

# Board Characteristics and Firm Performance: Case of Saudi Arabia

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## Abstract

Corporate governance (CG) has received much attention in the current studies all over the world especially after many corporate scandals and the failures of some biggest firms around the world such as Commerce Bank (1991) Enron (2001), Adelphia (2002), and World Com (2002).

The aim of this study is to examine the relationship between board mechanisms (audit committee size, audit committee composition, board size, and board composition) and firm performance (ROA) based on the annual reports of listed companies in the year 2011 of sample of non-financial firms in the Saudi Market (*Tadawul*). For the purpose of this study, data was collected from a sample of 102 non-financial listed companies.

Furthermore, an analysis of regression analysis is utilized to examine the relationship between board characteristics and firm performance. The results of this study reveal that audit committee size, audit committee composition and board size have no effect on firm performance in the selected sample while board composition has a significant negative relationship with firm performance.

**Keywords:** Corporate governance, firm performance, Saudi Arabia

## 1. Introduction

### 1.1 Background

Corporate governance (CG) has received much attention in the current studies all over the world especially after many corporate scandals and the failures of some biggest firms around the world such as Commerce Bank (1991) Enron (2001), Adelphia (2002), and World Com (2002). Practically, transparency and accountability became needed for attracting investors and capital funds on one hand, and for financial security and stability on the other hand. As the environment business has become very competitive, the uncertainty and risk are the main characteristics for today's business.

Under this modern environment, it became very difficult to predict and control the factors that affect the performance of the firms (Kuratko& Morris, 2003). Good CG practice could be one of the best solutions to reduce the uncertainty and the risk in the current business environment. Furthermore, it could attract investment capital as a result of reducing the risk level.

In fact, the subject of CG is practically very important. Even in developed markets, there is a great debate on how bad or good the current CG mechanisms are(Shleifer&Vishny, 1997). Hence, many international organizations in the world such as the International Corporate Governance Network (ICGN) and the Organization for Economic Cooperation and Development (OECD) have also developed guidelines for CG. The OECD issued a guidance publication for better corporate governance titled "Principles of Corporate Governance" in 1998 and reviewed it in 2004. These principles focus on the performance of long-term economics and enhancement the international financial system, which, as a result, sheds the light on the significance of CG.

It is generally believed that CG enhances the performance of the firm and protects shareholders' interests. The vital economic roles of practicing good CG are to provide a good connection between the firm and its environment and to secure its critical resource by attracting new investors and capital funds. Another important benefit of good CG is to act as a mechanism of internal governance and monitoring of management. Practicing good CG is an effective tool to help the firm to achieve better performance.

In accordance with the agency theory, the agency relationship is a contract between principals and agents. The agents perform some service on behalf of the principals, and on the other hand, the principals delegate some decision-making authority to the agents (Jensen &Meckling, 1976). Literature on CG attributes two factors to agency theory; the first factor is that firms are reduced to two participants, managers and shareholders whose interests are assumed to be both clear and consistent. The second notion is that humans are self-interested and unwilling to sacrifice their personal interests for the interests of the others (Daily,Dalton & Canella, 2003). The management (agents) in general acts for their own interests and they do not take the best probable action for the public and for the shareholder.

The measures or procedures that of a maximum achievement of the objectives formerly set lead and facilitate the long-term achievement of benefits for stakeholders. Consequently, efficient CG is critical in increasing the interests of all parts of the organizations. In addition,

it plays a vital role in facilitating and increasing the efforts of government to guarantee the firms accountability (Vinten, 1998).

Claessens (2003) reviews CG extensively, and points out that CG influences firm performance by two main aspects; the first aspect is by creating new access to external financing through attracting new investments and funds which may lead to effective employment creation, greater investment and higher growth. The second aspect is by reducing the cost of capital and is linked with higher firm valuation.

### ***1.2 Problem Statement***

The recent events financial scandals such as the Enron crisis (2001) and WorldCom in 2002 resulted in the further need of CG. Each of these monumental events led to the loss of confidence of potential investors in the accounting procedures (Becht, Marco & Patrick, 2002). Another case occurred in the US Securities in 2001 whereby the former Executive Director of the Sunbeam Company was indicted in his involvement in illegal activities with Arthur Anderson which led to a civil penalty and loss of stakeholders and investors' confidence on the financial system (Rice & Alabama, 2006). Furthermore, the global crisis in the mid of 2008 and then the following crisis in the United Arab Emirates, known as Dubai crisis, resulted in a collapse of the biggest company in Dubai took a place in highlighting the need to CG.

As a consequence of the above financial crisis, a great stress was made upon the employment of CG, which is unanimously considered by various studies as the solution to the problems occurring in the countries' market environment. Majority of researchers hailing from various fields like accounting, economics, administrative, and legal have their studies based on CG for the purpose of highlighting its advantages and positive results (Shleifer&Vishny, 2000).

Good CG brings better management and well-allocation of the company's resources, additionally; it enhances firm performance which would significantly contribute to the company's share price, and increases the value of a shareholder, (Keong 2002). Many studies have been conducted to investigate the relationship between CG and firm performance (such as Jensen &Meckling, 1976; Jensen, 1993; Adams &Mehran, 2005; Haniffa&Hudib, 2006; Ramdani&Witteloosuijn, 2009).

Several studies have been done in developing and developed countries to investigate the relationship between CG and firm performance. However, the results of the previous studies are inconsistent. Some of the previous studies found that better firm performance is related to good CG (Baysinger& Butler,1985; Brickley&James, 1987; Rechner& Dalton, 1991; Byrd &Hickman, 1992; Brickley et al, 1994; Rhoades et al, 2001; Coles &Jarrell, 2001; Haniffa&Hudaib, 2006) and some other studies found a negative relationship between CG and firm performance (Bathala&Rao, 1995; Kien, Suchard&Jason, 2004; Hutchinson, 2002; Ertugrul&Hegde; 2004). Besides, some other studies could not find any significant relationship between CG and firm performance (Prevost et al. 2002; Park &Shin, 2003; Singh &&Davidson, 2003). In the case of Saudi Arabia, there is a lack in studies that investigate the impacts of CG on the firm performance which justifies the purposes of this study.

The first issue of CG codes in Saudi Arabia was in 2006 and revised in 2009. However, the

codes of CG in Saudi Arabia have some weaknesses due to the lack of experience in the implementation of CG. For example the code identifies the independent director as the director who has no first-relatives on the board, and they identify the relative as father, wife or husband, and children. However, it excludes brothers, sisters, uncles, and cousins. In a society like Saudi Arabia, the relationships between families are so strong, and the firms still look like family businesses. Due to a huge number of one family are serving in the board or in the sub-committees of the board, it may affect the decision making or lead to conflict of interest. Ihsan (2012) points out that the codes of CG that can be applied in the west may not be suitable in Saudi Arabia and it needs to be adjusted because of the differences in culture, society and business environment.

Yet, there is a gap in studies about the relationship between CG and firm performance in Saudi Arabia. In Saudi Arabia, practice of CG is still new and underdeveloped in comparison with the growth of companies and the stock market. Moreover, the transparency of disclosure practices is still poor and the concentration of power remains in the hands of directors as well as other key management connections. These problems in the face of weak regulatory environment and overall political instability of the country remain the barrier to foreign investment and they undermine investor confidence, generally leads to weak economic growth (Ihsan, 2012). Hence, this study aims to investigate the relationship between the characteristics of the board of directors and firm performance in Saudi Arabia to prove the effect of the board and the AC members in the performance of the firm, as well as, the effect of the size board and AC on the firm performance.

