CORPORATE GOVERNANCE AND FINANCIAL PERFORMANCE:

EVIDENCE FROM THE GHANAIAN BANKING SECTOR

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Abstract

Due to widespread bank scandals and failures around the world, there has been renewed interest in the effect of corporate governance on bank performance. The majority of research concerning corporate governance and its effect on bank performance has been undertaken in developed countries and markets, particularly the USA and European Union but relatively little evidence is provided in Sub Saharan Africa, specifically, Ghana.

This study investigates the effects of corporate governance on financial performance of Ghanaian universal banking companies during the period 2006-2014. This study primarily employs relevant governance theories to investigate the relationship between corporate governance and bank performance. Multiple regression panel data analysis and other appropriate methods are the main tools of analysis in this study.

The empirical investigation revealed a mixed set of results. The findings showed that board size, board composition, bank size and foreign ownership are positively but insignificantly related to profitability in terms of return on asset and return on equity, while board committees have a positive and statistically significant impact on financial performance which is consistent with the monitoring hypothesis of agency theory which argues that board committees are an important mechanism of corporate governance in Ghana which impact on bank performance.

This study contributes to the increasing number of research studies on the link between bank performance and corporate governance. The lacked of clarity, mixed and permanent relationships provided, show that the association between bank performance and different corporate governance mechanisms is complex and dynamic optimal governance arrangements may differ from bank to bank in relation to governance characteristics..

Keywords
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List of Abbreviations

AFRC – Armed Forces Revolutionary Council

APRA – Australian Prudential Regulation Authority

ATM – Automated Teller Machine

BCOMP – Board Composition

BSize – Board Size

BCBS – Basel Committee for Bank Supervision

BCCI – Bank for Credit and Commerce International

BHCs – Bank Holding Companies

BHC – Bank for Housing and Construction Ltd.

BComm – Board Committee

BIS – Bank for International Settlement

Bank Size – Bank Size

BOG – Bank of Ghana

BOG / BSD – Bank of Ghana (Bank Supervision Department)

BHC – Bank for Housing and Construction

CAMEL – Capital, Assets, Management, Earnings and Liquidity

CAR – Capital Adequacy Ratio

CBN – Central Bank of Nigeria

CEO – Chief Executive Officer
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
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<tr>
<td>CIR</td>
<td>Cost to Income Ratio</td>
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<tr>
<td>CPI</td>
<td>Consumer Price Index</td>
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<td>DOMEST</td>
<td>Domestic Ownership</td>
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<tr>
<td>ECOWAS</td>
<td>Economic Community of West African States</td>
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<td>EPS</td>
<td>Earning Per Shares</td>
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<td>ERP</td>
<td>Economic Recovery Program</td>
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<td>ETI</td>
<td>Ecobank Trans International</td>
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<tr>
<td>EVA</td>
<td>Economic Value Added</td>
</tr>
<tr>
<td>EU</td>
<td>European Union</td>
</tr>
<tr>
<td>FDIC</td>
<td>Federal Deposit Insurance Corporation</td>
</tr>
<tr>
<td>FE</td>
<td>Fixed Effects</td>
</tr>
<tr>
<td>FED</td>
<td>Federal Reserve Bank of New York, US</td>
</tr>
<tr>
<td>FINSSIP II</td>
<td>Financial Sector Strategic Plan II</td>
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<tr>
<td>FINSAP</td>
<td>Financial Sector Adjustment Programme</td>
</tr>
<tr>
<td>FSAC</td>
<td>Financial Sector Adjustment Credit</td>
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<td>FRC</td>
<td>Financial Reporting Council</td>
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<tr>
<td>UNCTAD</td>
<td>United Nations Conference on Trade and Development</td>
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<td>GBA</td>
<td>Ghana Bankers Association</td>
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<tr>
<td>GBP</td>
<td>Great British Pound</td>
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<td>GCB</td>
<td>Ghana Commercial Bank</td>
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GDP – Gross Domestic Product
GH₵ – Ghana Cedis
GSE – Ghana Stock Exchange
GRETL – Grelt Software
IMF – International Monetary Fund
IFC – International Finance Corporation
IFRS – International Financial Reporting Standard
IAS – International Accounting Standards
ISS – Institutional Shareholder Services
LOLR – Lender of Last Resort
MMLR – Market Makers of Last Resort
MOU – Memorandum of Understanding
NED – Non-Executive Director
NIC – National Insurance Authority
NPL – Non Performing Loans
NPA – Non Performing Assets
NPART – Non-Performing Assets Recovery Trust
NPRA – National Pension Regulatory Authority
OECD – Organization for Economic Cooperation and Development
OLS – Ordinary Least Squares
SSNIT – Social Security National Insurance Trust
Stata – Stata software
Tobin’s Q – The ratio of market value to replacement value of a firm’s assets.
UK – United Kingdom
UNCTAD – United Nation Centre for Trade Agreement and Developments
USA – United State of America
VAR – Vector Auto Regressions
WACB – West African Currency Board
WORLD BANK (ROSC) – Report on the Observance of Standards and Codes
Chapter One: Introduction

