Qatar and Kuwait and the 17th in the world as measured by the International Monetary Fund. With almost \$1 trillion in foreign invested assets, some argue that the UAE to be the richest, with the highest average income in the world. Over half of this money is generated by the nation's capital- Abu Dhabi and Dubai (UAE Ministry of Economy). As a result of the increased volume of investment and the rapid pace of development in the UAE, the government in 2000 decided to establish the capital markets.

The establishment of UAE financial markets resulted in an increase flow of overseas funds and subsequently, the increase in the size of investment in the country. As a result of increase in business activities, investors turned to local and foreign banks to finance these investments, which led to the increase in the volume of debts in the State. A recent report by the international credit rating company, "Fitch" indicated that the total external debt of the United Arab Emirates until the middle of 2009 was about \$125 billion (458 billion dirham) in the form of loans and bonds, indicating that about \$85 billion (311 billion dirham) of the total external debts of the state in the form of loans with the remainder in the form of bonds. Hence, UAE is the first Gulf Cooperation Council (GCC) country with the proportion of external debts before Kingdom of Saudi Arabia and Bahrain (Dweikat, 2008).

1.2 Problem Statement

According to Abdulhafedh (2006), firms finance their activities using funds from debt and equity; however, most successful companies depend on debt more than equity fund. It is estimated that they do not have more than 40 percent of equity fund from the total fund. It is documented that the value of borrowing is much greater than equity funding only from its owners and companies with mixed financing (internally and externally) as having more weight in the marketplace than companies funded by owners. So, it has been argued that a healthy financial structure must consist of mix debt and equity that have low weighted average cost of capital (Keown, Petty, Scott & Martin, 2001).

However, the importance of debt as a source of funding for companies needs to be approached cautiously because excessive debt could affect companies' results which would eventually affect the shareholder's wealth (Jawy, 2010). To explain, as the cost of

servicing the debt grows beyond the ability to pay due to either external events (income loss) or internal difficulties (poor management of resources), the shareholders' wealth will be affected. In a more direct sense, more bankruptcies have occurred due to both increased debt cost caused by deflation and reduced demand (Myers & Stewart, 1977). For example, in Dubai 2009, a debt crisis occurred when two large UAE Companies - Dubai World and Al-Nakheel failed to settle their debts with foreign banks.

Al-Nakheel is the property arm of Dubai World Group, owned by the Dubai government – which had to pay obligations during 2009 in the form of Islamic bonds worth \$3.5 billion. Meanwhile, the parent company (Dubai World) had debts amounting to \$59 billion accumulated from giant expansion projects in Dubai before the global financial crisis that began in September 2008. At that time, "Dubai World" announced to all of its creditors and creditors of the Al-Nakheel a freeze on debt payment to May 2010. This was to enable the restructuring of companies and the announcement sparked panic and as a result, in many of the global financial markets, Islamic bonds were devalued (Abdul-Salam, 2009).

According to Amaar Shata (2009) when Dubai World demanded from its creditors to postpone the payment of its debts, most foreign banks view this as a signal that other companies operating in the same area could have problems fulfilling their loan obligations. As a consequence of this, foreign banks began to reevaluate the way loans were given and as a result, the task of providing loans fell on local banks to provide companies the necessary funding for their projects. The growing demand for liquidity of local banks had led to increase in demand for local funding and eventually, an increased in the cost of lending.

Corporate governance mechanisms are a way to protect the shareholder interest, for example, in getting external fund with lower cost using. Sali Jumaa (2010) argues that one of the major benefits that arise from corporate governance is the growing availability of funding and access to cheaper sources of funding. Corporate governance is the set of procedures that control an organization in achieving its goals for providing maximize profits for the long-term benefits of shareholders. Good corporate governance practices are considered as important mechanisms in protecting not only the interest of shareholders, but also the other interested stakeholders such as customers, suppliers, employees, and the government (Vinten, 1998).

Fama and Jensen, (1983) indicated that board of directors is one of the important mechanisms in internal corporate governance mechanisms. Therefore, Klapper and Love (2004) argue that board of directors' effectiveness lead to the protection of investors and shareholders from the risks exposed as a result of borrowing from financial institutions, examples include defaults and increasing the cost of debt. Moreover Fields, Fraser and Subrahmanyam, (2010) argue that board effectiveness may cause banks to have greater faith in internal governance mechanisms and thus reduce borrowing costs. More generally, the quality of the board may have a material impact on the cost of debt capital. Rajans (1992) argues that high quality boards, by better governance, may complement the monitoring role of banks and thus reduce the costs.

The United Arab Emirates code of corporate governance for listed companies consider the board of directors to be an important mechanism for governance (Hawkamah) which protects shareholders and investors from defaults and agency costs that company face when involve in financial transactions such as loans and others (see UAE code of corporate governance, 2006).

Several studies have investigated the relationship between board of directors' characteristics and cost of debt by focusing on the impact of independence, size, expertise, board ownership and CEO duality (Anderson et al. 2004; Ashbaugh et al. 2006; Ertugrul & Hegde, 2008; Piot, et al. 2007; Fields, et all. 2010). However, these studies have ignored variables such as board meetings and directorship of the board which are considered by the literature as important elements behind the effectiveness of board of directors (Lipton & Lorsch, 1992; Conger, Finegold, & Lawler, 1998; Vafeas, 1999; Fich & Shivdasani, 2006 and Donato & Tiscini, 2009).

Accordingly, this study has attempted to explore the relationship between board of directors characteristics namely board size, independence, CEO duality, board meetings, multiple directorships and major director ownership with the cost of debt by using sample of companies listed on the UAE emergence capital markets, namely Dubai Capital Market (DCM) and Abu Dhabi Securities Exchange (ADX) for the year 2009.

1.3 Research Questions

This study basically focuses on board of directors characteristics, which might relate to the cost of debts in UAE listed companies. Accordingly, this study investigates the following research question:

1. What is the status of cost of debts of companies listed in UAE?
2. What is the relationship between board of director's characteristics namely board size, independence, CEO duality, meetings, multiple directorships and major director ownership with the cost of debts for UAE listed companies?

1.4 Research Objectives

In order to examine the impact of board of directors' characteristics (size, independence, CEO duality, meeting, multiple directorships and board ownership) in the context of cost of debts, the following are the objectives of the study:

1. To investigate the extent of cost of debts of companies listed in UAE.
2. To investigate the relationship between board of director's characteristics and cost of debts for companies listed in UAE.

1.5 Significance of Study

A vast majority of research linking empirically corporate governance mechanisms with the cost of debts has been carried out in countries with Anglo-Saxon regulations such as U.S and U.K. This exists particularly due to the fact that these countries have similar markets, culture, and regulatory framework (Anderson, et al. 2003; Bhojraj & Sengupta, 2003; Anderson et al. 2004; Ashbaugh et al. 2006; Roberts & Yuan, 2006; Piot, et al. 2007; Ertugrul & Hegde, 2008 and Fields, et al. 2010). Yet, there is a paucity of research conducted in the context of Arab countries that are considered to have different settings than the markets of the prior studies.

To the best of the researcher's knowledge, there is no empirical evidence exists to provide a concluding determination on the association between the corporate governance mechanisms and the cost of debts for the UAE environment. Thus, since the business environment, culture, and regulatory framework influence the corporate governance effectiveness, this study tries to provide a theoretical and empirical evidence on the relationship between corporate governance mechanisms (board of director's size, board of directors' independency, CEO duality and major director ownership) and the cost of debts by extending the previous literature in a different

context namely, the United Arab Emirates (UAE). The findings of this study are expected to provide useful information for UAE regulators, firm owners and managers.

In addition, there are other board characteristics that previous studies had ignored such as board meetings and multiple directorships which have been documented as important features of the board members (Lipton & Lorsch, 1992; Conger et al. 1998; Vafeas, 1999; Fich & Shivdasani, 2006 & Donato & Tiscini, 2009). Thus, this study has extended the existing literature in explaining the relationship between board of directors' characteristics and cost of debts, especially in the United Arab Emirates.

1.6 Organization of Study

The remainder of the study is divided into four chapters. The next chapter, chapter two, provides a review of related literature about cost of debts and corporate governance mechanisms. Chapter three introduces the research design and the methodology employed by the study, which begins with theoretical framework, hypotheses development, model specification, data collection and variable measurement. Chapter four discusses and presents the results of testing the hypotheses of the study, and finally, chapter five provides conclusion, contributions and limitations of the study as well as suggestions and recommendations for future research.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter highlights the relevant literatures that are related to all variables of the study. The literatures are arranged according to dependent variable and independent variables. This chapter is divided into five parts. The first part discusses the significant of debts cost. The second part considers corporate governance mechanisms while specific characteristic of board directors are discussed in the third part. The fourth part of this chapter considers other corporate governance mechanisms and finally, the summary of the chapter is presented in chapter five.

2.1 Cost of Debts

Cost of debt is defined by Chen (1978) as the effective rate that a company pays on all of its debts. According to Bhojraj & Sengupta (2003), cost of debt is associated with the value of interest that is paid on current outstanding debts. In the broadest sense, this can apply to all types of interest, including interest charges that are associated with revolving charge accounts. Generally, cost of debt is understood to be the interest that is paid on bank loans, bond options, and similar types of financial transactions (Ertugrul & Hegde, 2008).

According to Warga and Welch (1993) cost of debt is important to all firms for several reasons. First, obtaining the best interest rate possible is simply a good way to manage available finances. Second, computing cost of debt as it applies to incurring more debt through loans or other sources can help the corporation to weigh the benefits of the potential action with the liabilities. Third, evaluating cost of debt

capital can help a company determine if the issuance of a bond issue is the best move to finance an upcoming project.

Moreover, Pittman and Fortin (2004) indicate that cost of debt includes both short and long term interest cost and may be affected by long term contracts. Scott (1976), Myers (1977) and Miller (1977) argue that cost of debts includes financial distress, personal taxes, debt overhang, and agency conflicts between managers and investors or among different groups of investors. In addition, cost of debt is an important element that investors consider when they evaluate investment opportunities in a company. Companies often pay a higher interest rate when they have poor credit ratings or a less sound financing structure, due to the increased chance that the firms would default on those debts (Modigliani, Merton & Miller, 1958).

Prior research has identified a number of factors that can determine the cost of debt. These factors include board of directors' characteristics, ownership structure, disclosure and audit quality features. The following are prior studies that have investigated factors that affect the cost of debts.

2.2 Corporate Governance Mechanisms and Cost of Debts

OECD Principles of Corporate Governance (1999) indicate that corporate governance involves a set of relationships between a company's management, board, shareholders and other stakeholders. Corporate governance also provides the structure through which the objectives of the company are set, and the means of attaining those objectives and the monitoring of performance. Shleifer and Vishny (1997) define corporate governance as the way through which suppliers of capital to corporations assure themselves of getting a return on their investment.

Corporate governance has been identified in previous studies (Friend & Lang, 1988 and Abor, 2007) to influence the capital structure decisions of firms. According to Piot, Missonier and Piera (2007), the major difference between debt and equity capital is that debt holders have no effective control on the use of the funds they provide. These funds can then be diverted from their initial goal by corporate managers acting opportunistically in their self interest, or in the interest of shareholders. Since these risks are anticipated by debt holders, they would demand a higher return on the debt. Thus, those external capital providers (i.e., debt holders) might pay attention to the overall quality of monitoring devices set up within companies.

Agency theory expressed by Jensen and Meckling (1976) posits that there exists a natural conflict in the interests of all stakeholders (including debt holders) and the managers of a firm, leading to the possibility that managers may make suboptimal decisions that improve their own welfare at the expense of shareholders. Self interested managerial behavior (managerial expropriation and opportunism) can take several forms including shirking, consumption of perquisites, overcompensation, and empire building, all of which increase the agency risk faced by external stakeholders and decrease the expected value of the cash flows to the firm and its external stakeholders. As the firm's expected cash flows decline, the default risk of lenders increases leading to higher debt yields.