### ***1.3 Research Questions***

Generally, this study examines the impacts of CG mechanisms on firm performance in Saudi Arabia. Therefore, this study addresses the following questions:

1. What is the relationship between audit committee size (AC size) and performance of non-financial listed companies in Saudi Arabia?
2. What is the relationship between AC composition and the performance of non-financial listed companies in Saudi Arabia?
3. What is the relationship between board size and performance of non-financial listed companies in Saudi Arabia?
4. What is the relationship between board composition and performance of non-financial listed companies in Saudi Arabia?

### ***1.4 Research Objectives***

By using four CG mechanisms (AC size, AC composition, board size and board composition), this research aims to examine the impact of CG mechanisms in the performance of Saudi firms by using one firm performance measurement (ROA), this study particular aims to examine the association between:

1. AC size and firm performance in the non-financial listed companies in Saudi Arabia.
2. AC composition and firm performance in the non-financial listed companies in Saudi

Arabia.

3. Board size and firm performance in the non-financial listed companies in Saudi Arabia.
4. Board composition and firm performance in the non-financial listed companies in Saudi Arabia.

### ***1.5 Significance of Study***

There is lack of CG studies in the Middle East in general and particularly in Saudi Arabia. Therefore, this paper contributes the knowledge about CG in Saudi Arabia and provides an overview of CG there after six years of issuing the codes of CG. As CG practice is new in Saudi Arabia this paper attempts to increase the understandability of CG.

In respect to the practitioners, this study enhances their understanding of the mechanisms of CG affecting the firm performance in Saudi Arabia. Furthermore, this study enhances the research field in CG.

### ***1.6 Scope of Study***

The target of this study is the nonfinancial firms in the Saudi Arabia Exchange Market (known as *Tadawul*). There are 109 nonfinancial firms in *Tadawul*. The sample of this study is 102 firms only due to the available information.

### ***1.7 Organization of the study***

The introduction is placed in chapter one. It presents the research background, problem statement, research objectives, significant of the study, scope of study and then the organization of the study.

The following chapter presents the literature review. The chapter reviews the related studies in CG, CG in Saudi Arabia, and then focuses on the studies on the relationship between CG mechanism and firm performance then the summary of the chapter.

Research methodology used in this study is presented in chapter three. In addition to the research method, the chapter includes research framework, hypotheses development, research design, data analysis and summary of the chapter.

Chapter four is the analysis of the study. This chapter provides data analysis, which includes descriptive statistics, correlation analysis, multiple regressions, multiple linear regression analysis, discussions of the results and summary will be discussed in the last section of this chapter. Finally, the conclusion of this research is in chapter five. This chapter summarizes the study, and presents the contribution and the limitation of the study.

## **2. Literature review**

### ***2.1 Introduction***

This chapter highlights and explains firm performance, CG, CG in Saudi Arabia and the association between CG mechanisms namely, AC size, AC composition, board size, and board composition, and firm performance (ROA).

## 2.2 Agency theory

Agency theory is based on the idea of separation of ownership and management (principal and agent). Furthermore, it is concerned with ensuring that agents act in the interest of the principals. It is also based on the premise of inherent conflict of interest between agents and principals (Fama& Jensen, 1983). The problems occur if the managers start acting in the self-interest which costs the shareholder more expenses (Jensen &Meckling, 1976; Fama& Jensen 1983; Eisenhardt, 1989; Agrawal&Knoeber, 1996). While monitoring agents to ensure that they act in the best interest of the principals, as a result, there will be an increase in the cost to the company (agency costs) which will affect the shareholders' interests.

Eisenhardt (1989) points out that the agency problems are resulted by either the conflict of interests or the costless or difficulties for the principals to verify what the agents are actually doing. Subsequently, the vital duty of the board is monitoring the management activities in order minimize the agency problems and achieve the superior firm performance.

According to the agency theory, CG mechanisms are needed to mitigate the agency theory problems. Thus, the agency theory provides a basis of CG through the use of internal and external mechanisms (Weir et al, 2002; Roberts et al, 2005). The objectives of CG mechanisms are to *“protect shareholder interests, minimize agency cost and ensure agent-principals interest alignment”* (Davis et al, 1997, p.23).

## 2.3 Corporate Governance

The concept of CG has been developed from the agency theory, which takes into consideration the investor, shareholder, manager, and administrator. Cadbury (1992) defines CG as *“the system by which companies are directed and controlled”* (p.14). Also, OECD (2004) states *“corporate governance involves a set of relationship between a company's management, its board, its 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 monitoring performance are determined”* (p.11). The previous definitions of CG indicate that CG focuses on the responsibilities and duties of firm's board of directors in order to lead the firm to achieve its objectives. It concerns also the relationship between the firm and its shareholders and stakeholders. Darwish (2000) points out that the concept of CG is developed based on the agency theory, and it concerns all those who are directly or indirectly related to the firms' affairs and the problems may occur between them.

Over the last two decades, CG has frequently moved forward and was given the interest and debate it deserved (Parker, 2005). Many studies have been conducted to examine the effects of CG on the business, such as the reporting quality, earnings management, firm performance, disclosure, and dividend policy. Meanwhile, many factors have led CG to attract the researchers' attention, such as the rampant corporate frauds and failures of some biggest firms and the financial crisis (Parker, 2005). According to IskanderandChamlou (2000) the financial crisis in East Asia played an important role in forcing countries to take majors steps to strengthen governance.

As the agency theory states that the agency relationship is an agreement between principals and agents, it is clear that the main duty and responsibility of the agents is to run the firms

successfully to maximize profits. Furthermore, CG takes into account the shareholders and stakeholders. Moreover, some authors point out that the CG mechanism should be considered on shareholders' interest in the market (Mathiesen, 2002). According to OECD (2004) CG is a method by which companies are managed and monitored.

Generally, CG has important implications for the economy growth as it reduces the risk that might be taken by investors, investment capitals, and companies' performance (Spanos, 2005).

Nowadays, corporate governance is considered as a complex issue as it contains laws, politics, regulations, professional associations, public institutions, and ethics code. Notwithstanding, many details of the corporate governance structure of the developing countries' markets are still missing. For the developing countries, the corporate governance system is difficult to develop due to the ambiguous relationship between state and financial sectors. In addition, many aspects might affect the development of corporate governance such as weak legal and judicial systems, absent or underdeveloped institutions, corrupt political systems, and scarce human resource capabilities (Chowdary, 2003).

There is no single globally accepted set of CG principles to be applied by all countries. Notwithstanding, OECD issued general principles for good CG in order to be adopted by countries all over the world. The OECD principles focus on the listed companies as well as companies with a large numbers of shareholders.

The complexity of governance system leads the researchers to concentrate on the economic impacts of certain governance approaches. Cadbury (1992) claims that:

*“The country's economy depends on the drive and efficiency of companies. The effectiveness in which the boards discharge their responsibilities determines their competitive position. They must be free to drive their companies forward, but exercise that freedom within a framework of effective accountability”*(P.10).