1.1 Background to the Study

Corporate governance has become an increasingly important phenomenon in recent years, primarily due to the number of corporate scandals, which have resulted in a decline in shareholder value, a reduction in investor confidence and in some cases significant bank failures (Klapper & Love, 2004). Good governance is essential in promoting and ensuring fairness, accountability and transparency within organizations (OECD, 2010, Murphy & O'Donohoe, 2006). Effective corporate governance should fundamentally guarantee shareholders’ value by ensuring the appropriate use of firms’ resources, enabling access to capital and improving investor confidence (Denis & McConnell, 2003). This is related to both internal organization and external market conditions; a firm’s responsiveness to external conditions is largely dependent on the way the firm is managed as well as the efficacy of the firm’s governance structure (Geogory & Simms, 1999). Some authors, Rwegasira, (2000); Nam et al., (2004) have argued that good corporate governance prevents the expropriation of company resources by managers, ensuring better decision making and efficient management. This results in better allocation of company resources and ultimately, improved performance.

Concerns have been raised regarding the governance processes of financial systems and this is mainly as a result of the increasing government pressure and international agencies like the IMF, IFC and the World Bank. These developments are expected to have implications for the owners, boards and management of banks. According to Lefort & Urzua (2008), boards of directors are the central institution in the internal governance of a company. There is a growing call for boards to provide strategic direction as well as better monitoring to deal with agency problems in the firm (Lefort & Urzua, 2008). These bank boards are expected to adopt a critical role in crafting strategy, implementing and executing the strategy and then over time initiate corrective adjustments in the vision and objectives of the bank (Thompson & Strickland, 2001). This increased interest is in recognition of the fact that effective governance structure can lead to improved performance. The effect of ownership structure and concentration on a firm’s performance is
an important issue in the literature of finance theory. La Porta et al., (1998) argue that the main conflict is between owners and managers in common law countries due to the existence of dispersed control and ownership structure, while in civil law countries, control and ownership structures are concentrated; thus the main governance problem arises between minority and controlling shareholders. Therefore, ownership has greater importance in civil law countries where protection of shareholder rights is weak. In most developing economies such as Ghana, there are closely held banks (family or private individual, state controlled banks and subsidiaries or branches owned international banks) tend to dominate the banking landscape. Concerns have also been raised regarding weak institutional environment, poor protection of investors and high ownership concentration in emerging economies that have given rise to conflicts between controlling shareholder and minority shareholders more often than between managers and shareholders.

In this regard, La Porta et al., (2002); and Young et al., (2008) stress that, unlike developed economies where principal–agent conflicts are the major concern of corporate governance, principal (controlling shareholder) –principal (minority shareholders) are a major issue in developing countries. In Ghana, banks have high ownership concentration, and higher degree of economic uncertainties coupled with weak legal controls and poor investor protection, and frequent government intervention; all resulting in poor performance (Rabelo & Vasconcelos, 2002). There has been a series of calls by international agencies such as the IMF, IFC and World Bank on the Ghanaian government to create a stable macroeconomic environment, strong investor protection, and a robust regulatory and legal framework to help the growth of capital market.

Several events are responsible for the heightened interest in corporate governance especially in developing countries such as Ghana. First, there has been a proliferation of scandals and crises across the globe in which the behaviour of the banking sector affected entire economies and deficiencies in corporate governance endangered the stability of the global financial system. Second, the market based investment process is now more important for most emerging economies than it used to be, and that the entire process is underpinned by better governance. Third, banks execute a crucial function of
financial intermediation between savers and investors. Any disruption in this process will undoubtedly have a catastrophic effect on the economy (Mitton, 2002). For this reason, stakeholders in the financial arena have a strong interest in the good governance of the banking institutions.