Conflict of interests also happen between shareholders and debt holders. Three potential conflicts can be noted: direct wealth transfer, asset substitution (or risk shifting), and underinvestment. In the case of direct wealth-transfer conflicts, dividends are increased or debt with higher priority is issued (Smith & Warner, 1979). In the case of asset substitution, the firm has strong incentives to substitute current projects for projects which have higher risk because if the projects are successful and profitable, shareholders capture

most of the gains, while debt holders bear most of the cost (Jensen and Meckling, 1976). However, if the substituted project failed, it would reduce the value of collateralization to debt holders, and if the firm goes bankrupt, limited liability allows stockholders simply to walk away from it, shifting all the risk to creditors. Myers (1977) indicate that underinvestment problem arises when shareholder lack the incentives to contribute new capital in value-increasing projects where returns are captured mainly by creditors (debt overhang problems).

As these agency costs of debt increases, the premium that debt holders require increases (Pittman & Fortin, 2004). Bhojraj and Sengupta (2003) argue that stronger governance can result in lower cost debt capital through a reduction in default risk due to reduced agency problems and improved monitoring of managerial actions.

Other important determinant of cost of debt is the information asymmetry. In the case of asymmetrical information, lenders would be concerned about two possibilities - (i) that the company was withholding information that could increase the default risk of the loan and/ or (ii) that the company was not truthful in the disclosures that it did make (Mazumdar & Sengupta, 2005). Myers and Majluf (1984) show that definitely such information risk affects the loan spread the lenders charge.

Governance mechanisms can help reduce information risk by inducing firms to disclose information in a timely manner and assuring the supervision of the quality of financial reports (Yuan, 2006). In support of this argument Beasley (1996) documented a negative association between the proportion of the board that is composed of outsiders and the probability of financial statement fraud.

Most of studies that examine the relationship between internal corporate governance mechanisms and debt holder-stockholder conflicts suggest that some ownership structure mechanisms benefit debt holders, institutional ownership (Bhojraj & Sengupta, 2003, Roberts & Yuan, 2006), family ownership (Anderson, Mansi, & Reeb, 2003), ownership concentration and the number of block holders (Ashbaugh, Collins & Lafond, 2006). Board of directors is often considered as the most important internal control mechanism responsible for monitoring the actions of top management (Fama & Jensen, 1983).

Therefore, Lefort and Urzua (2008) indicate that board of director is a central body in the internal governance of a company which provides a key monitoring function in dealing with agency problems inherent in managing an organization. Based on the arguments above, this study has considered the board of directors' characteristics as an important mechanism of corporate governance.

2. .1 Board of Directors and Cost of Debts

Board of directors improve firm efficiency in such a way that both creditors and shareholders' benefit, thereby reducing the cost of loans and/or their covenant requirements. For example, board diversity may cause banks to have greater faith in internal governance mechanisms and thus reduce borrowing costs. Moreover, board effectiveness may lead to better quality advice to management and lead to better terms for debt (Fields, Fraser & Subrahmanyam, 2010).

Generally, quality of the board may have a material impact on the cost of debt capital. Smith and Warner (1979) suggest that creditors price the firm's debt to reflect the difficulties in ensuring the validity of the lending agreement, indicating that if board structure is an important oversight element in the financial accounting process, debt prices may be sensitive to board of director characteristics.

Several studies have addressed specifically the association between board of directors' characteristics and the cost of debt financing. In the U.S, Anderson et al. (2004) examine the relationship between cost of debts and corporate governance features which include board independence, size and expertise and audit committee features by using a sample of S&P 500 firms over the period from 1993-1998. While, this study ignored other board of director's characteristics and limited to American companies only, the current study has used board independence, size and other characteristics ignored before such as board meeting, board, CEO duality, multiple directorships and board ownership in the different sample of UAE listed companies.

By using the same sample of US companies but different period used by Anderson et al. (2004), Ashbaugh et al. (2006) discuss the relationship between cost of debts and four corporate governance features i.e. ownership structure and influence financial stakeholder rights and relations, financial transparency and information disclosure, and board structure and process over the period from 2001-2004. The study considers just three characteristics of the board namely board independence, ownership and expertise but it ignored the other boards features that this study has included such as board size, meeting, CEO duality, and multiple directorships in the different sample of UAE listed companies.

Consistent with the previous studies, Ertugrul and Hegde (2008) examine how equity-based compensation for external directors affects shareholder-bondholder conflicts. However, this study considered only the external directors features; there are other important features with regard to the internal and external directors that this study ignored such as (board size, independence, meetings and others). Moreover the issue of relationship between cost of debts and corporate governance has not been

investigated in each of the developing countries. Hence, the current study will use the other characteristics of internal and external directors ignored before and will use UAE listed companies.

Based on previous studies by (Anderson et al. 2004; Ashbaugh, et al. 2006; Ertugrul & Hegde, 2008), Fields et al. (2010) extended these studies in US firms by using the data for S&P 500 firms over the period from 2002 to 2004. This study analyzes the relationship between comprehensive measures of board quality and the cost as well as the non-price terms of bank loans. However, board quality characteristics used in this study are board size, board independence, the presence of an advisory board member (who is not an insider), board experiences, female board members as a proxy for board diversity, director pay, and director ownership. The current study has used some of these characteristics and other board characteristics ignored by the earlier studies such as CEO duality, board meetings and multiple directorships in the different sample selection of UAE listed companies.

The relationship between corporate governance characteristics, audit quality proxies and cost of debts has been investigated by Piot et al. (2007). The proxies of corporate governance that are used in their study are independent directors, existence of a compensation committee and the presence of institutional shareholders. Although it used different sample that previous studies didn't use which include French listed companies and other corporate governance characteristics, the study still ignored the other characteristics of corporate governance. Therefore, the current study will use these characteristics that ignored by previous studies by using different sample of UAE listed companies.

Based on the above studies that discussed the association between board of directors' characteristics and cost of debts, debt holders favour monitoring mechanisms that are likely to limit managerial opportunism and consider the board monitoring effectiveness as a source of greater assurance with respect to the integrity of accounting numbers thus, improving the financial accounting process. Henceforth, these creditors allow a reduction in their risk premium.

This study will extend what has been done earlier by analyzing the relationship between board of directors characteristics namely board size, board independence, board meetings, split of chairman and CEO roles, multiple directorships and director's ownership on cost of debt. The following sub-sections will discuss each of the board characteristics and the association of these characteristics with the cost of debts.

2.2.1.1 Board Size and Cost of Debts

Board size or the number of directors on board is an important factor that determines the effectiveness of the board. Increase in board size would improve companies' board effectiveness to support the management in reducing agency cost that resulted from poor management and would in turn lead to better financial results (Jensen & Meckling, 1976). Recent studies also indicate that board size may play an important role in directors' ability to monitor and control managers. Lipton and Lorsch (1992) and Jensen (1993) for instance, argue that because of difficulties in organizing and coordinating large groups of directors, board size is negatively related to the board's ability to advise and engage in long-term strategic planning.

In contrast, Yermack (1996) and Adams and Mehran (2002) argue that some firms require larger boards for effective monitoring. Chaganti, Mahajan and Sharma (1985)

posit that large boards are valuable for the breadth of their services. Klein (2002) for instance, finds that board committee assignments are influenced by board size since large boards have more directors to spread around. As such, she suggests that board monitoring is better achieved by increasing the board size as this would distribute the work load over a greater number of observers.

Lipton and Lorsch (1992) and Monks and Minow (1995) extend this argument by suggesting that larger (smaller) boards are able to commit more (less) time and effort to overseeing management. If large boards are more effective monitors of the financial accounting process, then bondholders should benefit through roved financial transparency and reliability.

There have been a number of studies that investigated the relationship between board size and cost of debts. In U.S., Anderson et al. (2004) was among the first to examine the relationship between board size and cost of debts. This study uses sample of S&P 500 firms from the period 1993-1998, and the results of this study indicate that cost of debt financing is negatively related to board size as larger boards may increase the level of managerial monitoring. Fields et al. (2010) extended the sample of the above study and use different period for the same firms; they used S&P 500 firms over the period from 2002-2004 to show whether board size has any association with cost of debts. Consistent with Anderson et al. (2004) their study found that increase in board size lead to borrowing at lower interest rates. Based on these two studies, this current study has used board size as one of independence variable for UAE listed companies.

By using a pool of sample composed of SBF 120, non-financial listed French companies over the years 1999 to 2000, Piot et al. (2007) investigate empirically the

correlation between corporate governance mechanisms, audit quality proxies and the cost of debt. The authors use board size as one feature of the board to examine whether there is any influence of the board size on the cost of debts. The results of this study fail to document any association between board size and the borrowing cost. However, the current study has used the other area of UAE listed companies. The debt rate in this area is high compared to other countries. This study will examine whether these two variables i.e. board size and cost of debts have any correlation.

2.2.1.2 Independence of Board Members

Board independence or the degree to which board members are dependent on the organization is seen as a primary incentive of board monitoring. According to Fama and Jensen (1983), board effectiveness in monitoring management is a function of the combination of insiders and outsiders who serve on the board. Christopher (2005) argues that independent directors on the board add value to an organization by increasing responsibility, by providing self-governing judgment, by increasing the network of business connections for the board and executive, and by moderating the power of the chair and/or the chief executive officer (CEO) who in some organizations, may be overly powerful. As a result of their independence from firm management, the non-executive or outside directors are believed to provide superior benefits to the firm (Judge et al. 2003).

Similarly, Roberts, McNulty and Stiles (2005) indicate that if an outside director is an active participant, the independence of mind which such a director brings to the team can be a valuable contribution to the functioning executives in their leadership of the business including the monitoring and controlling of executive conduct. Moreover,

Byrd and Hickman (1992) point out that independent director contribute expertise and objectivity that minimize managerial entrenchment and expropriation of firm resources. Beasley (1996) and Dechow, Sloan and Sweeney (1996) find that the proportion of independent directors on the board (board independence) is inversely related to the likelihood of financial statement fraud.

More recently, Klein (2002) documents a negative relation between abnormal accruals and director independence from senior management. If independent boards provide superior oversight of the financial accounting process, then we expect bondholders to directly benefit through greater transparency and validity in accounting reports.

There are a few studies which investigate the association between board independence and borrowing cost. In US listed companies Anderson et al. (2004) was the first to examine the relationship between board independence and cost of debts by using data of S&P 500 firms from 1993-1998. The results of this study found that the cost of debt financing is negatively related to board independence. Consistence with this result Fields et al. (2010) increase the data and change the period that was used in the above study; they used 1500 US companies over the period from 2002 to 2004. The result of this study found that the companies secured cheaper loans if these companies have high percent of board independence.

The other study done on USA companies was by Ashbaugh et al. (2006) who studied the impact of corporate governance on credit ratings for United States companies. By considering the independence of board as one of board structure, the authors observe that firm credit ratings are positively related to overall board independence, and this can translate into significant debt cost savings for firms. This means that board independence

does impact the debt rating which means that the company can secure large amount of debts easily and this will have influence on the cost of these debts.

The three studies that discussed above consider only companies that were listed in the U.S by using different data and different period, the other study that investigated the association between board independence and cost of debts was in France by Piot et al. (2007). This study used 120 non financial companies listed in French over the time from 1999 to 2000; the study found that the board independence is negatively related to cost of debts or the cost of debts will be low when the company has high percentage of board independence. However, most of the previous studies focused on US and French companies. This study examines the relationship between board independence and cost of debts in the sample of UAE listed companies.

2.2.1.3 CEO Duality

One aspect of corporate governance, which has given rise to concern, is the dominant personality phenomenon that includes role duality, where the chief executive officer (CEO) or managing director is also the chair of the board. According to Carapeto et al. (2005), a company can achieve superior performance when the CEO exercises complete authority and his role is both unambiguous and unchallenged.

However, Fama and Jensen (1983) and Jensen (1993) argue that the separation between the CEO's roles and chairman facilitates the reduction of the agency costs. Moreover, they argue that duality decreases firm performance and increase the agency problems due to CEO entrenchment and a decline in board independence from corporate management. These arguments have been supported by Yermack (1996) who found firms to be more valuable when the CEO and board chair positions are separate.

In addition, the two main roles in a typical corporation are the chairman of the board as a legal guardian of owners' interests and the chief executive officer (CEO), legally responsible for the good management of the firm. Fama and Jensen (1983) suggest that when a single individual has the authority of both the CEO and the chairperson positions, managerial monitoring is greatly affected since that individual is more aligned with management than with stockholders. Separating the two roles could signal to investors that proper monitoring is taking place (Bitar, 2003).