The CG guidelines were formulated in a general manner and hence, leaving various countries to apply them according to their discretion and what the situation calls for. The general believed that there is no such intention to introduce a more universal model of CG that is suitable for all countries, but long-term trend is to come up with standards fulfilling global necessities (Gregory, 2000).

In Saudi Arabia, effective CG is needed for many reasons, the main reason is to enhance transparency, reliability and quality of public financial information, then to ensure corporate accountability, and to enhance the integrity and efficiency of capital markets, which in turn will attract new investors to the Saudi market and improve the confidence of current investors.

### 2.3.1 Corporate Governance in Saudi Arabia

Corporate governance in Saudi Arabia, like so many developing countries, is still sub-par and weak. Capital Market Authority issued first Corporate Governance Regulations in the end of 2006 and revised in 2009 in order to attract more investors to the country and it was an attempt to solve the agency problem in the country (Ihsan, 2012). One of the strengths of the

codes in Saudi Arabia is that it concerns the shareholders' rights in terms of providing transparent information. In addition, the chairman is not allowed to occupy CEO position in the same time. In the other words, there is no CEO duality in Saudi Arabia.

Nevertheless, the codes of CG in Saudi Arabia have some weaknesses due to the lack of experience in the implementation of CG. For instance the code identifies the independent director as the director who has no first-relatives on the board, and they identify the relative as father, wife or husband, and children. However, it excludes brothers, sisters, uncles, and cousins. In a society like Saudi Arabia, the relationships between families are so strong, and the firms still look like family businesses. Due to a huge number of one family are serving in the board or in the sub-committees of the board, it may affect the decision making or lead to conflict of interest. Ihsan (2012) points out that the codes of CG that can be applied in the west may not be suitable in Saudi Arabia and it needs to be adjusted because of the differences in culture, society and business environment.

Yet, there is a gap in studies about the relationship between CG and firm performance in Saudi Arabia. In Saudi Arabia, practice of CG is still new and underdeveloped in comparison with the growth of companies and the stock market. Moreover, the transparency of disclosure practices is still poor and the concentration of power remains in the hands of directors as well as other key management connections. These problems in the face of weak regulatory environment and overall political instability of the country remain the barrier to foreign investment and they undermine investor confidence, generally leads to weak economic growth (Ihsan, 2012). Hence, this study aims to investigate the relationship between the characteristics of the board of directors and firm performance in Saudi Arabia to prove the effect of the board and the AC members in the performance of the firm, as well as, the effect of the size board and AC on the firm performance.

The rules of CG were initially not compulsory but the Capital Market Authority required the listed firms to comply with certain rules of the Corporate Governance Regulations in order to enhance the transparency and protect the shareholder's rights. The Capital Market Authority required the listed firms to include information in their annual report about:

- i. Compliance with the Corporate Governance Regulations.
- ii. The composition of the board of directors and the balance between executive and non-executive (including independent) directors, and the other joint-stock companies directors holding a seat in its board of directors.
- iii. A brief description in respect of the composition of committees formed by the board of directors, such as audit, nomination and remuneration committees.
- iv. The details of compensation and remuneration paid to the chairman, board members and the highest-paid five executives (the chief executive officer and chief financial officer if they are not amongst the highest-paid five executives); and
- v. Any punishment, penalty or restrictions imposed on the company by any regulatory, executive or judicial authority, and the annual review of the effectiveness of its internal audit (Capital Market Authority, 2009).

Companies that do not comply with the above requirements will be penalized by the Capital Market Authority. For instance, a fine of Saudi Real 50,000 will be imposed on a Saudi firm if it does not include in the annual report information about the compliance with the Corporate Governance Regulations.

### 2.3.2 Corporate Governance (Board Characteristics) and Firm Performance

#### 2.3.2.1 Audit Committee Size

An AC is a sub-committee of the board of directors. Cadbury Committee recommended that board of directors should establish an AC in order to oversee and monitor the accounting procedures and the external auditors. Based on the regulation of CG in Saudi Arabia, the board of directors should set up an AC of not less than three members. The AC members should not be executive directors in the board of directors and the committee should include a specialist of financial and accounting matters to help the board of directors to carry out their responsibilities for better CG and financial reporting.

Over the time, the main role of the AC is to improve the quality of information (Pincus et al, 1989) which leads to improve firm performance (Wild, 1996). The Australian Corporate Governance Guidelines defines the role of AC to oversee and monitor the financial reporting quality and to oversee the independent of external auditors. For the US firm, the New York Stock Exchange rules require the listed firms to establish an AC to review the firm's risk assessment and hedging strategies. Thus, the primary roles of the AC are to oversee the risk management assessment, hedging strategies and financial reporting in order to improve the performance of the firm.

In the context of Saudi Arabia, the CG guidelines (2009) address the duties and responsibilities of AC as following:

1. To supervise the company's internal audit department to ensure its effectiveness in executing the activities and duties specified by the Board of Directors.
2. To review the internal audit procedure and prepare a written report on such audit and its recommendations with respect to it.
3. To review the internal audit reports and pursue the implementation of the corrective measures in respect of the comments included in them.
4. To supervise the activities of the external auditors and approve any activity beyond the scope of the audit work assigned to them during the performance of their duties, and
5. To review together with the external auditor the audit plan and make any comments thereon (Capital Market Authority, 2009).

Previous studies find that firms with ACs perform better than those without them and the ACs play a significant role in improving the firm performance (Wild, 1996; Weir, Laing & McKnight, 2002). On contrast, other studies revealed that ACs have no effect on the performance of the firms (Theodorou, 1998; Weir et al, 2002).

Furthermore, the existence of the AC attracts the attention of some authors to investigate the

relationship between AC and some financial scandals in some companies. Beasley (1996) points out that the probability of financial reporting fraud will reduce if the firm has an AC.

An AC size refers to the number of members are serving in the board of audit. Few studies have examined the relationship between AC size and firm performance. The previous studies show mixed result. Kyereboah-Coleman (2007) examines the relationship between AC size and firm performance using a sample of 103 listed companies in four different African countries namely; Ghana, Nigeria, Kenya and South Africa in the period 1997-2001 and he finds a positive relationship between AC size and firm performance. Yasser,EntebangandMansor(2011) examine the relationship between AC size and two firm performance measures (return on equity, ROE, and profit margin, PM) in 30 listed firms in Karachi Stock Exchange, and they provide an evidence of positive relationship between them.

Moreover, an AC size plays a significant role in improving the quality of financial reporting which leads the firms to perform better. Felo, Krishnamurthy andSolieri (2003) find a positive relationship between AC size and financial reporting quality. However, the previous studies indicated that better quality of financial reporting and disclosure leads to improve the performance of the firm (Wild, 1996).

Besides, an AC plays another significant role in improving the firm performance by controlling the earnings management. The likelihood of earnings management is reduced when the firm has good firm performance. Klein (2002) finds a negative relationship between AC size and earnings management. The results of Klein's study indicate that smaller size of AC is preferred because it leads to reduce the earnings management.Hazarika, et al (2011) report that poor firm performance may cause earnings management.

MakandKusnadi (2005) could not provide any relationship between the size of ACs and the firm performance in Malaysia and Singapore.