In this vein, parliament, governments, regulators and the private sector in many countries have worked together to build up a strong, reliable and stable financial system (Arun & Turner, 2004). The study of banks and other financial institutions is particularly relevant given the importance of the financial sector in the modern economy, thus, requiring specific regulations and supervision by market authorities. This importance became very clear during the recent crisis since the banks were subjected to specific interventions from various central banks and governments (Friedman, 2011) aiming to maintain confidence in the markets (Zingales, 2008). In a country such as Ghana, where the financial sector is dominated by banks, any failure in the sector has an immense implication on the economic growth of the country.

Following the recent global financial crisis and major bank collapses in the various developed stock markets, efforts to enhance the efficacy of governance structures have been undertaken by international bodies as well as countries via the establishment of corporate governance codes and principles (e.g. BCBS, 2010, 2015; OCED, 2010; CBN, 2014; UK (FRC) 2014). These increased interests are in recognition of the fact that an effective governance system can lead to improved performance. However, the principles outlined in most of the codes are largely derived from recommendations in developed countries and may not necessarily be applicable to a developing country such as Ghana.

Ghana underwent extensive economic and financial reforms in the late 1980s and early 2000s. An important part of financial sector reform was an attempt to improve the way in which banks are governed. Domestic efforts at reforming corporate governance in Ghana coincided with the Bank of Ghana attempts at enhancing the efficacy of bank governance structures. For instance, the Bank of Ghana made an effort to reform corporate governance practices in state owned banks with the appointment of qualified and

Despite these legislative reforms, Ghana had experienced turbulent times with regard to its corporate governance practices in the last two decades, resulting in generally lower corporate profits across the economy. Arising from high profile bank failures and distresses, coupled with generally poor performance, across the banking sector, the credibility of the existing corporate governance structures has been put into question. For instance, the collapse of Ghana Cooperative Bank, Bank for Housing and Construction, and Securities Discount and Investment Company in the late 2000s was as a result of inadequate corporate governance practices such as ineffective board practices, insider related credit abuses, poor risk appreciation and internal control failures (Amidu, 2007, Bank of Ghana, 2002). Monks (1998) argues that the numerous cases of corporate failures are an indictment of the effectiveness of the existing corporate governance structures. In the aftermath of the financial crises in 2007, OECD (2009) on the corporate governance lessons from the crises concluded that, the crises was largely due to failures and weaknesses in corporate governance arrangements which could not serve their purpose to safeguard against excessive risk taking by the financial institutions.

Nevertheless, while there is extensive research on the relationship between corporate governance structure and the performance of banks in developed economies, notably the United States of America, UK and European Union (Erkens et al., 2012; Aebi et al., 2012; Guest, 2008; Busta, 2008; De Andre and Valledado, 2008). On the other hand, there is a dearth of literature in this area of research from developing economies particularly in Ghana, where there are huge institutional and legal differences, including the mechanisms of corporate governance, between Ghana and developed economies. More so, it is not known whether existing differences in institutional, regulatory and cor-
porate governance practices also translate into differences in the relationship between corporate governance and bank performance. This study to this end seeks to find out whether there is a relationship between corporate governance and the financial performance of universal banks in Ghana.

1.2 Motivation for the Study

The current study aims to examine the relationship between corporate governance structures and financial performance with respect to universal banking firms in Ghana. Evidence of the relationship between corporate governance mechanisms and financial performance, or lack thereof, will enable banks to make appropriate choices about corporate governance structures to create and improve bank performance and value. The main reasons for undertaking this study are discussed below. First, internationally there is a growing recognition of the importance of corporate governance for the success of a bank. Several international agencies and countries have issued guidelines, regulations, principles and codes for best governance practices (Cadbury Report, 1992; King Reports, 2002; 2010; BCBS, 2006; 2015; OECD, 2004; 2014, UK FRC, 2012; 2016; Nigeria CBN Code, 2014). However, whether banks following the best practices regarding corporate governance principles will indeed perform better is a question to be examined empirically in the Ghanaian context.