Imhoff (2003) argues that board governance is severely compromised when the current CEO of the company also serves as chairman of the board. This is because the board chairman frequently sets the board's agenda and therefore, controls issues brought before the board. Moreover, CEOs that serve as board chair frequently have significant influence on the slate of candidates for board seats, thereby increasing the risk that new board appointees will not be independent of management even though they are "outsiders". Furthermore, given that a key function of the board is to determine who should serve as CEO, the board cannot effectively replace poorly performing managers when the CEO and chairman titles are vested in one individual.

A number of empirical studies have suggested that agency problems are more prominent when the CEO is also the chairman because it promotes CEO entrenchment limiting the board's effectiveness in performing its governing function (Jensen, 1993; Goyal & Park, 2002). Forker (1992) asserts that CEO duality poses a threat to monitoring quality. He found a significant negative relationship between the existence of a unitary leadership structure and the disclosure quality. Dechow et al. (1996) shows that when the CEO is the Chairman of the Board and there are more insiders on the board, the entity is more likely to violate GAAP.

Nevertheless, it should be noted that although the separation of roles is generally seen as positive in classical agency theory, it could also create an occasion for communication breakdown and hence further information asymmetry between the CEO and the Chairman. Brickley et al. (1997) provide contrasting evidence that the costs of separating the CEO and chairman positions may exceed the benefits.

There are two studies that examine the relationship between CEO duality and the cost of debts. Ashbaugh et al. (2006) was the first to investigate whether the CEO who is also the chairman of the board has any influence on the debts rating for United States companies. The results of this study indicate that credit ratings are negatively associated with the power of the CEO. Based on Ashbaugh et al. (2006) results, Piot et al. (2007) studied 120, non-financial listed French companies over the years from 1999 to 2001 to find out whether CEO duality for French companies correlate with the cost of debts. The study found a negative relation when the CEO was not the Chairman of the board. They however, fail to document an association between these variables. Consequently, the current study has extended the empirical studies in the other area of UAE listed companies to show whether separation of CEO and chairman roles has any influence on the borrowing cost.

2.2.1.4 Board of Director Meetings

Board of directors meeting is defined by Adams (2003) as the number of meetings held by the board during the year. According to Vafeas (1999) and García et al. (2009), the number of board meetings is a good proxy for the directors' monitoring effort. Menon and Williams (1994) indicate that board of directors that do not meet, or meet only a small number of times are unlikely to be effective monitors. Lipton and Lorsch (1992) consider that the most widely shared problem faced by directors is

the lack of time to carry out their duties. Vafeas (1999) shows that frequent board meetings can be a remedy to this limited director interaction time. Similarly, Conger et al. (1998) show that board meeting time as an important resource in improving the effectiveness of a board.

Consistent with this view, Klein (1998) finds that audit committees of strong-CEO firms also have a tendency to meet less frequently than their counterparts. On the other hand, Carcello, Hermanson, Neal and Riley (2002) show that hard-working boards (boards meeting more frequently) pay higher audit fees because they demand differentially higher audit quality and greater assurance which requires more audit work, suggesting a relation between board activity and the monitoring over the financial accounting process.

An opposing view is that board meetings are not necessarily useful because routine tasks absorb much of the limited time directors spend together and the CEO almost always sets the agenda for board meetings. Vafeas (1999) finds a negative relationship between the number of board meeting and performance, which means that boards that meet more frequently are valued less by the market. Rehman, Rehman and Raoof (2010) find that board of directors meeting is positively related with capital structure (debt and equity).

Moreover, the only evidence on the relation between board activity and cost of debt comes from Anderson et al. (2004) who examine the correlation between corporate governance features which include board of directors features namely board independent, size and expertise and audit committee features which include independence, size, meeting and expertise by using a sample of S&P 500 firms over the period 1993-1998. From all the features discussed by the study, audit committee

meeting was one of the features which used to show whether cost of debts are affected by audit committee meetings. The results indicate that increase audit-committee meeting frequency lead to a decrease in debt costs. Since it has been shown that audit-committee meeting does affect the cost of debts, it is expected that the number of board meetings would produce the same result in this study.

2.2.1.5 Multiple directorships

Directorship means any position held by directors in any company or organization which is not a subsidiary of the company. There is substantial evidence supporting the view that directorships serve as a measure of a director's reputation as a monitor. Fama (1980) and Fama and Jensen (1983) argue that the marketability of directors serves as an important source of incentives for them to be good monitors because being directors of well-run companies signals value to the external market which rewards them with additional directorships.

Directorships are perceived to be valuable because they provide companies with prestige, visibility, and contacts. Consistent with this view, Shivdasani (1993) finds that directors of hostile takeover firms have significantly fewer additional directorships in other firms thereby suggesting that outside directors of hostile targets are less reputed monitors. Gilson (1990) showed that firms overcoming a bankruptcy or debt restructuring, and directors who resign hold significantly fewer seats on other boards following their departure.

There is strong evidence on the costs associated with serving on multiple boards. These studies suggest that too many directorships may lower the effectiveness of directors as corporate monitors. Kaplan and Reishus (1990) found evidence that directors of poor performance firms are approximately 50 percent less likely to

receive additional outside directorships. Moreover, Shivdasani and Yermack (1999) indicate that the benefits of outside directorships may be non-linear, declining for the highest directorship levels as busy directors have less available time to monitor management properly. In Malaysia, Haniffa and Hudai (2006) found that there is a significant relationship between directorship and market performance.

According to Beasley (1996), the probability of committing accounting fraud is positively related to the average number of directorships held by outside directors. This result is consistent with the view that additional directorships held by directors distract them from their monitoring responsibilities, thereby increasing the likelihood of financial statement fraud. Fich and Shivdasani (2006) mentioned that firms with busy boards, those in which a majority of outside directors hold three or more directorships are associated with weak corporate governance i.e. they are less likely to remove a CEO for poor performance.

In contrast, Ferris, Jagannathan and Pritchard (2003) claim that busy boards are as effective as non-busy boards at monitoring and find no relation between the average number of directorships held by outside directors and the firm's market-to-book ratio. They conclude that proposals calling for limits on multiple board appointments are misguided. In relation to cost of debt, Ashbaugh et al. (2006) show that credit ratings are positively associated with directorships and this can be translated into a lower debt cost for firms.

According to Donato and Tiscini (2009), directorship is an important feature of board as it affects the ability to acquire low cost debts from financial institutions. This study indicated that when firms have a good relationship with banks or other financial institution, this will lead to reduce information asymmetry and transfer

financial competences into the firm, thus enabling conditions for a lower cost of debts and allowing the sustainability of a higher indebtedness level.

2.2.1.6 Major Director Ownership

Generally, the literature suggests that directors with equity stakes are associated with better monitoring. Equity stakes ties directors' wealth more closely to the value of corporate equity and can provide them greater incentives to monitor management (Jensen & Meckling, 1976). Moreover, Jensen (1993) indicates that a larger managerial ownership interest should be more closely align to the decision-making and wealth interests of managers with those of company shareholders, which would results in the minimization of agency problems. This would suggest a negative association between the level of managerial ownership and the level of agency costs. Patton and Baker (1987) suggest that a director with a large stake in the firm is more likely to question and challenge management's proposals.

The results of many empirical studies are consistent with the view of directors' ownership as a way to constrain the opportunistic behavior of managers, and document a negative association between the likelihood of discretionary accruals (Warfield et al., 1995) or financial statement fraud (Beasley, 1996) and director ownership.

Besides having the incentives to do better monitoring tasks, the relatively undiversified stakes of directors tends to induce them to adopt a risk adverse behavior that may result in efforts to reduce the firm risk. If director equity ownership creates incentives for independent directors to closely monitor firm management and mitigate firm risk, then expect debt holders to have the advantage. This idea is supported by several researchers such as Ertugrul and Hegde (2008) who

find that equity-based compensation increases the monitoring incentives of outside directors and is negatively related with bond yield spreads in US listed companies.

Consistent with the above study which use data of United States companies, Asbaugh et al. (2006) analyze the effect of the percentage of shares held by officers or directors as one characteristics of ownership structure on firm credit ratings. The results of this study found that a positive relationship between percentages of shares held by directors and firm credit rating or increase in the percentage shares held by the directors will lead to increase debt ratings, and this will affect the cost of these debts.

2.2.2 Other Corporate Governance Mechanisms and Cost of Debts

As mentioned earlier, corporate governance includes several mechanisms and board of directors is one of the important mechanism that the current study has discussed and used it as an independent variable. Otherwise, there are other mechanisms of the corporate governance such as ownership structure, disclosure, and auditor's quality that the current study will discuss to support the literatures review of this study. Hence the next section will discuss the studies that have investigated the relationship between these corporate governance mechanisms namely ownership structure, disclosure, and auditor's quality and cost of debts.

An important study of ownership structure mechanism was conducted in 2003 by Bhojraj and Sengupta, this study explores the effect of governance mechanisms (institutional ownership and outside directors) on bond ratings and yields in the case of US firms. The empirical results of this study shows that greater institutional ownership indeed enjoys lower bond yields and higher credit ratings and these two mechanisms are more effective in reducing the cost of debt and increasing the bond

rating for firms with poor governance quality. However, this study ignored other governance mechanisms such as board of directors and other ownership structures which are important mechanisms of corporate governance. The institutional ownership in the Gulf area is limited because most companies in this area are family-controlled companies hence institutional ownership will be low among UAE listed companies.

Another study was by Anderson, et al. (2003), this study used a sample of U.S companies and analyzes another aspect of the firm's corporate governance, namely ownership structure. Specifically, they observe that ownership concentration in the hands of the founding family is negatively associated to the agency cost of debt. The authors also examine the impact of institutional ownership, but find no significant relation between institutional investors' participation and the cost of debt. The above study however, ignored other ownership structures such as managerial ownership and government ownership and ignored the important corporate governance mechanisms such as board of directors and other committees.

More recently Elyasiani, Jia and Mao (2010) examine the association between institutional ownership stability and the cost of debt. The results of the study indicate that stable institutional ownership is associated with a lower cost of debt. This study found that the ownership stability effect on the cost of debt is stronger for active and larger institutional investors, and for firms with more severe information asymmetry and agency problems of debt. Although this study is consistent with the previous studies by (Bhojraj and Sengupta, 2003; Anderson et al., 2003) it ignored other important ownership structure such as family ownership, government ownership and managerial ownership. It should be noted that family ownership is a feature of most

companies in the Gulf area, so the impact of institutional ownership for these countries on the cost of debt will be limited.

Consistent with the above studies in using the sample of US companies, Ashbaugh et al. (2006) study the relationship between corporate governance and credit ratings. This study looks at four cooperate governance features i.e. ownership structure, financial stakeholder rights, information disclosure, and board structure. They document that credit ratings are positively affected by the quality of financial transparency and ownership structure. Moreover, credit ratings are negatively related to shareholder rights. While the study uses some of board directors' features that are discussed above such as board independence, ownership and expertise but it ignored the other board features. The current study has used them as important features for the board such as board size, meetings and directorship which lead the board to being more effective to get the loans or other debts easily from financial institution at reasonable costs.

Another mechanism of corporate governance is auditor's quality; Mansi, Maxwell and Miller (2004) study the relationship between auditor characteristics and cost of debt for United States companies and discover that auditor quality correlate negatively with the cost of debt. At the same time, Pittman and Fortin (2004) use the same sample of US companies from 1977-1988, and test for correlation between auditor reputations with the cost of debt. They find that the companies having retained a big six auditor exhibit a lower averaged cost of debt capital. However, in these two studies, the authors used one mechanisms of external corporate governance (external auditor's characteristics) while these studies ignored internal corporate governance mechanisms such as board of directors, audit committee, ownership

structure, so UAE listed companies has been chosen by the current study to discuss the effect of one internal corporate governance mechanisms namely board of directors characteristics on the cost of debt.