#### *2.3.2.2 Audit Committee Composition*

AC must be independent from the management board in order to fulfill the oversight role. CG mechanism and regulations support the independent of AC. According to Carcello and Neal (2003) good financial reporting is linked with the AC independence. For example, the Australian CG Principles and Recommendations require the companies to have an independent AC with a minimum three independent directors. National Association of Securities Dealers Automated Quotations (NASDAQ) and New York Stock Exchange (NYSE) consider the independence of an AC only if all directors are independent of inside management. According to Klein (2006) the AC may consist of independent and dependent directors, but she considers the AC as an independent committee if the majority of the members (more than 51%) are independent. It could be costly for the firms to obtain an AC consisting of only independent members. Thus, using the Klein's proposal that is the majority of the AC should be independent may be desirable alternative to many companies in order to reduce the cost.

According to the agency theory, the independent members in AC can help the owners to monitor the managements' activities and reduce benefits from withholding information. As a

result, the independent AC members in the AC help to increase the level of disclosure by the listed companies and facilitate more effective monitoring on financial reporting (Beasley, 1996).

Some of the prior studies attempt to examine the factors that may affect the independence of the AC. Sharma et al (2009) reveal that firms with inside director as chair of AC lead to decrease the level of AC independence. Other literatures study the existence of chief executive officer (CEO) in the AC and concluded that the existence of the CEO in the AC has a negative impact on the AC independence and leads to reduce the monitoring by the AC.

Previous studies also provide evidence of the importance of AC independence. Yang and Krishnan (2005) finds that independent ACs and ACs with financial expertise are significantly less likely to be associated with the incidence of internal control problems. Likewise, Abbott, Parker, and Peters (2004) find that ACs consisting of all independent members and with at least one member with accounting or related expertise is negatively associated with financial restatements. Beasley, Carcello, Hermanson, and Lapides (2000) find firms that commit fraud are likely to have less independent ACs. Moreover, Chen and Jaggi (2000) and Erickson et al, (2005) provide a positive relationship between the proportion of independent AC members serving in the board and the comprehensive of financial disclosure.

Klein (1998) and Hsu (2008) find no significant association. MakandKusnadi (2005) fail to find any significant relationship between either AC size or the proportion of independent directors on the AC and firm performance. Sunday (2008) studied the relationship between AC composition and firm performance by using a sample of 20 non-financial listed companies in Nigeria, and he could not provide a significant association between them.

### *2.3.2.3 Board Size*

A board size refers to the number of directors serving in the board of directors (Jensen &Meckling, 1976). The size of board of directors is a debatable manner. Many studies prefer that the number of board size must be between seven to fifteen directors (Ogbechie, Koufopoulos&Argyropoulou, 2009). However, other studies argue that the size of the board should be limited to seven or eight members (Lipton &Lorsch, 1992; Jensen, 1993).

According to Raheja (2005) the board of directors has two important functions which are advising and monitoring. The Saudi Corporate Governance Codes state the following functions for the board of directors:

1. Approving the strategic plans and main objectives of the company and supervising their implementation.
2. Lay down rules for internal control systems and supervising them.
3. Outlining a written policy that regulate the relationship with stakeholders with a view to protecting their respective rights, and
4. Drafting a Corporate Governance Code for their company, that does not conflict the Saudi Codes (Capital Market Authority, 2009).

Based on the Codes of Corporate Governance in Saudi Arabia, the board of directors consists of three to eleven members. Jensen (1993) suggests that small board size leads to improve their performance. He points out that if the boards consist of more than seven or eight members, they will not function effectively and it will be easier for the CEO to control. Besides, Lipton and Lorsch (1992) study the board size in the US firms and they concluded that the size of the boards in the US firms are crowded which is more costly to the shareholders, reduce the competitive opportunities in market and causes the employees to lose their jobs. They suggest that the board size should be small and limited to seven or eight members. They reveal that it is more difficult for directors in the board to express their opinions and ideas if the board has more than 10 members. Barnhart and Rosenstein (1998) find out that firms with small board size have superior performance compared to the firms with large boards. Topak (2011) concludes that large board of directors is more costly and it affects the communication, decision making and coordination between the directors in the board. However, Chaganti, Mahajan and Sharma (1985), Dalton et al (1998) and Dallas (2001) believe that large board size enhances the decision making in the board because larger board size provides more expertise members, and it is more effective in preventing corporate failure.

The previous studies on the relationship between board size and firm performance show mixed results. The majority of the studies find a negative relationship between board size and firm performance (Jensen, 1993; Barnhart & Rosenstein, 1998; Van, Postma, & Sterken, 2003; Cheng, Evans & Nagarajan, 2008; Shakir, 2008; Guest, 2009).

Yermack (1996) examines the relationship between board size and firm performance by using a sample of 452 large US listed firms, and he finds a significant negative relationship between them. Using a sample of 879 small listed firms in Finland, Eisenberg, Sundgren and Wells (1998) find a negative relationship between board size and firm performance (ROA). Conyon and Peck (1998) examine the relationship between board size and firm performance in five European countries; UK, France, Italy, Denmark and Netherland, and they prove a negative relationship for each country. Lasfer (2004) found a negative relationship between board size and firm performance for a sample of 1424 listed UK firms. In Malaysia, the board size has a negative impact on firm performance (Mak & Kusnadi, 2005; Haniffa & Hudaib, 2006). Moreover, Loderer and Peyer (2002), Bonn, Yoshikawa and Phan (2004), and Bozeman (2005), find a negative relationship between board size and firm performance in Switzerland, Japan and Canada respectively.

On the contrary, some other studies find a positive relationship between board size and firm performance. They show that large boards lead to better performance due to the variety of skills and experiences presence for better decision making and monitor the performance of the CEO (Zahra & Pearce, 1989).

Empirically, Adams and Mehran (2005) study the relation between board size and firm performance in the US using a sample of 35 publicly traded US bank holding companies during 1959-1999. They find that board size has a positive effect on their performance. Similar results also are found by other studies (Pfeffer, 1972; Zahra & Pearce, 1989; Mak & Li, 2001; Dalton & Dalton, 2005).

Sunday (2008) uses return of assets and profit margin as firm performance measurements to examine the relationship between board size and firm performance in 20 non-financial firms listed in Nigeria. He finds a significant positive relationship between board size and firm performance. Mak and Li (2001) find a significant positive relationship between board size and firm performance in 147 listed companies in Singapore.

#### *2.3.2.4 Board Composition*

The board of director is an important mechanism of board structure, which refers to independent and dependent director representation on the board. According to agency theory, a majority of independent directors on the board enhance its effective and provide superior performance (Dalton et al, 1998; Ramdani&Wittelooستuijn, 2009).

Board composition has been highly debated in the previous literatures. Previous studies that investigate the relationship between board composition and firm performance find mixed results but it is generally believed that effective boards contain a great proportion of outside directors.

Yasser,et al (2011) examine the relationship between board composition and two firm performance measures, return on equity and profit margin, for a sample 30 listed companies in Pakistan between 2008 and 2009 and they find a significant positive relationship between board composition and the both measures used. Similar, Khan and Awan (2012) select a sample of 91 listed firms in Karachi Stock Exchange to examine the relationship between board composition and two firm performance measures namely; return on equity and return on assets. They conclude that firms with greater independent directors showed greater return on equity and return on assets.

O'Connell and Cramer (2010) examine the relationship between board composition and firm performance for 77 listed firms in Ireland; their findings reveal a positive relationship between board composition and firm performance. In addition, Weiback (1988) find firms with outside board of directors are able to perform better. Kosnik (1987), and Kyereboah-Coleman and Biekpe (2006) find a positive association between proportion of outside board members and performance. The authors reveal that the firms are supposed to increase the independence of their board in order to overcome of poorly performing.