The second major motivation for this study is that, since 1988 a number of stakeholder laws have been enacted with the view of promoting accountability, transparency, fairness and discipline in financial sector in Ghana. Corporate and banking failures and distresses, high non-performing loans, related party lending, insider dealings, creative accounting and other “self-dealing practices have alerted the government, regulators, investors and legislators to the danger involved in the absence of constraints governing corporate governance practices. The lack of constraints are viewed as being conducive to definite losses to shareholders and other stakeholders such as regulators, government, and investors, to destabilize the financial sector, national economy and the investment climate. All of these have reinforced interest in the enforcement of good corporate governance practices in the Ghanaian banking industry.
The third motivation for this study is that there is the need whether the financial sector reforms which were implemented in the late 1980s have altered the efficiency and performance of universal banks in Ghana. These regulatory changes included the privatization of public sector banks, listing of banks on Ghana Stock Exchange, the easing of entry into the banking market for both foreign and private domestic investors, the introduction of universal banking concept, and deregulation of interest rates. The effects of the changes can be considered as environmental factors or bank specific characteristics that can influence the performance of banks. There is a large body of empirical literature that had investigated the differences in the relative efficiency and performance dynamics among state, private-domestic banks, and foreign banks (De Young & Nolle, 1996; Bhattacharyya et al., 1997; Berger et al., 2009), between universal banks and focus banks (Laeven & Levine, 2007), and between listed banks and non-listed banks (Girardone et al., 2009; Ray & Das, 2010). These differential factors- (ownership types, universal banking concept, specialization and capitalization) brought about as a result of regulatory reforms impacted positively on bank performance and efficiency. This thesis is investigating to find out whether the regulatory reforms impacted positively on universal banks’ performance or not.

The fourth and final motivation for this study is that it is almost three decades since the financial sector reform was implemented in Ghana. However, no research to date has investigated the relationship between corporate governance practices and financial performance of universal banks. In this respect, this study provides the first time opportunity to investigate the relationship between corporate governance mechanisms and bank performance in the post sector reform period.

1.3 Statement of Research Problem

The capacity of any government to provide a good bank governance framework is considered as one of the important elements contributing to the country’s financial system, because banks play a primary role in intermediation of savings and investment, as well as in servicing the economic agents with an efficient payment system. Failure of
banks due to poor governance mechanisms will mean that their impact on the economy could be damaging and destabilizing. The systemic risk from bank failures needs to be avoided and hence the study of corporate governance of banks takes priority in an economy. Given the importance of corporate governance, several empirical studies have been conducted in developed countries on the relationship between corporate governance mechanisms and banks’ financial performance and found mixed results (Adams & Mehran, 2012; 2005; Erkens et al., 2012; Aebi et al., 2012; Busta, 2008). However, most of the prior studies were undertaken on large banks operating within well-organized corporate governance mechanisms in developed economic systems and well-structured capital markets. However, there is an increasing awareness that theories originating from developed economies such as the USA, EU and UK may have limited applicability to emerging markets. Emerging markets have different characteristics such as different political, economic and institutional conditions, which limit the application of developed markets’ empirical models. Ghanaian empirical studies have been contradictory in theory findings on the relation between corporate governance and firm performance (e.g. Kyereboa-Coleman & Biekpe, 2006; Kyereboa-Coleman, 2007; Adusei, 2011).

Furthermore, the issue of corporate governance had also received a lot of attention from the World Bank ROSC reports (2005; 2007; 2010) and IMF Country reports of 2011 and 2013. These reports cited weaknesses in the governance mechanisms in the banking and non-banking institutions. The identified weaknesses included lax internal control system, poor board practices, unsound risk management practices, non-existent of code of corporate governance practice for banks, and high state ownership of banks and they all have contributed to poor performance of banks in Ghana (IMF, 2011; 2012; 2013). There has been renewed interest concerning issues of corporate governance in Ghana, however, relevant data from empirical studies are still few and far between. This has invariably led to limitations in the depth of our understanding of bank governance issues.

In Ghana, there were a number of studies on banks (World Bank, (1996, 1997); Ziorklui-et al., (2001); Bank of Ghana, (2001; 2006); Buchs and Mathisen (2005). These
were mostly focused on analyzing the efficiency, stability and accounting performance of banks without much attention to the possible effects of corporate governance on the financial performance of universal banks. Hence, what are the effects of foreign ownership, board structures, and bank size on financial performance? It is against these backdrops, that this study therefore seeks to investigate ownership structure, board characteristics, bank size and its effects on financial performance in the banking sector in Ghana. This study focuses on one important African country, Ghana, as it provides an interesting setting to investigate the issue of corporate governance and financial performance of universal banks. This is the gap the current study seeks to bridge.