Although most of the above studies consider the association between cost of debt and ownership structure and auditors quality, Byun (2007) discussed the other area of corporate governance that is between the cost of debt and corporate governance practices by using sample of Korea listed companies for the period 2001 to 2004. This study finds that firms that are associated with sound corporate governance practices have a lower cost of debt capital. In particular, dividend policies, shareholder rights protection, board of directors, and audit committee are corporate governance practices that significantly reduce the cost of debt capital. However, corporate governance practices differ from country to others and the code of corporate governance for each country has its own features which fit with the organization environment. The current study has used the UAE corporate governance code to examine whether board of directors characteristics of this code has a relationship with the cost of debts.

2.3 Summary

Previous studies have examined the relationship between corporate governance mechanisms and cost of debts. Corporate governance includes several mechanisms such as board of directors, ownership structures, and disclosure and auditors quality. This study has considered the board of directors characteristics because board of directors is often cited as the most important internal control mechanism responsible for monitoring the actions of top management and board of directors is a central body in the internal governance of a company which provides a key monitoring

function in dealing with agency problems inherent in managing an organization.

From all the above studies, it can be concluded that there is no consensus among researchers about the direction of the relationship between board size, independence, CEO duality, board meetings, multiple directorships, director ownership and cost of debts. Most characteristics of the board discussed by the previous studies indicate a negative relationship with borrowing cost, but a few of these studies show positive relationships. Hence, this study has extended from the previous studies by examining the relationship between the six characteristics of the board and cost of debts in the new environment.

CHAPTER THREE

RESEARCH FRAMEWORK AND METHODOLOGY

3.0 Introduction

This chapter is divided into three sections: the first section presents a theoretical framework to verify the relationship between boards of directors' characteristics namely board size, independency of the board, CEO duality, board meetings, multiple directorships, and board ownership and cost of debts. Section two presents the hypotheses development and the third section, discusses the design of the study.

3.1 Theoretical Framework

The theoretical framework of this study is based on the agency theory. Agency theory highlights in this section as the main theory of this study and the other subsection is framework of the study which shows the relationship between each board of director's characteristics as independent variables and cost of debts as dependent variable.

3.1.1 Agency Theory

An agency relationship is defined by Jensen and Meckling (1976) as a contract under which one or more principals engage another person (the agent) to perform some service on their behalf. Agency theory has shown that, as the result of separation between management and ownership, shareholders require protection because the management (agent) may have different agendas than shareholders (principals), and hence may not always act in the interests of the absentee owners (Jensen & Meckling, 1976; Fama, 1980 and Fama & Jensen, 1983).

The principal delegates decision making responsibility to their agent. The agents are charged with using and controlling the economic resources of the company. However, the management may not always maximize the value of the shareholders due partly to adverse selection and moral hazard that arise from information asymmetry.

Agency theory focuses on resolving problems arising from the agency relationship. Often, the sources of these problems are externalities arising from asymmetries of information, differences in attitude towards risk, and differences in decision-making rights (Ertugrul & Hegde, 2008). Heinrich (2002) identifies that agency problems may arise between three parties: first, between shareholders and top management, second, between controlling and minority shareholders, and the last, between shareholders and creditors. To limit these problems, both principal and agent have increased investment in various information systems and control mechanisms to reduce agency costs associated with information asymmetry (Jensen & Meckling, 1976 and Fama & Jensen, 1983). These control mechanisms might offer maximum gains for all parties since the agent would bear agency costs that occur when principals discount the value of the firm, based on the likelihood of adverse selection, shirking and moral hazard (Alchian & Demsetz 1972 and Jensen & Meckling 1976).

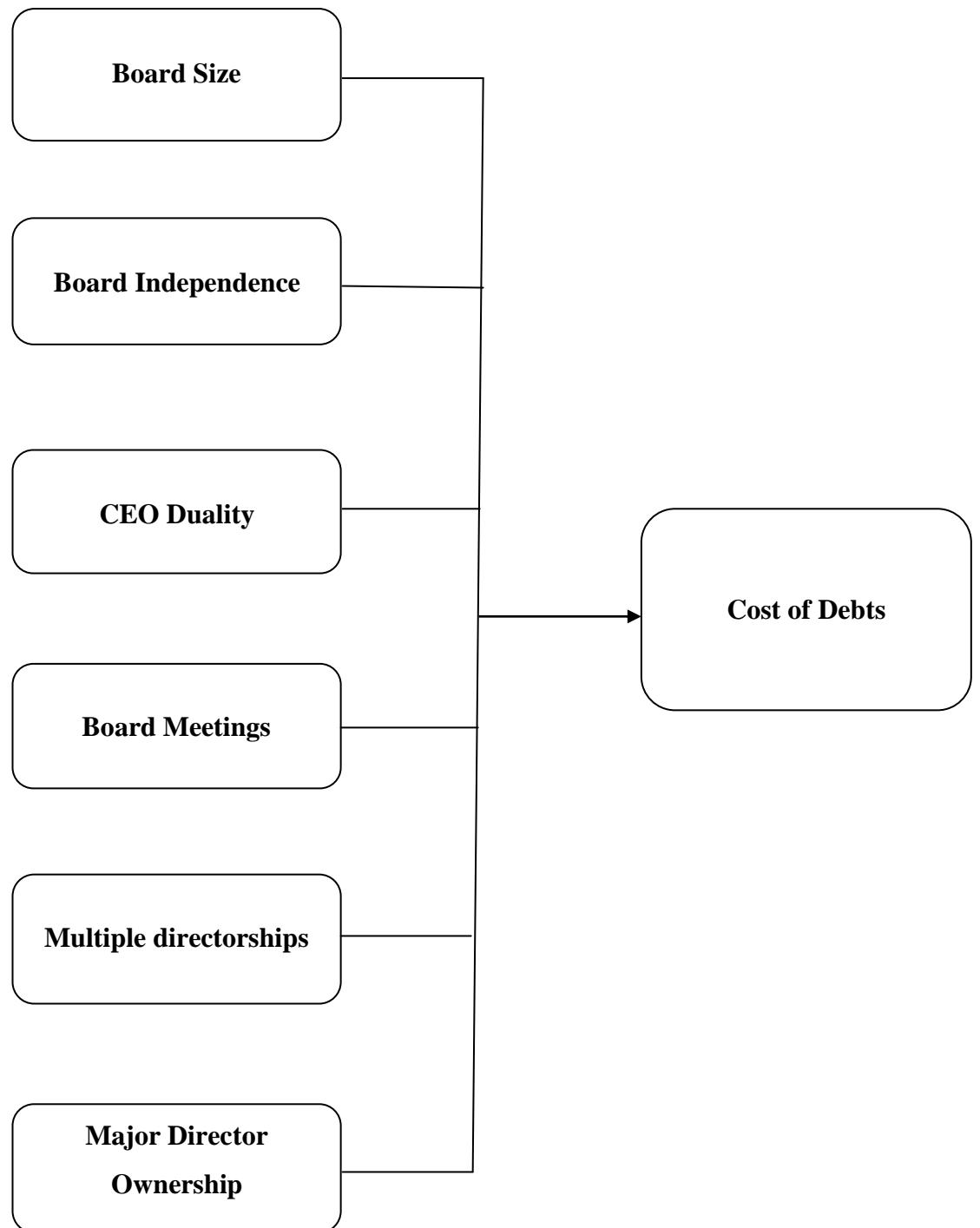
Agency theory has provided the basis for theoretical research and daily application of corporate governance mechanisms that have been used to monitor the management of listed companies. Fama and Jensen (1983) indicate that the role of the board of directors is to deal with agency problem and an oversight role of monitoring managers is the primary role of director. The board of directors is argued to play an important role in protecting the interests of various stakeholders against management's

self-interests. According to Hermalin and Weisbach (2003), the optimal solution (at least second best) to some agency problems which modern companies faced is the board of directors. Fama and Jensen (1983) argued that board of directors is needed to minimize agency cost and maximize shareholder interests. Enhancement in board of directors, in term of board size, board composition and leadership structure, could improve board effectiveness and its capacity to monitor the management (Abdullah, 2004 & De Andres et al. 2005).

In addition, boards of directors' characteristics are argued to play a role in influencing firm's cost of debts (Fields et al. 2010). Empirically, the result of previous studies on relationship of the board characteristics, namely board size, board's independent, CEO duality and board ownership with cost of debts have been reported as mixed (Anderson et al, 2004; Ashbaugh et al, 2006; Piot et al. 2007 and Fields et al. 2010).

This study specifically investigates the relationship between the board characteristics, namely board size, board independence, CEO duality, frequency of meetings, multiple directorships and board ownership with cost of debts. Figure 3.1 shows the research framework of this study that includes all respective variables. Each of the variables and the development of hypotheses will be discussed in details in the following sections.

Figure 3.1: Research Framework



3.2 Hypotheses Development

According to agency theory discussed earlier, the board of directors is an important mechanism to ensure the agent works to maximize the shareholders wealth. It is also noted that an important role of board of directors in internal corporate governance is to reduce the information asymmetry that leads to increase in agency problems. In addition, board of directors' effectiveness leads to the protection of investors and shareholders from the risks exposed as a result of borrowing from financial institutions which include defaults and increasing the cost of debt. In doing so, it has been suggested by agency perspective that board of directors should possess some crucial characteristics such as independent members, sufficient size, frequent meetings, CEO duality, multiple directorships and board ownership to perform its duties more effectively.

3.2.1 Board Size

Generally, board size has been found to affect the monitoring ability of the board of directors. Abdullah (2004) argues that larger size of board would result in better monitoring of the actions of the company management teams. Moreover, Jensen and Meckling (1976) indicated that larger board size would improve companies' board effectiveness to support the management in reducing agency cost that resulted from poor management and would lead to better financial results. However, Lipton and Lorsch (1992) argued that as board size increases, boards might become less effective at monitoring management. They recommend in their study that board membership should be between eight and nine, and any additional benefits that can be gained from increased monitoring by other membership will offset the costs related with slow decision making, the effort problem and easier control by the CEO.

Empirical evidence on the relationship between board size and cost of debts provided mixed results. Anderson et al. (2004) found that there is a negative relationship between board size and borrowing costs as larger boards may increase the level of managerial monitoring. In addition, Fields et al. (2010) examine the relationship between these two variables and they found that board sizes are negatively associated with cost of debts. However, Piot et al. (2007) in France found no significant association between board size and borrowing cost.

Based on the above argument and empirical evidence provided by the previous studies, it is expected that there is a relationship between the size of the directors' board and the cost of debts in UEA listed companies. Thus, it is hypothesized that:

H1: There is a relationship between board size and the cost of debts.

3.2.2 Board Independence

Boards of directors consist of inside directors and outside directors. Outside directors are persons who serve on the board of a firm but do not act in any sort of executive capacity (Ertugrul & Hegde, 2008). According to Jensen and Meckling (1976), large numbers of outsiders or non-executive directors (NEDs) may help to reduce the agency problem by monitoring and controlling the performance of the management team.

Therefore, Fama and Jensen (1983) indicated that the board's effectiveness in monitoring management is a function of the combination of insiders and outsiders who serve on the board. Christopher (2005) argues that independent directors on the board add value to an organization by increasing responsibility, by providing self-

governing judgment, by increasing the network of business connections for the board and executive, and by moderating the power of the chair and/or chief executive officer (CEO) who in some organizations, may be overly powerful. As a result of their independence from firm management, the non-executive or outside directors are believed to provide superior benefits to the firm (Judge et al. 2003).

The results of previous studies that investigated the relationship between portion of independent directors on the board and cost of debts were inconsistent. Ashbaugh et al. (2006) observe that there is a positive relationship between credit rating and board independence. However, Anderson et al. (2004) and Piot et al. (2007) found that there is a negative correlation between independence of board and borrowing costs. Similarly, Bhojraj and Sengupta (2003) results showed that cost of debts is negatively associated when the fraction of the board is made up of outsiders. In US listed companies, Fields et al. (2010) studied the same relationship and found that board independence negatively affects the borrowing costs.

Depending on the above argument and empirical evidence provided by the previous studies, it is expected that there is a relationship between board of directors' independence and cost of debts. Thus, it is hypothesized that:

H2: There is a relationship between the proportion of independent directors and cost of debts.