However, some other studies find out that majority of independent directors leads to poor performance (Yermack, 1996; Klein, 1998). Kiel and Nicholson (2003) find a negative relationship between board composition and firm performance for a sample of 348 Australian firms.

Some previous literature could not provide any relationship between board composition and firm performance (Forsberg, 1989; Hermalin&Weisbach, 1991; Zahra & Pearce; 1989). Sunday (2008) examines the relationship between corporate governance and two measures of firm performance; return of assets and profit margin, for a sample of 20 non-financial listed firms in Nigeria, and he could not provide any significant relationship between board composition and firm performance.

## *2.4 Summary of the Chapter*

The present study investigates the relationship between CG and firm performance. Prior studies pertaining to CG and firm performance are discussed in this chapter. The chapter covers the discussion pertaining to CG, CG in Saudi and the relationship between CG (board characteristics) variables, (AC size, AC composition, board size and board composition) and firm performance. The next chapter presents the hypotheses development as well as the methodology of the study.

## **3. Hypothesis Development and Methodology**

### *3.1 Introduction*

The chapter presents the theoretical framework according to the agency theory and hypotheses formulation. Then, the research methodology will be explained. Following, the chapter provides a description of the research process initiating with the research design, namely data collection, procedures of data collection, model specification and multiple regressions and measurement of the variables. Next, the chapter provides a description of data analysis namely, descriptive analysis, correlation of variables and multiple linear regression analysis, and finally, the summary of the chapter.

### *3.2 Research framework*

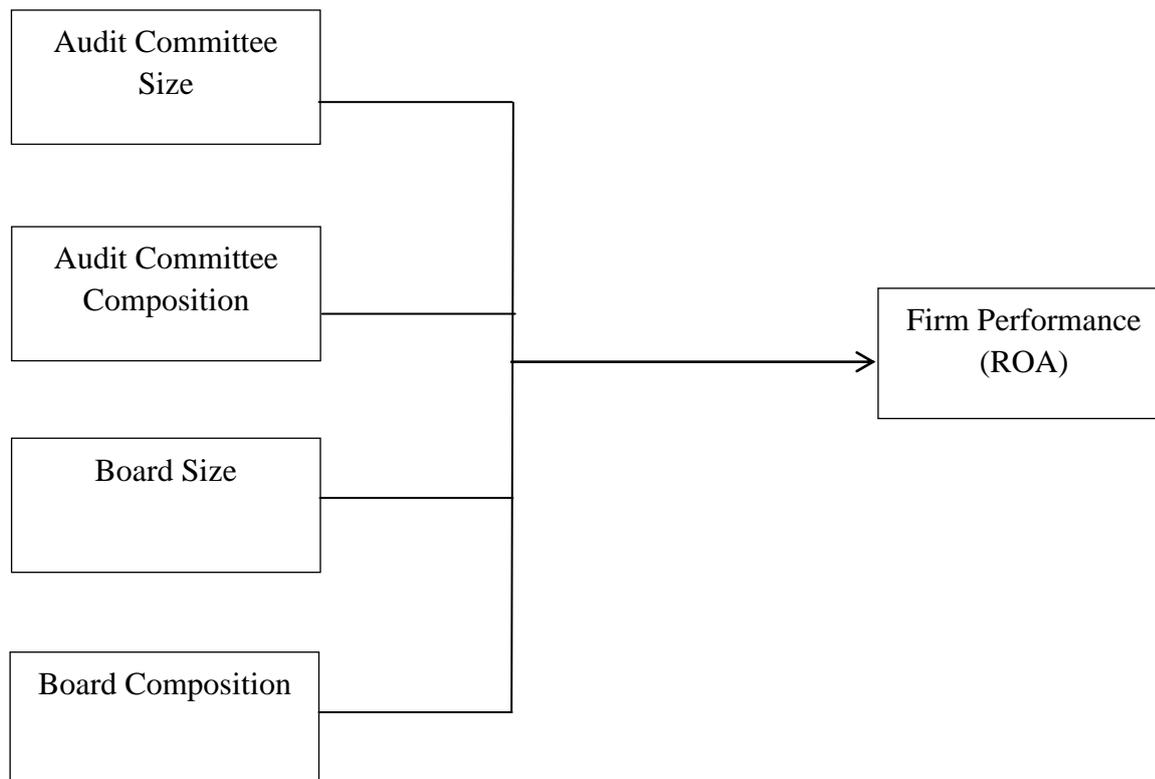
Based on the agency theory, the main agency problems appear as conflict of interests between agents and principals on the one hand, and misreporting and asymmetric information on the other hand.

According to the agency perspective, firms need mechanisms of corporate to mitigate the probability to have agency problems, meanwhile, agency theory is supposed to provide a basis of CG through the use of external and internal mechanisms. Furthermore, agency theory arranges the relationship between board characteristics and firm performance (Kyereboah-Coleman & Biekpe; 2006).

Accordingly, this study attempts to investigate the relationship between CG mechanisms namely; AC size, AC composition, board size and board composition, and firm performance (ROA) in the listed companies in Saudi Arabia. In this study, the CG mechanisms are considered as independent variables while ROA is considered as dependent variable.

The following figure presents the model of this study including both independent and dependent variables.

Figure 3.1: Theoretical Framework.



### 3.3 Hypothesis Development

In this section, the study provides the relationship between dependent variable and independent variables.

#### 3.3.1 Firm Performance

In order to measure the performance of the firm, return on assets (ROA) is used as a measurement of CG in this study.

ROA tells what the firm can do with what is controlled, on other words, the firm ability to make profit from what it owns of assets. It gives an indication of the profitability and the business. In addition, ROA measures the operating and financial performance of the firm (Klapper& Love, 2002). Thus higher ROA presents the effective use of assets for the shareholders' advantage (Haniffa&Huduib, 2006).

According to Miller and Dobbins (2001), ROA is a measurement of assessing the overall efficiency of which the firm's assets are used for the purpose of net income production from firm operations. Also, the authors point outthat ROA is evidence of effective management in allocating capital as there is a possibility of the firm being efficient but yet poorly able to utilize capital.

ROA has been used widely in CG studies such as (Baysinger& Butler, 1985; Rechner& Dalton, 1991; Coles & Jarrell, 2001; Khatri, Leruth&Piesse, 2002; and Sunday, 2008). In the

current study, concentration is provided to independent variables such as AC size, AC composition, board size, and board composition. This section discusses these variables guiding the study of its results compared to prior studies. The objective is to examine the impact of these variables upon firm performance. The following section explains the sole dependent variable and all the independent variables.

### 3.3.2 Audit Committee Size and Firm Performance

The main role of the AC is to improve the quality of the financial reporting (Pincus et al, 1989) which leads to improve the firm performance (Wild, 1996). Different perspectives have been stated on the size of AC. Cadbury Commission suggested that the AC should have three members in the AC as a minimum. Some authors argue that large AC size provides more skilled members serving on the committee which leads to improve the firm reporting (Sunday, 2008). Klein (2002) indicates that larger AC size leads to reduce the earnings management due to the positive relationship between AC size and firm performance. Yasser et al (2011) also find a positive relationship between AC size and Pakistani firm performance.