1.4 Objectives of the Study

The principal objective of this thesis is to carry out an empirical investigation of the relationship between corporate governance and financial performance of universal banks over the period 2006-2014. The assessment of corporate governance practices in the Ghanaian banking sector aims to provide a mechanism to improve investor confidence and trust in management and promote economic development of the country. Therefore, in order to understand the governance practices that contribute to enhance the value of universal banks in Ghana, this study aimed to explore the efficacy of corporate governance practices, which affect bank performance resulting in accountability to both shareholders and other stakeholders. This research determined the relationships between the corporate governance practices of board structure; ownership structure, bank size and bank performance of universal banks in Ghana. In order to achieve the principal objective of this thesis, five specific objectives will have to be achieved:

The specific objectives of this study are:

1. To examine the relationship between board size and financial performance.
2. To investigate the relationship between board composition and financial performance.
3. To assess the influence of board committee structures on financial performance.
4. To find out if there is a relationship between bank size and financial performance.
5. To assess the relationship between foreign ownership and financial performance.
1.5 Research Questions

This study aimed to provide evidence on the potential impact of corporate governance structure on bank performance in the context of developing country such as Ghana. Liu and Fong (2010) posited that one of the most important mechanisms of corporate governance is the board of directors. Members of board of directors are representatives of shareholders and their responsibility is to make sure that managers are working in the best interest of owners. Corporate governance frameworks should ensure the strategic guidance of a company and effective monitoring of management by the board of directors (OECD, 2010). The board is responsible for monitoring managerial behaviour to reduce conflict between shareholders and managers to achieve adequate returns for shareholders (OECD, 2010). With the development of the Ghanaian banking market, and because of the increase in the number of universal banks since the deregulation of banking sector, efforts are required to enhance the board structure of Ghanaian banks.

Jensen and Meckling (1976) argued that ownership of a corporation, especially the role of equity ownership of managers, is a mechanism to align manager’s interest with that of the owner. In developing countries, ownership is highly concentrated, where the rights of minority shareholders are weak due to insufficient regulations or absence of relevant laws (Shleifer & Vishny, 1997; La Porta et al., 1999). Furthermore, the literature on corporate governance argued that the identity, objective function, nature and behaviour of shareholders vary for different types of owners, which might affect firm performance (Shleifer & Vishny, 1997; Thomsen & Pedersen 1999; Douma et al., 2006). There is an indirect link between bank size and profitability in the study conducted by Boyd & Runkle (1993). Berger et al., (1987) opined that bank size has an inverse link with larger banks and a direct association with smaller banks’ profitability but intermediate size banks earn high return on investment. Recently, Adusei (2011), Kyereboah-Coleman & Biekpe (2006), Abor & Biekpe (2007) examined corporate governance and firm performance in Ghana. Furthermore, there is still a question over whether corporate governance practices have actually contributed to the Ghanaian bank market as intended. Clearer answers to these questions are very important for policy makers in the
development of appropriate corporate governance systems that are optimized for Ghanaian universal banks. The principal question in this thesis: “To what extent does corporate governance influence financial performance of universal banks in Ghana?” In order to achieve the principal question of this thesis, five specific questions will have to be answered.

Therefore, this section addresses five main questions:

1. To what extent (if any) does board size affect the financial performance of universal banks?
2. Does the presence of board composition (non-executive directors) affect universal bank performance?
3. Is there a significant relationship between board committee structures and the financial performance of banks?
4. Is there any relationship between bank size and financial performance of universal banks in Ghana?
5. Whether foreign ownership has had a beneficial or detrimental impact on the financial performance of universal banks?

1.6 Significance of the Study

The Ghanaian setting is particularly interesting for a number of reasons. First, this study might help us to enhance our understanding of corporate governance in term of agency theory in a developing country specifically, in Ghanaian universal banks, and if there any possible improvements that could be made to deal with. Second, Ghana is a developing country, thus the findings of this study should be seen to benefit many developing countries with similar political, cultural, environmental, economic conditions, particularly in Sub-Saharan Africa. Third, the study shall also promote and improve good corporate governance practice in governmental outfits. The organizations that benefit from the study are the Ghana Bankers Association, Securities and Exchange Commission, the Ghana Stock Exchange, the Chartered Institute of Bankers of Ghana, the National Banking College, the Institute of Directors, Financial Institutions, and Train-
ing centers etc. Other stakeholders that shall benefit from this study are the policy makers in government and those in the banking sector as well as shareholders, employees and the general public, especially at this period that the banking industry is undergoing an unprecedented turn around in banking reforms and restructuring.