3.2.3 CEO Duality

Duality occurs when the same person undertakes both of the roles of CEO and chairman. Jensen and Meckling (1976) argue that if someone holds two top positions, this will lead to strategies which advance personal interests at the expense

of the firm as a whole. Similarly, Mallette and Fowler (1992) argue that in combined roles, the chairman of the board might make decisions potentially leading to a conflict of interest. Moreover, in combined roles, the CEO can set the board's agenda and can influence (if not control) the selection of directors for the board. They concluded in their paper that CEO duality can challenge a board's ability to monitor executives.

A number of empirical studies have put forward that agency problems increase when the same CEO is the chairman of the board because it promotes CEO entrenchment limiting the board's effectiveness in performing its governing function (Jensen, 1993 and Goyal & Park, 2002). Moreover, Rechner and Dalton (1991) indicate that to facilitate more effective monitoring and control of the CEO, agency theory suggests splitting the board chair position from CEO position. Similarly, Fama and Jensen (1983) and Jensen (1993) argue that the separation between the CEO's roles and chairman facilitates the reduction of the agency costs because the separation will lead the chairman to monitor the CEO better than having these two roles performed by one person.

Although Piot et al. (2007) hypothesized that there is a negative relationship between cost of debts and separation of CEO and the Chairman of board functions, they fail to emphasize the relationship between these variables. By using the same sample of US companies, Ashbaugh et al. (2006) document that credit ratings are negatively associated with CEO power. Based on the above argument and empirical evidence provided by the previous studies, it is expected that there is a relationship between the separation of chairman-CEO roles and cost of debts. Thus, it is hypothesized that:

H3: There is a relationship between CEO duality and cost of debts.

3.2.4 Board of Director Meetings

Board meetings are considered as the time that directors spent monitoring the performance of management team (Vafeas, 1999) and it is also an important source to improve the board members effectiveness (Lipton & Lorsch, 1992 and Conger et al. 1998). Moreover, if the directors have regular meetings, they will be more likely to have all the information about the relevant performance of the company and leading those members to take suitable actions to address the issues (Blue Ribbon Committee, 1999 and Abbott et al. 2003).

Studies that discussed the relationship between board of directors meetings and other dependent variables provided mixed results. Rehman et al. (2010) found that board of directors meeting is positively related with debts ratio as part of a company capital structure. However, Vafeas (1999) found that there is a negative relationship between the number of board meetings and firms' performance, which means when the boards have high number of meetings, market value will be low.

Moreover, there is evidence that show the relationship between meetings of committees which comes under board of directors namely audit committee and cost of debts. This study comes from Anderson et al. (2004) who found that there is a negative relationship between audit committee meetings and cost of debts. Based on the argument and empirical evidence provided by the previous studies, it is expected that there is a relationship between the board of directors' meeting and cost of debts.

Thus, it is hypothesized that:

H4: There is a relationship between board of director meetings and cost of debts.

3.2.5 Multiple directorships

Directorship is a position held by director members in any company or organization which is not a subsidiary of the company (Ashbaugh et al. 2006). Shivdasani and Yermack (1999) show that the benefits of directors that have jobs outside the company may be non-linear, as directors that work outside the company have a little time to monitor management team as well. According to Beasley (1996), there is a positive relationship between average number of directorships held by outside directors and the possibility of committing accounting fraud. This result is consistent with the view that additional directorships held by directors distract them from their monitoring responsibilities, thereby increasing the likelihood of financial statement fraud.

On the other hand, directorship is an important feature of boards as it leads to the ability to get debts from financial institution at low cost (Donato & Tiscini, 2009). The results of this study indicated that when firms have relationship with banks or other financial institution, it will lead to reduce information asymmetry and transfer financial competences into the firm, thus enabling conditions for a lower cost of debts and allowing the sustainability of a higher indebtedness level.

Fich and Shivdasani (2006) found that there is a negative relationship between a majority of outside directors who hold three or more directorships and practices of corporate governance (e.g. they are less likely to remove a CEO for poor performance). Haniffa and Hudai (2006) in Malaysia found that there is a significant relationship between directorship and market performance. In the case of relationship of the directorship as expertise and debts amount, Ashbaugh et al. (2006) find that credit ratings are positively associated with directorship and this can be translated into a lower debt cost for firms. Based on the results of previous studies, this study

expects that there is a relationship between multiple directorships and cost of debts.

Hence, it is hypothesized that:

H5: There is a relationship between multiple directorships and cost of debts.

3.2.6 Major Director Ownership

Director ownership is considered as the percentage of total firm equity capital (without shares attributable to underlying share bonus, incentive and option plans) held by all company directors (Asbaugh et al. 2006). The previous studies indicated that if the directors own shares in the company, this will result in better monitoring. Moreover, Jensen and Meckling (1976) mentioned that equity stakes ties director's wealth more directly to the assessment of corporate equity and can provide them with more incentives to control the management. In addition, Jensen (1993) indicate that a larger managerial ownership interest should more closely align the decision-making and wealth interests of managers with those of company shareholders which results in reducing the agency problems.

The results of many empirical studies are consistent with the view of directors' ownership as a way to constrain the opportunistic behavior of managers. Warfield et al. (1995) found that there is a negative relationship between the possibility of flexible accruals and director ownership. However, Beasley (1996) found there is a negative relationship between financial statement fraud and director ownership. Therefore, Ertugrul and Hegde (2008) conclude that shares held by the directors lead to an increase in the monitoring incentives of outside directors and is also associated negatively with bond yield spreads. Asbaugh et al. (2006) investigate the relationship between firm credit ratings and the percentage of shares held by officers or directors, and found that there is a positive relationship between these variables. Based on the

results of the previous studies this study expected that there is a relationship between director's ownership and cost of debts. Hence, it is hypothesized that:

H6: There is a relationship between major director ownership and cost of debts.

3.3 Research Design

This section highlights the design of the study. The first section shows the process of collecting data and the second section discusses the regression model and operational definition. The third section discusses the measurement of the variables and then the predictors variables are summarized in the table. The fourth subsection discusses the types of analysis used to analyze the data.

3.3.1 Data Collection

The population of this study consists of non-financial firms that are listed on UAE emergence capital markets namely Dubai financial market (<http://www.dfm.co.ae>) and Abu-Dhabi securities exchange (<http://www.adx.ae>). According to Dubai financial market and Abu-Dhabi securities exchange, there were 62 non-financial companies listed as of 20th March 2011. Due to the differences in the regulatory requirements, and the characteristics of their financial reports which are different from those of non-financial firms, the banks and the other financial institutions are excluded from this study (Alsaed, 2006). The year 2009 has been chosen because the year's annual reports formed the latest source of information available at the time the study was initially conducted.

Information on the research variables was mainly extracted from the annual reports from firms which were obtained from UAE capital markets. This study employs basically secondary data based on the financial statements of all the 62 non-financial

firms on Dubai financial market and Abu-Dhabi securities exchange in a specific year. The use of listed firms is due primarily to data availability and reliability as they are required by law to provide end of year financial reports.

3.3.2 Regression Model

This study applies multiple linear regression analysis in order to test the hypotheses of the relationship between board characteristics and cost of debts. The equation uses to explain the association is:

$$\text{Cost of Debts} = \alpha_0 + \beta_1 \text{BSIZE} + \beta_2 \text{BIND} + \beta_3 \text{DUAL} + \beta_4 \text{BMEET} + \beta_5 \text{MDSHIP} + \beta_6 \text{BOWNER} + \varepsilon$$

Where: α_0 – Intercept. BSIZE - Board Size. BIND - Board Independence. DUAL – Duality Role. BMEET – Board Meetings. MDSHIP – Multiple Directorships. DOWNER – Major Director Ownership. ε - Error term.

3.3.3 Operational Definition and Measurement of the Variables

Cost of Debts

Cost of debts employs in this study as a dependent variable, which is defined as the effective rate that a company pays on all its debts. Cost of debts will be measured as the interest expense for the year divided by the amount of debts (Pitman & Fortin, 2004; Francis et al. 2005 and Piot et al. 2007).

Board Size

Board size is the total number of directors on the board of each sample firm which is inclusive of the CEO and Chairman for each accounting year. This study will measure the board size by determining total number of directors available on the board which include outside directors, executive directors and non-executive

directors (Anderson et al. 2004 and Piot et al. 2007).

Board Independence

Board independence is the independent board members in the organization. The primary measure of board independence is the proportion of independent directors on the board (% indep) or a number of independent directors and divided it by the total number of directors on board (Anderson et al. 2004 and Piot et al. 2007).

CEO Duality

CEO duality means the CEO is also the board chairman. This study measures CEO duality (CEO is also the chairman of the board) as one and zero otherwise (Ashbaugh et al. 2006 and Piot et al. 2007).

Board of Director Meetings

Board of directors' activity (frequency of meetings) is the number of meetings held by board during the year. Based on Vafeas, 1999 and Rehman et al. 2010, this study measures board meetings by the number of board meetings during the year.

Multiple directorships

The directorship of the board means that board members that sit on boards of other companies. Following Haniffa and Hudai (2006); Ashbaugh et al. 2006, multiple directorships is measured as the percentage of board members that sit on boards of other companies.

Major Director Ownership

Director ownership is defined as the percentage of shares held by directors in the company. Following Warfield, et al. (1995) and Asbaugh et al. (2006), this study measures director ownership as the percentage of shares held by directors in the company.

The predictor variables included in the above model are described and summarized below.

Table 3.1 Summary of Predictor Variables

Variables Names	Variables Acronym	Operational definition
Board of Directors Size	BSIZE	The total number of directors on the board members (Anderson et al. 2004 & Piot et al. 2007).
Board of Directors Independence	BIND	The percentage of independent members in the board of director's members (Anderson et al. 2004 & Piot et al. 2007).
CEO Duality	DUAL	The CEO is also the board chair (Ashbaugh et al. 2006 & Piot et al. 2007).
Board of Director Meetings	BMEET	The number of meetings held by board during the year (Vafeas, 1999 & Rehman et al. 2010).
Multiple directorships	BDSHIP	Percentage of board members that sit on boards of other companies (Haniffa & Hudai (2006) and Ashbaugh et al. 2006).
Major Director Ownership	BOWNER	Percentage of shares that held by director's members in the company (Warfield et al. 1995 & Asbaugh et al. 2006).

3.3.4 Data Analysis

This subsection describes the data analysis adopted in this study. The data is analyzed by using the Statistical Package for the Social Science (SPSS). The analysis covers the following stages: - (1) The Descriptive Statistics; (2) Correlation Analysis; and (3) Linear Regression Analysis. These three stages are explained below:

3.3.4.1 Descriptive Statistics

Descriptive analysis is the initial analysis. The descriptive analysis exposes us to more descriptive information and enables us to understand and interpret the data better (Zikmund 2003). This study uses descriptive analysis to show the mean, minimum, maximum and standard deviation for each variable for sample.

3.3.4.2 Correlation Analysis

The second analysis of the data is an analysis of the correlation between dependent and independent variables. The correlation analysis used in this study is an interdependence approach that seeks to evaluate the extent of linear relationship between two continuous variables (Genser et al. 2007). This analysis can be done by using a correlation matrix which is used to observe the correlation of one variable with another. Moreover, the output of this examination explains the nature, direction and significant of the correlation of the variables used in this study.

3.3.4.3 Multiple Regression Analysis

This study applies multiple linear regression (MLR) in order to examine the association between the cost of debts and board of director's characteristics (board size, board independence, CEO duality, board meetings, multiple directorships and board ownership).

CHAPTER FOUR

FINDINGS AND DISCUSSION

4.0 Introduction

This chapter discusses the findings of this study which includes descriptive statistics, followed by correlation analysis and assumptions of multiple regressions. Finally, the results from multiple linear regression analysis are revealed in the last section.

4.1 Descriptive Statistics

The first step in the analysis of multivariate data is a table of means and standard deviations. Descriptive analysis provides more descriptive information and enables to understand and interpret the data better (Zikmund 2003). The following table 4.1 illustrates the mean, median, minimum, maximum and standard deviations of the dependent and independent variables used by this study.