However, some of the previous studies indicate that smaller AC size improves the firm performance because large AC size may reduce cooperation in the committee (Lin et al., 2008). Yermack, (1996), Kalbers and Fogarty, (1996) reported that large number in the AC may lead to unnecessary debates and delay in decision making. The following hypothesis is formulated based on the above discussion:

*H1: There is a relationship between AC size and firm performance.*

### 3.3.3 Audit Committee Composition and Firm Performance

Independence AC is necessary to achieve the negotiations and delegations carried out by the board members to positively affect their firms. Improving auditor independence is important to improve transparency of financial reporting. The AC should be independent from the management to improve the oversight role and protect the interests of shareholders. If the AC is independent from the organization's management and owners, they should be able to prevent management to manipulate the financial results (Beasley, 1996). Sommer (1991) points out that the presence of independent AC is an indicator of the commitment of the firm's CG practice.

Some of the previous literature suggested that the majority of AC members should be independent (Klein, 2006). However, some previous literatures provide evidence that there is a positive effect on the quality of financial statements with the presence of independent ACs (Petra 2007). Sunday (2008) studies the relationship between AC composition and firm in Nigerian listed companies, and he could not find a significant relationship between AC composition and firm performance. Kirkpatrick (2009) finds that AC contributes to better share price if it has independent members, because they have better understanding of financial risk. Furthermore, Kyereboah-Coleman (2007) finds that AC size has a positive relationship with the effectiveness to monitor misreporting. Based on the above discussion, the following hypothesis is formulated:

*H2: There is a relationship between AC composition and firm performance.*

### 3.3.4. Board Size and Firm Performance

Roles of board size have been a debatable matter from different views (Jensen 1993; Yermack, 1996; Hermalin&Weisbach, 2003). While some studies have suggested smaller boards are better for improving firm performance (Lipton &Lorsch, 1992; Jensen 1993; Yermack, 1996; Barnhart & Rosenstein, 1998; Topak, 2011) others have suggested larger boards enhance firm performance (Pfeffer, 1972; Zahra & Pearce, 1989; Klein, 1998; Mak& Li, 2001; Adam &Mehran, 2003; Sunday, 2008). Based on the agency theory, larger companies need larger boards to control and monitor the management actions. According to Yermack(1996) the board size is determined by the firm size. While Kiel and Nicholson (2003) point out that the board size and firm performance are related. Conversely, Lipton and Lorsch (1992) reveal that more directors in the board might mitigate the effectiveness of management monitoring and will increase the agency cost.

Empirically, many literatures have studied the relationship between board size and performance of the firm and they have revealed mixed results, some of the studies find a positive relationship between board size and firm performance (Yermack, 1996; Mak& Yuanto, 2003; Hermalin&Weisbach, 2003; Bonn, Yoshikawa&Phan, 2004; Haniffa&Hudaib, 2006; Sunday, 2008; Shakir, 2008). While some other studies provide a negative relationship between board size and firm performance (Zahra & Pearce, 1989; Mak& Li, 2001; Adam &Mehran, 2005; and Dalton & Dalton, 2005). The following hypothesis is formulated based on the above:

*H3: There is a relationship between board size and firm performance.*

### 3.3.5 Board composition and Firm Performance

Board composition is the number of independent directors serves on the board. The large number of independent directors in the board may mitigate the agency problem because independent directors have better controlling and monitoring for the opportunistic activities of the management (Jensen &Meckling, 1976). Baysinger and Butler (1985) point out that the non-executive directors provide better performance to the firm.

In order to fulfill the goals of the organization, it is needed to retain the balance of independent non-executive directors (Mallin, 2007). According to Cabdury (1992) the non-executive directors should be independent from management and they should be excluded from any business or other links which could influence their exercise of autonomous judgment. In the same regard, OECD (2004) points out that the objective of board independent is to have sufficient number of directors who are totally separated from the management.

In the empirical studies, the relationship between board composition and firm performance is positive in general. Millstein and MacAvoy (1998) conclude that there is a positive relationship between the independent board of directors and firm performance in the US companies. Moreover, Kosnik (1987), Kyereboah-Coleman and Biekpe (2006) also point out that the strength of the board is signified by the strong group of non-executive directors who are not linked to the management of the firm. However, some author studies find a negative relationship between board composition and firm performance (Baysinger& Butler, 1985;

Klein, 1998; Haniffa & Hudaib, 2006). Sunday (2008) investigate the relationship between board composition and firm performance in the Nigerian listed companies by using two measurements; return on assets and profit margin, and he could not provide a significant relationship between them. Based on the previous discussion, the formulation is as followed:

*H4*: There is a relationship between board composition and firm performance.

### **3.4 Research Design**

To achieve the objectives of this study, the regression studies are used to examine the relationships between AC size, AC composition, board size, and board composition as independent variables and firm performance (ROA) as dependent variable.

#### **3.4.1 Data Collection**

The population of this study comprises only non-financial firms listed on Saudi Arabia stock exchange (Tadawul) (<http://www.tadawul.com.sa>). According to Mehran, Morrison and Shapiro (2011), there are two main differences governance in the banking sector and non-financial sectors. The first is that banks have many more stakeholders than non-financial firms. The second is that the business of banks is opaque and complex and can shift rather quickly. The complexity of the financial sectors, particularly the banking sector causes a difficulty of implementing formal regulations (Mehran, Morrison & Shapiro, 2011). Due to the differences in regulations between banks and non-financial firm, this study excludes the financial firms.

The total number of non-financial companies listed on (*Tadawul*) stock exchange is 109 firms in the end of 2011. Based on the information available in the end of 2011, the study conducts a sample of 102 firms only due to the availability of information. This study will be carried based on the annual reports as in the end of 2011.

##### **3.4.1.1 Procedures of Data Collection**

The data necessary for the study of CG (board characteristics) and firm performance were collected from the annual reports of the selected companies that listed on the official trading market stock website as known *Tadawul* stock exchange (<http://www.tadawul.com.sa>). For the data needed for CG, they are collected from the annual reports in particular from the portion expounding on corporate information and statement of CG as well as from the director's profile. As for firm performance, data regarding it is taken from financial statements like balance sheet, income statement, and cash flow statement provided in the annual reports.

Secondary data were collected owing to the ease of availability and for the purpose of answering the research question; the entire data needed were taken from the annual reports of the companies listed on *Tadawul* Stock Exchange. According to (Sekaran, 2003), the secondary data provides vary information for the research and for problem solving.

#### **3.4.2 Model Specification and Multiple Regressions**

The multiple regression method is used to examine the relationship between the firm performance in *Tadawul* stock exchange and AC size, AC composition, board size and board composition.

The result of regression analysis is an equation that represents the best prediction of a dependent variable from several independent variables. This method is used when the independent variables are correlated with one another and with the dependent variable.

The following regression equation is estimated as follow:

$$\text{FIRMPFC} = \alpha_0 + \beta_1 \text{ACSIZE} + \beta_2 \text{ACCOMP} + \beta_3 \text{BOARDSIZE} + \beta_4 \text{BOADCOMP} + \varepsilon$$

Where:

FIRMPFC: firm performance

$\alpha_0$ : Constant

ACSIZE: audit committee size

ACCOMP: audit committee composition

BOARDSIZE: board size

BOADCOM: board composition

$\varepsilon$ : Error term.