Table 4.1 Summary of Descriptive Statistics

Variables	Minimum	Maximum	Mean	Std.
Board size (number)	3.000	18.000	8.338	2.297
Board independence (%)	28.600	88.900	66.568	15.227
CEO duality (0/1)	0.000	1.000	0.161	0.370
Board meetings (number)	2.000	12.000	5.258	1.707
Multiple directorships (%)	37.500	90.900	70.691	14.496
Major director ownership (%)	0.000	74.080	3.748	11.673
Cost of debts (%)	2.000	10.420	5.246	1.883

Based on table 4.1 which reports the descriptive statistics for the sample firms, it is noted that the average of board size (BSIZE) is 8.338 members with maximum and minimum sizes of 18 and three members respectively. The mean value of the proportion of independent non-executive directors (BIND) to total directors on the board is 66.5 percent with maximum and minimum percent of 88.90 and 28.60

respectively, which indicates that a significant number of directors are independent non-executive directors, suggesting that boards of UAE companies contain a high percentage of outside directors. This is essentially good for the effectiveness of a board (Akhtaruddin, et al. 2009). They argue that boards dominated by outsiders or non-executive directors may help to mitigate the agency problem by monitoring and controlling the opportunistic behavior of management.

Moreover, the mean number of board meetings is 5.2 meetings which mean that the level of board meetings of UAE companies is moderate as the minimum number is two and the maximum number is 12 meeting. However, 84 percent of the firms studied adopt non-duality board structure implying that about only 16 percent of the firms have their CEOs and board chairman positions combined in one personality. This suggests that the avenue for agency problems emanating from conflict of interest is minimized.

In addition, the results in table 4.1 indicate that the mean percentage of board members that sit in the other companies' board is 70.6 percent with minimum and maximum percent is 37.50 and 90.90 percent respectively. However, the mean percentage of shares held by major board members in UAE listed companies is 3.7 percent with zero ownership in some companies and with maximum percent of 74.08 in the others.

With regard to the mean percentage of debts cost in UAE listed companies, it is 5.246 percent with maximum and minimum cost of 10.42 and two percent respectively and the standard deviation of this variable is 1.883 percent.

4.2 Correlation Analysis

Correlation analysis is the statistical tool that can be used to describe the degree to which one variable is linearly related to another (Levin & Rubin, 1998). It is the initial statistical technique employed to analyze the relationship between the dependent and independent variables. Before carrying out multiple regression analysis, a spearman correlations matrix was generated to assess the relationships between the independent variables, and this would help in formulating the prediction multiple model following will show that when the value of correlation is 0, it indicates there is no relationship, while a correlation of ± 1.0 indicates that there is a perfect positive or negative relationship. Furthermore, when $r = \pm 0.1$ to ± 0.29 , the relationship is small, when $r = \pm 0.30$ to ± 0.49 , the strength is medium while when r is ± 0.50 and above, the strength is large. The following table 4.2 will show the correlation between board of director's characteristics and cost of debts.

Table 2.2 Correlation Matrix for All the Dependent and Independent Variables

Variables		SIZE	BINDP	DUAL	BMEET	MDSHIP	OWNR	COSTD
SIZE	Correlation	1	0.316(*)	0.050	0.391(**)	0.322(*)	0.072	-0.271(*)
	Sig. (2-tailed)		0.012	0.698	0.002	0.011	0.576	0.033
BINDP	Correlation		1	-0.138	0.381(**)	0.434(**)	-0.224	-0.311(*)
	Sig. (2-tailed)			0.286	0.002	0.000	0.081	0.014
DUAL	Correlation			1	-0.222	-0.201	-0.138	0.384(**)
	Sig. (2-tailed)				0.083	0.118	0.284	0.002
BMEET	Correlation				1	0.579(**)	-0.074	-0.601(**)
	Sig. (2-tailed)					0.000	0.566	0.000
MDSHIP	Correlation					1	-0.286(*)	-0.501(**)
	Sig. (2-tailed)						0.024	0.000
OWNR	Correlation						1	-0.094
	Sig. (2-tailed)							0.467
COSTDE	Correlation							1
	Sig. (2-tailed)							

* Correlation is significant at the 0.05 level (2-tailed).

** Correlation is significant at the 0.01 level (2-tailed).

The findings for the correlation between dependent and independent variables are as shown in table 4.2 above. This findings show that the board size is statistically correlated significantly with cost of debt at the 0.033 by negative direction. The percentage of independent non-executive directors on the board is another important variable has a negative correlation at the 0.014 significant levels.

Moreover, combining the roles of chairman and CEO in one person positively correlated with cost of debts at the 0.002 a significant level. However, there is a negative correlation between board meetings and costs of debts at 0.000 a significant level. Similarly, multiple directorships of the board correlated negatively with cost of debt at the 0.000 a significant level, or increase multiple directorships of the board will decrease borrowing costs. While the correlation between major director's ownership and cost of debts for UAE listed companies was negative but statistically not significant.

From the above discussion, it can be seen that four variables have a negative correlation with cost of debts, namely board size, board independence, board meetings, and board multiple directorships. While, CEO duality correlated positively with cost of debts. On the other hand, there is no correlation between major director's ownership and cost of debts.

4.3 Multiple Regression

Multiple regression is a statistical method used to examine the relationship between one dependent variable and one or more independent variables. Normality test and multicollinearity test will discuss in the next subsection as assumption of multiple regressions. The second subsection shows the regression model of this study.

4.3.1 Assumption of Multiple Regression

This section discusses some basic assumption in undertaking any multiple regression analysis. First section discusses the normality of the data used by this study and followed in the second section by multicollinearity test.

4.3.1.1 Normality Test

There are two analyses that have been conducted by this study to test the normality of data distribution. The first analysis is skewness and the second is kurtosis. Skewness analyses achieve the normality of the data when the output value of this analysis is between ± 3 . Kurtosis analyses achieve the normality when the output value of this analysis is between ± 10 (Kline, 1998). The following table 4.3 shows these two analyses.

Table 4.3 Normality Tests

Variables	N	Skewness		Kurtosis	
	statistic	statistic	Std.Error	Statistic	Std.Error
SIZE	62	1.095	0.304	4.084	0.599
BINDPE	62	-0. 98	0.304	-0.087	0.599
DUAL	62	1.888	0.304	1.615	0.599
MEET	62	1.522	0.304	4.448	0.599
MDSHIP	62	-0. 48	0.304	-0.730	0.599
DOWNR	62	3.096	0.304	9.047	0.599
COSTDE	62	0. 95	0.304	-0.317	0.599

Table 4.3 above shows that all values under skewness analyses is located between the range of ± 3 except for the value of ownership which is more than $+3$. However, the values of kurtosis analyses are between ± 10 include ownership, hence the data of this study is normality include ownership because ownership is normality by kurtosis analysis regardless of the other analysis.

4.3.1.2 Multicollinearity Test

Multicollinearity was used to check whether there is high relationship among independent variables. Multicollinearity describes the degree to which any variable's effect can be predicted by the other variable (Hair et al. 2010). The existence of multicollinearity, i.e. high correlation between the independent variables is a serious problem in regressions because the effect of each independent variable on the dependent variable becomes difficult to identify. A widely used method to detect for and measure multicollinearity is the Variance Inflation Factor (VIF) for each independent variable (Naser,et al. 2002). Table 4.4 below illustrates the VIF for each independent variable.

Table 4.4 Variance Inflation Factor

Variables	VIF
Board size	1.349
Board independence	1.353
CEO duality	1.166
Board meetings	1.192
Multiple directorships	1.813
Major director ownership	1.241

Dependent Variable: cost of debts

In circumstances where the VIF is above 10, the independent variables are considered highly correlated, causing a multicollinearity problem (Silver, 1997). Thus, the multicollinearity diagnostics command to include the VIF was selected when running the regression models. The results in table 4.4 above revealed that there is no serious multicollinearity problem as the VIF for each independent variable is less than 10.

4.3.2 Multiple Linear Regression Analysis

Multiple regressions analysis is a regression that generalized the logistic model to the case of more than one independent variable (Sekaran, 2003). This section presents an analysis and discussion of the relationship between cost of debts as dependent variable and board size, board independence, CEO duality, board meetings, multiple directorships and board ownership as independent variables using a multiple regression technique. The outputs of multiple regressions shown in tables 4.5 and 4.6 are related with cost of debts as dependent variable.

Table 4.5 Summary of Regressions Model

R	R Square	Adjusted R Square	Std. Error of the Estimate
0. 695(a)	0.483	0.427	1.426

a. Predictors: (Constant), OWNER, BSIZE, DUAL, BIND, BMEET, DSHIP

b. Dependent Variable: COSTDE

The results as measured by R^2 which indicates the impact of the independent variables on the dependent variable, by which, the independent variables explain 48.3 percent of the variance in the cost of debts as shown in the table 4.5 above. Based on the adjusted R^2 of 42.7 percent, it can be confirmed that less than half of relationship with cost of debts can be explained by the six independent variables used in this study. The remaining 57.3 percent of the impact to cost of debts is explained by other factors.

Table 4.6 Coefficients of Multiple Regression Analysis

Model	Coefficients	Std. Error	t	Sig.
(Constant)	10.338	1.162	8.893	0.000
BSIZE	- 0.013	0.092	- 0.144	0.886
BIND	- 0.007	0.014	- 0.498	0.620
DUAL	1.091	0.532	2.052	0.045
BMEET	- 0.433	0.139	- 3.116	0.003
MDSHIP	- 0.033	0.017	- 1.934	0.058
DOWNR	- 0.029	0.017	- 1.641	0.107

From the equation of cost of debts found in table 4.6, it is noted that the relationship between board size, board independence, and major director ownership with cost of debts are not significant. Firms that have combine between the positions of board chairman and CEO, cost of debts will increase about 1.091. Whereas, increases board meetings by one meeting, cost of debts will decrease about 0.433 and if the percentage of multiple directorships increases by one percent then the cost of debts will decrease by 0.033.

4.4. Discussion

Table 4.6 presents the regression results of relationship between cost of debts and board of director's characteristics. The output indicates mixed result between board variables and cost of debts. These outputs show that the relationship between board size and board independence with the cost of debts are negative but statistically not significant. These results are consistent in direction with Bhojraj and Sengupta (2003), Anderson et al. (2004), Piot et al. (2007) and Fields et al. (2010) but different with the significant level.

In terms of CEO duality, the result shows that there is positive relationship between combined roles of board chairman and CEO and cost of debts; this finding is in line with Piot et al. (2007) hypothesis but they fail to find this relationship in US companies. The Audit Committee Board Meetings is also discussed in this study and the results shows that there is negative relationship with borrowing costs and this study is consistent with the results of Anderson et al. (2004) who found the same relationship but between audit committee meetings and cost of debts.

Moreover, multiple directorships argued by Donato and Tiscini, (2009) is an important board features which could lead to securing debts easily from financial institution at a low cost. Consistent with this argument Ashbaugh et al. (2006) show that credit ratings are positively associated with directorship and this can be translated into a lower debt cost for firms. Haniffa and Hudai (2006) found that there is a significant relationship between directorship and market performance. The results of this study in table 4.6 confirmed these arguments which show that there is a negative relationship between directorship and cost of debts and this is the first study which found this result since no study has found this relationship before.

Major director ownership is the other variable discussed by this study with the cost of debts and the results indicated that there is a negative relationship between them but statistically not significant. This is because most of UAE listed companies are owned by families and these companies always appoint persons who have a relationship with these families as directors and the shares in these companies are always recorded by the older person of these families. Hence, the directors will own only a small percent of shares in these companies.

4.5 Summary

This chapter has presented the results of the analysis that was conducted by using several tools. Before ensuring that test for the data meet the assumptions of multiple regressions and there was no serious cases of normality and multicollinearity problem, the correlation analysis and regression analysis were conducted. Both analyses provided evidence that the relationship between board size, board independence and major board ownership with cost of debts are negative but statistically not significant.

Table 4.7 below shows the summary of the hypothesis results. The combine roles of board chairman and CEO in one person has a significant positive relationship with cost of debts. However, the results of this study found that the relationship between board meetings and multiple directorships with cost of debts are negative at the significant level.