### 3.4.3 Measurement of the Variables

This section provides measurement of both dependent variables and independent variables.

#### 3.4.3.1 Dependent Variables

Return on assets (ROA) is the measurement utilized to measure firm performance. ROA is the earnings before tax divided by total assets of the company.

#### 3.4.3.2 Independent Variables

This section provides measurements of the board characteristics as independent variables which are considered as follows:

AC SIZE: the total number of members serving on the AC.

AC COMPOSITION: the ratio of independent members to the total number of members serving in the AC.

BOARD SIZE: the total number of directors serving on the board of directors.

BOARD COMPOSITION: the ratio of independent directors to the total number of directors.

Capital Market Authority in Saudi Arabia identifies the independent members as “*member who enjoys a complete independence*” (p.3). The following constitutes infringements of the independency:

- i. If the member holds a controlling interest in the company or in any other company within that company’s group.
- ii. During the preceding two years, if the member has been a senior executive of the company or of any other company within that company’s group.
- iii. If the member is a first-degree relative of any board member of the company or of any

other company within that company's group

- iv. If the member is first-degree relative of any of senior executives of the company or of any other company within that company's group.
- v. If the member is a board member of any company within the group of the company which he is nominated to be a member of its board.
- vi. during the preceding two years, the member has been an employee with an affiliate of the company or an affiliate of any company of its group, such as external auditors or main suppliers; or if he/she, during the preceding two years, had a controlling interest in any such party.

### ***3.5 Summary of the Chapter***

The present chapter contains the explanation of the methodology used in the research and highlighted the development of hypotheses. In addition, it explains the theoretical framework according to the agency theory and hypotheses formulation, research methodology, the research design and data analysis.

## **4. Results and Discussion**

### ***4.1 Introduction***

This chapter presents the analysis of the relationship of CG variables and firm performance variable using the data from the sample. Moreover, the findings of this study are presented in this chapter. At the end of this chapter, the results of multiple linear regression analysis will be discussed. The chapter has three sections. First, descriptive statistics, following by correlation analysis, then multiple liner regression are described. The final section discusses the results.

### ***4.2 Descriptive Statistics***

Table 4.1 shows the descriptive statistics. The mean of AC size is 3.3, while the maximum and minimum are 5 and 2 respectively. The AC size should have a minimum of three members in Saudi Arabia. Therefore, it is clear that the AC in the listed firms in Saudi stock exchange have more than three members in average. The mean of AC composition is almost 28%, which is 28% of the AC members are independent while almost 72% shows dependent members. The maximum percentage of independent AC is 80% while the minimum is zero, which means that some companies have fully dependent AC.

In regards to the board size, the Codes of Corporate Governance in Saudi Arabia require that the board of directors should consist of at least three directors and 11 directors as a maximum. The Table shows that the mean of board size is approximately 8.2 with maximum 12 members and minimum four members. The Saudi Codes also require that third (33.33%) of the board of directors or three members of them should be independent directors. Table 4.1 reveals that almost 49.3% of the directors are independent, the maximum and minimum percentage of independent directors are 100% and zero respectively, which means that some companies have a full independent board of directors, and some companies have a full dependent board of directors.

It is clear from Table 4.1 that the ROA has a huge deviation among Saudi firms. It shows a mean performance of almost 5.8%, the maximum reported performance is around 44% and the minimum is -67.8% with deviation of 11.26 between firms

**Table 4.1**
*Descriptive Statistics*

	N	Range	Min	Max	Mean		Std.	Variance
	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Deviation	Statistic
	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Statistic
ROA	102	111.7900	-67.8100	43.9800	5.810490	1.1157572	11.2685952	126.981
ACSIZE	102	3.0000	2.0000	5.0000	3.294118	.0550114	.5555879	.309
ACCOP	102	.8000	.0000	.8000	.282352	.0242178	.2445879	.060
BOARDSIZE	102	8.0000	4.0000	12.0000	8.205882	.1534804	1.5500766	2.403
BOARDCOMP	102	1.0000	.0000	1.0000	.492532	.0188070	.1899415	.036
Valid N	102							

### 4.3 Correlation Analysis

Table 4.2 summarizes the correlation between the independent variables and dependent variable. It displays that AC size, AC composition and board size are not related to the firm performance (ROA). However, the relationship between board composition and firm performance is significantly negative.

Furthermore, Table 4.2 also presents the correlations between the independent variables to each other. It shows that there is no relationships between AC size and both AC composition and board composition. However, AC size has a positivesignificant relationship with board size, which means that the size of board of directors play a significant role in determining the AC size. On the other words, large board size leads to larger AC size.

Besides, Table 4.2 also shows that AC composition has no relationship with any other independent variables. Meanwhile, board size plays a significant role not only in determining the AC size; it also has a significant negative relationship with board composition, which means that larger board of directors leads to dependent board of directors.

**Table 4.2**
*Correlations of variables*

		ROA	AC SIZE	AC COMP	BOARD SIZE	BOARD COMP
ROA	Pearson Correlation	1	-.035	.029	.136	-.269**
	Sig. (2-tailed)		.728	.771	.174	.006
	N	102	102	102	102	102
AC SIZE	Pearson Correlation	-.035	1	.082	.274**	-.044
	Sig. (2-tailed)	.728		.411	.005	.657
	N	102	102	102	102	102
AC COMP	Pearson Correlation	.029	.082	1	.070	-.011
	Sig. (2-tailed)	.771	.411		.486	.910
	N	102	102	102	102	102
BOARD SIZE	Pearson Correlation	.136	.274**	.070	1	-.244*
	Sig. (2-tailed)	.174	.005	.486		.014
	N	102	102	102	102	102
BOARDCOMP	Pearson Correlation	-.269**	-.044	-.011	-.244*	1
	Sig. (2-tailed)	.006	.657	.910	.014	
	N	102	102	102	102	102

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

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

#### 4.4 Multiple Linear Regression Analysis

Table 4.3 shows multiple regressions which is related to ROA as dependent variable. The Table shows the influence of independent variable (AC size, AC composition, board size, and board composition) on dependent variable (ROA). The Table indicates that the independent variables determine .083 of the ROA variance. This means that there are other factors affecting ROA by 91.7%.

**Table 4.3**
*Summary of the regression Model*

model	R	R Square	adjusted R Square	Std. Error of the estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.288 <sup>a</sup>	.083	.045	11.0119451	.083	2.191	4	97	.076

a. Predictors: (Constant), BOARDCOMP, ACCOMP, AC SIZE, BOARDSIZE

Table 4.4 shows the relationship between independent variables namely AC size, AC composition, board size, and board composition on ROA. Statically, there is no significant relationship between three of the CG mechanisms used in this study; AC size, AC composition, and board size, on the firm performance (ROA). It is clear that the increasing in the percentage of independent directors sitting in the board will decrease ROA. If the board composition increases by 1, the ROA will decrease by about -14.8.