Table 4.7 Summary of the Hypothesis Results

Hypothe	Relationship	Findings
H1	Between board size and cost of debts	Not significant
H2	Between board independence and cost of debts	Not significant
H3	Between CEO duality and cost of debts	Positive
H4	Between board meetings and cost of debts	Negative
H5	Between multiple directorships and cost of debts	Negative
H6	Between major director ownership and cost of debts	Not significant

CHAPTER FIVE

CONCLUSION

5.0 Introduction

The first section of this chapter presents discussion and summary of the study followed by contributions of the study in the second section. Limitations that are inherent in the study are discussed in the third section and the suggestions for the future research are highlighted in the last section.

5.1 Summary of the Study

Based on a sample of the 62 non-financial UAE listed companies, the objective of this study was to investigate the relationship between board of directors' characteristics namely, board size, board independence, CEO duality, board meetings, multiple directorships and board ownership and cost of debts. The banks and other financial institutions were excluded in this study due to the differences in the regulatory requirements, and the characteristics of their financial reports which are different from those of non-financial firms.

This study found that the average value of cost of debts of the sample was 5.2460 percent with maximum and minimum cost of 10.42 and two percent respectively and the standard deviation of the cost of debts was 1.883 percent. The mean value of board size for companies listed in UAE was eight members with 18 as maximum and three, minimum. On average, UAE listed companies chose their number of board members just close to optimal because Jensen (1993) provide evidence that the average (or optimal) board size for U.S. firms is between eight and nine directors. With regards

to board independence, the mean ratio was about 66.5 percent which implies that a board depends on the optimal mix of inside and outside directions in the overall sample which is a good indicator for the effectiveness of a board (Fama & Jensen, 1983). In term of CEO duality, most companies in UAE adopt the non-duality board structure where the positions of board chairman and CEO are taken by different personalities thereby reducing agency cost. As for board meetings in UAE listed companies, it was found that the mean numbers of meetings was five meetings in the year with the maximum and minimum of 12 and two meetings respectively during the year. The results show that the increase in the number of board meetings for the UAE listed companies did influence the cost of debts.

Moreover, the results of this study showed that multiple directorships for the companies listed in UAE is an important feature for board members as this would influence the cost of debts secured by them. In other words, increase in the percentage of board directorship leads to a reduction in the cost of debts. However, major director ownership in UAE listed companies is low because most of UAE companies are family-owned companies, hence the shares of this companies are always held by the older person of this family and they appoint the other family members as a directors and in most cases, these members do not own shares in the companies. It is for this reason that this study fails to find a relationship between board ownership and cost of debts.

With respect to the relationship between cost of debts and board of directors' characteristics namely board size, board independence, CEO duality, board meetings, multiple directorships and major director ownership of the UAE non-financial listed firms, a linear regression analysis was used for this purpose. The finding revealed that the relationship between board size and board independence with cost of debts of

UAE listed companies was in a negative direction but not significant. However, the empirical findings of this study found that there was a significant positive relationship between CEO duality and cost of debts.

In term of board meetings and board directorship, the results found that for UAE listed companies, there was a significant negative relationship between board meetings and multiple directorships with cost of debts. Increase in board meeting and increase in percentage of sitting board members in the other companies led to a decrease in the cost of debts. Although the results of this study showed that there was a negative relationship between major director ownership and cost of debts for UAE listed companies, this relationship was statistically not significant.

The results of this study in forms of board size, board independence and cost of debts are not consistent with Bhojraj and Sengupta (2003), Anderson et al. (2004), Piot et al. (2007) and Fields et al. (2010). However, the relationship between CEO duality and cost of debts is positive and this result is in line with Piot et al. (2007) hypothesis but they failed to find this relationship in US companies.

Anderson et al. (2004) examine the relationship between audit committee meetings and cost of debts and they found negative relationship between them. This study used board meetings as one of the important features of the board and this variable has not been discussed before with the cost of debt, hence this study is consistent with Anderson et al. (2004) in the relationship direction. Moreover, multiple directorships is the other new variable discussed by this study. The result of this study supported the argument by Donato and Tiscini (2009) that directorship is an important feature for board members which lead to getting debts easily from financial institution at low cost. In addition, Ashbaugh et al. (2006) shows that credit ratings are positively

associated with directorship and this can be translated into a lower debt cost for firms.

Major director ownership was discussed by this study and the results was not consistent with the previous study by Ertugrul and Hegde (2008), which found a negative relationship between board ownership and cost of debt. This study failed to find a significant relationship in UAE listed companies.

5.2 Contributions of the Study

This study extended the literature of the previous studies that discussed the relationship between corporate governance mechanisms and cost of debts. There are several studies that have been conducted in the developed and developing countries (Anderson, et al. 2003; Bhojraj & Sengupta, 2003; Anderson et al. 2004; Ashbaugh et al. 2006; Roberts & Yuan, 2006; Piot, et al. 2007; Ertugrul Hegde, 2008 and Fields, et al. 2010) which examined the relationship between corporate governance mechanisms and cost of debts, but there are still a number of countries that have not been tapped to examine the relationship between corporate governance mechanisms and cost of debts.

To my knowledge, no study has been done on companies listed on the UAE Stock Exchange to examine the relationship between corporate governance mechanisms (i.e. board of directors' characteristics) and cost of debts. Hence, this study was conducted under the UAE business environment, unlike the other studies that have been conducted under different business environment.

Moreover, this study reexamined variables discussed by the previous studies which have shown mixed results in the relationship of namely independent variables: board

of director's size, board of directors' independency, CEO duality and major director ownership with cost of debts. Since the effectiveness of corporate governance is affected by the environment that companies operate in, the previous studies did not provide evidence to the stakeholders in the other environments where this relationship had not been investigated. This study has extended from the previous studies by providing evidence to UAE regulators, owners and managers from there environmental about the relationship between these variables with cost of debts because corporate governance practice different from country to other depending to culture and other factors.

In addition, this study has continued the studies conducted earlier by examining the relationship between new characteristics of board namely multiple directorships of the board with cost of debts. Multiple directorships of the board considered by agency theory, independency theory and literature (Fich & Shivdasani, 2006 & Donato & Tiscini, 2009) as important feature for the board members to get internal debts easily and by low cost from banks and other institutional firms. The findings of this study supported the previous arguments by providing evidence that as percentage of board members who sit in other companies increase the cost of debts decrease for the companies listed in UAE.

This study also extended the past studies by examining the relationship between board meetings and cost of debts. The literature has indicated that board meetings are important resource in improving effectiveness of board, also the number of board meetings is a good proxy for the directors' monitoring effort (Lipton & Lorsch, 1992; Conger et al. 1998; Vafeas, 1999). The finding of this study confirmed these arguments (i.e. there is a negative relationship between board meetings and cost of debts of companies listed in UAE).

5.3 Limitations of Study

This study faced several limitations which hinder the scope and generalization of the results of the study. These limitations include firstly, the research design of the study which considered only UAE listed companies and also centered only on non-financial companies. Other non-listed companies and financial companies were totally ignored. So, the validation of the conclusions might not hold for financial companies and other companies outside those lists. Secondly, the study only used data for the year ended 2009; if the study had used more than one year (panel data) this would make the results better than the cross-sectional data.

Moreover, this study examined six characteristics of the board of directors namely board size, independence, CEO duality, board meetings, multiple directorships and major director ownership and its relationship with cost of debts, but this study did not examine the board process, although some argued that not only these board of director's characteristics determine the board effectiveness, but the board process were also the key factors in making boards better (Finkelstein and Mooney, 2003). So, the limitation of this study came from the nature of the data collected due to limitations of the annual reports' disclosures that were available in UAE as compared to the other advanced countries.

5.4 Future Research

Future research would be useful to overcome the limitations of this study. It is suggested that future research would include other unlisted companies and financial companies by using different method. Future studies also may want to consider panel data because panel data has different advantages for example panel data covers short and long term effects and usually panel data contain more degrees of freedom

and more sample variability than cross-sectional data, hence improving the efficiency of econometric estimates (Hsiao, 2006). Moreover, future studies should consider the other variables of corporate governance mechanisms that were not included in this study.

In addition, future studies may consider the element of tax planning to show the effect of tax on the cost of debts, because borrowing from financial institutions entails the obligation to pay interest regularly to those institutions and borrowing costs are expenses incurred by the company income and therefore, overstating the value of that debt leads to increase in cost of their own and thus reduce the profits of the company. Several companies seek external debts as a way to avoid taxes imposed on them and take advantage of those amounts borrowed to finance its activities, so the future studies should look to the relationship between tax planning, cost of debts and corporate governance.

The future studies should also look at corporate governance as a bundle, because the effectiveness of one mechanisms depend on the other mechanisms, so it suggested for future studies to use composite measure for the board effectiveness and how board effectiveness effect on the cost of debts. As well as, the argument of this study based on the agency theory, so it ignored other characteristics of the board that might reduce the cost of capital. It is suggested that for future studies to use resource of independency theory to explain the relationship between other board characteristics (i.e. board diversity such as education level, attitudes of management toward information technology and others) with cost of debts.

REFERENCES

Abbott, L., Parker S., Peters, G., & Raghunandan, K. (2003). The association between audit committee characteristics and audit fees. *Auditing: A J. Pract. Theory*, 22(2), 17–32.

Abdulhafedh, K. (2006). Testing and evaluation of the relationship between the cost of capital and stock market returns: An Empirical Study on the industrial companies listed on the Amman Financial Market. University of the Western Mountain Libya.

Abdullah, S. (2004). Board composition, CEO duality and performance among Malaysian listed companies. *Corporate Governance*, 4(4), 47-61.

Abdul-Salam, A. (2009). How the debt crisis of Dubai happened? *The Saudi Economic Journal*. Available at http://www.akhbaralaalam.net/news_detail.php?id=32058. 20/04/2011.

Abor, J. (2007). Corporate governance and financing decisions of Ghanaian listed firms. *International Journal of Business in Society*, 7(3), 205-2015.

Adams, R. (2003). What do boards do? Evidence from board committee and director compensation data. SSRN Moscow Meetings Paper.

Adams, R., & Mehran, H. (2002). Board structure and banking firm performance. Working Paper, Federal Reserve Bank of New York.

Akhtaruddin, M., Hossain, M., Hossain, M., & Yao, L. (2009). Corporate governance and voluntary disclosure in corporate annual reports of Malaysian listed firms. *Journal of Applied Management Accounting Research*, 7(1), 1-19.

Alchian, A., & Demsetz, H. (1972). Production, information costs and economic organization. *American Economic Review*, 62(5), 77-95.

Alsaeed, K. (2006). The association between firm-specific characteristics and disclosure: The case of Saudi Arabia. *Managerial Auditing Journal*, 21(5), 476-496.

Al-Shata, A. (2009). Dubai debt crisis will raise the cost of lending in the region. Forum business and finance within the cultural sandroz forums.

Anderson, R., Mansi, S., & Reeb, D. (2003). Founding family ownership and the agency costs of debt. *Journal of Financial Economics*, 68(3), 263-285.

Anderson, R., Mansi, S., & Reeb, D. (2004). Board characteristics, accounting report integrity, and the cost of debt. *Journal of Accounting and Economics*, 37(4), 315-347.

Ashbaugh-Skaife, H., Collins, D., & LaFond, R. (2006). The effects of corporate governance on firms' credit ratings. *Journal of Accounting and Economics*, 42(2), 203-243.

Beasley, M. (1996). An empirical analysis of the relation between the board of directors and financial statement fraud. *The Accounting Review*, 71(5), 443- 465.

Bhojraj, S., & Sengupta, P. (2003). Effect of corporate governance on bond ratings and yields: The role of institutional investors and outside directors, *Journal of Business*, 76(4), 455-475.

Bitar, J. (2003). The impacts of corporate governance on innovation: Strategy in turbulent environments. Chair de management strategies international. Walter-J.-Somers, HEC Montréal, Cahier de recherché.

Blue Ribbon Committee (1999). Report and recommendations of the Blue Ribbon Committee on improving the effectiveness of corporate audit committees. New York Stock Exchange.

Braunstein, Y, (2002). Cost of capital study for telecommunications utilities. Working paper, School of Information Management and Systems, University of California. 3-8.

Brickley, J., Coles J., & Jarrell, G. (1997). Leadership structure: separating the CEO and chairman of the board. *Journal of Corporate Finance*, 3(3), 189-220.

Byrd, J., & Hickman, K. (1992). Do outside directors monitor managers? Evidence from tender offer bids. *Journal of Financial Economics*, 32(2), 195–222.

Byun, H. (2007). The cost of debt capital and corporate governance practices. *Asia-Pacific Journal of Financial Studies*, 36(5), 765-806.

Carapeto, M., Lasfer, M., & Machera, K. (2005). Does duality destroy value? SSRN working paper series.

Carcello, J., Hermanson, D., Neal, T., & Riley, R. (2002). Board characteristics and audit fees. *Contemporary Accounting Research*, 19(3), 365-385.

Chaganti, R., Mahajan, V., & Sharma, S. (1985). Corporate board size, composition, and corporate failures in retailing industry. *Journal of Management Studies*, 22(3), 400–417.

Chen, A. (1978). Recent developments in the cost of debt capital. *The Journal of Finance*, 33(3), 863-6877.

Christopher, P. (2005). Corporate governance and the role of non-executive directors in large UK companies: An empirical study. *Corporate Governance*, 4(2), 52-63.

Conger, J., Finegold, D., & Lawler, E. (1998). Appraising boardroom performance. *Harvard Business Review*, 76(1), 136-148.

De Andres, P., Azofra, V., & Lopez, F. (2005). Corporate boards in OECD countries: Size, composition, functioning and effectiveness. *An International Review*, 13(2), 197-210.

Dechow, P., Sloan, R., & Sweeney, A. (1996). Causes and consequences of earnings manipulation: An analysis of firms subject to enforcement actions by the SEC. *Contemporary Accounting Research*, 13(1), 1–36.

Donato, F., & Tiscini, R. (2009). Cross ownership and interlocking directorates between banks and listed firms: An empirical analysis of the effects on debt leverage and cost of debt in the Italian case. *Corporate Ownership & Control*, 6(3), 473–481.

Dweikat, E. (2008). UAE tops Gulf countries in the emerging debts and Oman the last. *Gulf Journal*. <http://www.alkhaleej.ae/portal/65540903-309f-4670-be6f-b75145631e23.aspx>.

Elyasiani, E., Jia, J., & Mao, C. (2010). Institutional ownership stability and the cost of debt. *Journal of Financial Markets*, 13(4), 475–500.

Ertugrul, M., & Hegde, S. (2008). Board compensation practices and agency costs of debt. *Journal of Corporate Finance*, 14(5), 512-531.

Fama, E. (1980). Agency problems and the theory of the firm. *The Journal of Political Economy*, 88(2), 288-307.

Fama, E., & Jensen M. (1983). Separation of ownership and control. *Journal of Law and Economics*, 26(2), 301-325.

Farinha, J. (2003). Corporate governance: A survey of the littérateur. SSRN working paper series no 470801.

Ferris, S., Jagannathan, M., & Pritchard, A. (2003). Too busy to mind the business? Monitoring by directors with multiple board appointments. *Journal of Finance*, 58(3), 1087-1112.

Fich, E., & Shivdasani, A. (2006). Are busy boards effective monitors? *The Journal of Finance*, 61(2), 689-724.

Fields, P., Fraser, D., & Subrahmanyam, A (2010). Board quality and the cost of debt capital: The case of bank loans. SSRN Working Paper Series.

Finkelstein, S., & Mooney, A. (2003). Not the usual suspects: How to use board process to make boards better. *Academy of Management Executive*. 17(2), 101-113.

Forker, J. (1992). Corporate governance and disclosure quality. *Accounting and Business Research*, 22(86), 111-124.

Francis, J., LaFond, R., Olsson, P., & Schipper, K. (2005). The market pricing of accruals quality. *Journal of Accounting and Economics*, 39(3), 295-327.

Friend, I., & Lang, L. (1988). An empirical test of the impact of managerial self-interest on corporate capital structure. *Journal of Finance*, 47(4), 271-281.

García, J., García, B., & Peñalva, F. (2009). Accounting conservatism and corporate governance. *Review of Accounting Studies*, 14(1), 161-201.

Genser, B., Cooper, P., Yazdanbakhsh, M., Barreto, M., & Rodrigues, L. (2007). A guide to modern statistical analysis of immunological data. *BMC immunology*, 8(1), 27.

Gilson, S. (1990). Bankruptcy, boards, banks, and blockholders: Evidence on changes in corporate ownership and control when firms default. *Journal of Financial Economics*, 27(2), 355-388.

Goyal, V., & Park, C. (2002). Board leadership structure and CEO turnover. *Journal of Corporate Finance*, 8(1), 49-66.

Hair, J., Anderson, R., Tatham, R., & Black, W. (2010). Multivariate data analysis (7th ed.). Prentice Hall.

Haniffa, R., & Hudai, M. (2006). Corporate governance structure and performance of Malaysian listed companies. *Journal of Business Finance & Accounting*, 33(7), 1034–1062.

Heinrich, R. (2002). Complementarities in corporate governance: Springer Verlag.

Hermalin, B., & Weisbach, M. (2003). Boards of directors as an endogenously determined institution: A survey of the economic literature. *Economic policy review*, 9(1), 7-26.

Hsiao, C. (2006). Panel data analysis - Advantages and challenges. IEPR working paper, SSRN.

Imhoff, E. (2003). Accounting quality, auditing, and corporate governance. *Accounting Horizons*, 17(1), 117-128.

Jauy, K. (2010). The importance of analyzing the capital structure of companies. *Newspaper Emirates Today*.

Jensen, M. (1993). Modern industrial revolution, exit, and the failure of internal control systems. *Journal of Finance*, 3(4), 831-80.

Jensen, M., & Meckling, W. (1976). Theory of the firm: managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(3), 305-360.

Judge, W., Naoumova, I., & Koutzevol, N. (2003). Corporate governance and firm performance in Russia: An empirical study. *Journal of World Business*, 38(4), 385-396.

Jumaa, S. (2010). The importance of corporate governance. Mansoura University Egypt. Available at: <http://www.f-law.net/law/index.php.4.4.2011>.

Kaplan, S., & Reishus, D. (1990). Outside directorships and corporate performance. *Journal of Financial Economics*, 27(2), 389-411.

Keown, A., Petty, W., Scott, F., & Martin, D. (2001). Foundations of finance: The logic and practice of financial management (3rd ed.). Prentice Hall.

Klapper, L., & Love, I. (2004). Corporate governance, investor protection, and performance in emerging markets. *Journal of Corporate Finance*, 10(5), 703-728.

Klein, A. (1998). Economic determinants of audit committee composition and activity. Working Paper, New York University, Center for Law and Business.

Klein, A. (2002a). Audit committee, board of director characteristics, and earnings management. *Journal of Accounting and Economics*, 33(4), 375–400.

Klein, A. (2002b). Economic determinants of audit committee independence. *Accounting Review*, 77(5), 435–452.

Kline, R. (1998). Principles and practices of structural equation modeling. New York: Guilford Press.

Lefort, F., & Urzua, F. (2008). Board independence, firm performance and ownership concentration: Evidence from Chile. *Journal of Business Research*, 61(6), 615-622.

Levin, R., & Rubin, D. (1998). Statistics for management. (7th ed.). Prentice Hall.

Limpaphayom, J., & Connelly, P. (2006). Board characteristics and firm performance: Evidence from the life insurance industry in Thailand Chulalongkorn. *Journal of Economics*, 16(2), 101-124.

Lipton, M., & Lorsch, J. (1992). Modest proposal for improved corporate governance. *Business Lawyer*, 12(3), 48-59.

Mallette, P. (1992). Effects of board composition and stock ownership on the adoption of poison pills. *Academy of Management*, 35(8), 1010 –1035.

Mansi, S., Maxwell, A., & Miller, D. (2004). Does auditor quality and tenure matter to investor? Evidence from the bond market. *Journal of Accounting Research*, 42(6), 755-793.

Mazumdar, S., & Sengupta, P. (2005). Disclosure and the loan spread on private debt. *Financial Analysts Journal*, 61(3), 83-95.

Menon, K., & Williams, J. (1994). The use of audit committees for monitoring. *Journal of Accounting and Public Policy*, 13(2), 121-139.

Miller, S., & Merton H. (1977). Debt and taxes. *Journal of Finance*, 32(2), 261-275.

Modigliani, F., Merton, H., & Miller, D (1958). The cost of capital, corporation finance, and the theory of investment. *American Economic Review*, 48(3), 261-297.

Monks, R., & Minow, N. (1995). Corporate governance. Blackwell New York, NY.

Myers, L., & Stewart C. (1977). Determinants of corporate borrowing. *Journal of Financial Economics*, 5(2), 147-175.

Myers, S., & Majluf, N. (1984). Corporate financing and investment decisions when firms have information those investors do not have. *Journal of Financial Economics*, 13(2), 187-222.

Naser, K., Al-Khatib, K., & Karbhari, Y. (2002). Empirical evidence on the depth of corporate information disclosure in developing countries: The case of Jordan. *International journal of commerce and management*, 12(3/4), 122-155.

Patton, A., & Baker, J. (1987). Why won't directors rock the boat? *Harvard Business Review*, 65(6), 10-15.

Piot, C., Missonier, R., & Piera, F. (2007). Corporate governance, audit quality and the cost of debt financing of French listed companies. SSRN Working Paper Series.

Pittman, J., & Fortin, S. (2004). Auditor choice and the cost of debt capital for newly public firms. *Journal of Accounting and Economics*, 37(1), 113-136.

Rajans, R. (1992). Insiders and outsiders: The choice between informed and arm's length debt. *The Journal of Finance*. 47(4), 1367-1400.

Rechner, P., & Dalton, D (1991). CEO duality and organizational performance: Longitudinal analysis. *Strategic Management Journal*, 12(1), 155–160.

Rehman, M., Rehman, R., & Raoof, A. (2010). Does corporate governance lead to a change in the capital structure? *American Journal of Social and Management Sciences*, 1(2), 191-195.

Roberts, G., & Yuan, L. (2006). Does institutional ownership affect the cost of bank borrowing? SSRN working paper: <http://ssrn.com/abstract=930138>. 28.3.2011.

Roberts, J., McNulty, T., & Stiles, P. (2005). Beyond agency conceptions of the work of the non-executive director: Creating accountability in the boardroom. *Journal of Management*, 16(1), 5-26.

Scott, W., & James H. (1976). A theory of optimal capital structure. *Bell Journal of Economics*, 7(1) 33-54.

Sekaran, U. (2003) Research methods for business: A skill building approach, fourth edition.

Sengupta, P. (1998). Corporate disclosure quality and the cost of debt, *The Accounting Review*, 7(3), 459-474.

Shivdasani, A. (1993). Board composition, ownership structure, and hostile takeovers. *Journal of Accounting & Economics*, 16(2), 167-199.

Shivdasani, A., & Yermack, D. (1999). CEO involvement in the selection of new board members: An empirical analysis. *The Journal of Finance*, 54(5), 1829-1854.

Shleifer, A., & Vishny, R. (1997). Legal determinants of external finance. *Journal of Finance*, 52(6), 1131-1150.

Silver, M. (1997). Business statistics. (2nd ed.). Published by McGraw-Hill Publishing Company.

Smith, C., & Warner, J. (1979). On financial contracting: An analysis of bond covenants. *Journal of Financial Economics*, 7(2), 117-161.

Vafeas, N. (1999). Board meeting frequency and firm performance. *Journal of Financial Economics*, 53(2), 113-143.

Vinten, G. (1998). Corporate governance: An international state of the art. *Managerial Auditing Journal*, 13(7), 419-431.

Warfield, T., Wild, J., & Wild, K. (1995). Managerial ownership, accounting choices, and informativeness of earnings. *Journal of Accounting & Economics*, 20(1), 61-92.

Warga, A., & Welch, I. (1993). Bondholder losses in leveraged buyouts. *Review of Financial Studies*, 6(5), 959-982.

Yermack, D. (1996). Higher market valuation companies with a small board of directors. *Journal of Financial Economics*, 40(2), 185-212.

Zikmund, W. (2003). Business research methods. (7th ed.). Drden press.