**Table 4.4**
*The Coefficients of Multiple Regression Analysis*

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
	(Constant)	12.103	8.907		
AC SIZE	-1.493	2.056	-.074	-.726	.469
AC COMP	1.194	4.501	.026	.265	.791
BOARD SIZE	.678	.758	.093	.894	.374
BOARD COMP	-14.768	5.950	-.249	-2.482	.015

a. Dependent Variable: ROA

**4.5 Discussion**

The results between CG variable (AC size, AC composition, board size, and board composition) and firm performance variable (ROA) are shown in table 4.4. The first hypothesis states that there is a relationship between AC size and firm performance. The analysis shows that AC size has no relationship with firm performance (ROA). The study could not provide a significant relationship between AC size and firm performance which

means that the first hypothesis is rejected. Many previous literatures provide significant relationships between the size of AC and the performance of the firms. However, few studies found similar results of this study. AbdurRouf (2011) investigates the relationship between the size of audit committee and the performance of the firm (ROA and AOE) in Dhaka Stock Exchange in 2006 using a sample of 93 non-financial listed firms, and he finds that there is no significant relationship between AC size and firm performance. Furthermore, Makand Kusnadi (2005) study the relationship between corporate governance and firm performance in Malaysia and Singapore and they could not find any significant association between audit committee and the value of the firm.

The proper size of AC is still debatable in the CG studies. Some empirical studies find that the normal size of the ACs in the UK and USA is about three to five members (Carcello& Neal, 2000; Raghunandan et al., 2001; Spira, 2002; Davidson et al., 2004). Some other authors argue that the larger size of AC may delay the decision making and cause avoidable debates (Yermack, 1996; Kalbers& Fogarty, 1996). While some other studies focus on the effectiveness of the AC rather than size, and they do not consider the AC size as an important factor in enhancing the effectiveness of the committees. In order to make the AC more effective, it should consist of independent, experts and knowledgeable members and it should have adequate authority (Mohiuddin&Karbhari, 2010).

As shown in table 4.4, the relationship between AC composition and ROA is not significant; this result rejects the second hypothesis which stated that there is a relationship between AC composition and firm performance (ROA). This result is consistent to Mak and Kusnadi's (2005) in Malaysia and Singapore. In addition, Sunday (2008) studies the relationship between AC composition and firm performance (return on assets and profit margin) in 20 non-financial firms listed in Nigeria, and he could not provide a significant association between them.

Furthermore, Table 4.4 shows also an insignificant relationship between board size and firm performance (ROA). Based on this finding, the third hypothesis, which stated that there is a relationship between board size and firm performance (ROA), is rejected. This study could not provide a significant relationship between the size of board of directors and the firm performance (ROA). This finding is similar to some previous studies. Chaghadari(2011) did not find significant relationship between board size and firm performance (ROE and ROA) in a sample of selected listed companies in Malaysia. Furthermore, Topak (2011) examines the relationship between the board size and the financial performance in the listed companies in Turkey, and he finds that there is no relationship between them.

According to Shakir (2008), the board size does not reflect its effectiveness. If the board has adequate experience and knowledge, it would be a crucial to ensure that the board functions effectively. Whereas, Guest (2009) points out that the relationship between board size and firm performance may differ due to differences in national institutional characteristics and firm specific characteristics. In the other words, the functions of the boards are different due to differences in institutional backgrounds. Therefore, the expected relationship between board size and firm performance could be different as a result.

The results from Table 4.4 reveal that there is a negative association between board composition and firm performance (ROA). This result supports the fourth hypothesis which stated that there is a relationship between board composition and firm performance (ROA). This negative relationship indicates that when the board composition increases, the performance of the firm will decrease and vice versa. This is consistent with some previous studies such as; Klein (1998) and Haniffa and Hudaib (2006), who investigate the relationship between board composition and firm performance in the US and Malaysia respectively, and they find that there is a negative relationship between board composition and firm performance.

This study has been conducted under the Saudi business environment and culture, which may affect the adoption of practicing good corporate governance. Haniffa and Hudaib (2006) point out that the principle of corporate governance in developing countries are derived from the recommendations in developed countries, and if principles are applicable in developed countries, it is not necessary to be applicable elsewhere in terms of differences in culture and business environment. Ihsan (2012) points out that the Codes of Corporate Governance in Saudi have some weaknesses due to the different social structure which is totally different from the western societies. The relationships amongst the people in Saudi Arabia are much stronger than western nations due to its tribal structure. For example, the first-degree relationship is defined in the Saudi Code as children, parents and spouse only. This means that the brothers and uncles are excluded from this relationship. This study finds that some firms in Saudi Arabia have more than two brothers sitting on the board of directors or in the subcommittees and they are described as independent members.

#### ***4.6 Summary of the Chapter***

The results in this study could not provide a significant relationship between the measure of firm performance and AC size, AC composition and board size. However, the board composition is related to the firm performance (ROA) negatively and significantly.

#### **Table 4.5**

##### *Summary of the hypotheses results*

Hypothesis	Relationship	Findings
H1	Between AC size and ROA	No relationship
H2	Between AC composition and ROA	No relationship
H3	Between board size and ROA	No relationship
H3	Between board composition and ROA	Negative and significant

## 5. Conclusion and Recommendations

### 5.1. Introduction

This study examines the relationship between board characteristics (AC size, board composition, board size, and board composition) and firm performance (ROA) based on the annual reports of listed companies in Saudi Arabia in 2011. The sample of the study is the non-financial firms in the Saudi Market (*Tadawul*). Next section provides the conclusion of the study then the following highlights the contribution of the study and end by the future research.

### 5.2. Conclusion

The objective of this paper is to examine the relationship between corporate governance mechanisms (AC size, AC composition, board size, and board composition) and firm performance (ROA) in Saudi Arabia. This study excludes the financial sector (banks and other financial sectors) from the sample. With regards to the examination of the impact of board (AC size, AC composition, board size, and board composition) of the Saudi non-financial firms listed on the Saudi Stock Exchange (*Tadawul*), on the firm performance (ROA), an analysis of linear regression is utilized.

This study could not provide any significant association between corporate governance mechanisms (AC size, AC composition, board size) and firm performance (ROA). However, board composition is found to be related negatively and significantly to the performance of the firm (ROA). Similar to Mak and Kusnadi (2005) and AbdurRouf (2011), this study finds that there is no association between AC size and firm performance. In addition, the study investigates the relationship between AC composition and firm performance, and it could not provide a significant relationship between them, which is similar to Mak and Kusnadi's (2005) and Sunday (2008) in Malaysia and Nigeria respectively. Furthermore, the study could not provide evidence about the relationship between board size and firm performance, which is consistent to Topak (2011) who could not find a relationship between firm size and firm performance in the Turkish listed companies.

### 5.3. Contributions of the Study

This study enhances the literature of prior studies that examine the relationship between corporate governance (board characteristics) and firm performance. In addition, it enhances our understanding about CG in the Gulf countries, that there is a lack of studies that examine the relationship between corporate governance and firm performance in the Gulf region in general and particularly in Saudi Arabia. There are several studies have been done in developed and developing countries which examine the relationship between CG (corporate mechanisms) and firm performance. In general, the lacking of studies that have been done in developing countries and in particular, the Gulf region encourages the conducting of this study and enhances its significance.

### 5.4. Future Research and Recommendations

Future research can examine the relationship between CG before issuing the Code of Corporate Governance in Saudi and after issuing them in order to investigate the differences

during longer period. This will indicate whether there is an improving in CG practice in Saudi Arabia, and it will investigate the different effects of CG on the performance of the firm since the establishing of the CG Codes. As well as, a study covering longer period is needed to have a better view on the CG in Saudi Arabia. Furthermore, a study on the ownership structure and managerial ownership is needed in Saudi Arabia to examine their effect on firm performance.

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