Finally, the findings of this study also provides a window into the prevailing situation of bank governance in Ghana which is of interest to local and foreign investors, managers and academic researchers considering the roles of corporate governance frameworks.

1.7 Contribution of the Study

By addressing research questions, this thesis hopes to make several contributions, as well as extensions to the existing corporate governance literature. First, the findings of this study would contribute to improving or understanding about corporate governance practices in Ghanaian banking and in what ways the banks can implement good corporate governance that aligns with bank performance. The empirical results would also provide general indicators of corporate governance useful for both regulators and business people in making policies and decisions as well as rewarding or punishing the banks that have great or little intention to improve corporate governance aligning with managers-owners risk-taking behaviour and bank performance.

Second, one of the distinctive contributions is the development of a multi-theoretical approach to corporate governance which identified specific board characteristics and their influence on bank performance. In this study, the review of different perspectives clarified that there is the need to adopt an integrated approach rather than a single perspective to understand and explain the effect of corporate governance on bank performance. This study is the first to the best of my knowledge that has developed a multi-theoretical approach that combined a set of corporate governance mechanisms that influenced the performance of the Ghanaian banking sector.

Third, this study represents one of the first attempts at modeling the impact of corporate governance mechanisms and bank performance within the Ecowas Sub-
region, with particular reference to Ghana, and thus crucially extends the literature to that of Sub Saharan Africa. Fourth, the findings of this study make a case for having larger boards. Larger boards tend to be associated with diversity of skills, business contacts and experience that smaller boards may not have, which offers greater opportunity to secure critical resources (Haniffa & Hudaib, 2006). Similarly, larger boards offer greater access to their firm’s external environment, which reduces uncertainties and also facilitates securing critical resources, such as finance, raw materials, and contracts (Goodstein et al 1994; Pearce and Zahra, 1992).

Finally, this study established that board committees are related to improved financial performance. The reasoning is that having board committees enhance corporate accountability, legitimacy and credibility by performing specialist functions (Weir et al., 2002). Also, effective monitoring by the board committee may help minimize financial fraud and increase firm value. Board committees are usually entirely composed of non-executive directors, making them better placed to protect shareholders’ interests by effectively scrutinizing managerial actions (Vefeas, 1999; Klein, 1998).

1.8 Thesis Organization

The thesis comprises of six chapters. Chapter one introduces what the study is about, the problem to be examined, motivation of the study, the objectives, research questions, significance of the study and research contributions. Chapter two discusses the corporate governance definitions, historical development of corporate governance, corporate governance mechanisms, bank regulation and central banking, corporate governance in the financial sector as well as the role of Bank of Ghana. The chapter three discusses the extant theoretical and empirical literature on corporate governance and bank financial performance and the development of hypotheses for this study. Chapter four explains the research philosophy and methodology, panel data analysis, test of panel regression assumptions, selection of sample and data collection method. This chapter also discusses the variables used to measure, conceptualize and operationalize the hypotheses and which includes a discussions of the statistical technique employed to analyze the data. Chapter five presents a summary of the descriptive statistics of dependent, independent and control variables. In addition, this chapter deals
with the main inferences which were drawn from the analyses. Chapter six presents the conclusions, research contributions and the recommendations of the thesis. In particular, the chapter also focuses on the key findings, research limitations and potential areas for future research.
Chapter Two: Corporate Governance; Banking Regulation and Central Banking; Corporate Governance of the Ghanaian Financial Sector, and the Role of Bank of Ghana

2.1 Introduction

This chapter presents the historical development of corporate governance and various definitions of corporate governance introduced by different researchers. According to Roche (2005) corporate governance is an evolving subject and is not easy to define; definitions vary according to their context. According to Armstrong and Sweeney (2002) there is no single acceptable definition of corporate governance. There is a considerable debate about the definition of corporate governance among researchers and scholars. In regard to the various definitions, researchers and scholars classify definitions either narrow or broad sense. Narrow definition is based on satisfying the interest of the shareholders, while the broad definition extends the previous definition and include the interest of stakeholders (investors customers, employees, unions and the society) (Gil- lan, 2006; Sternberg, 2004). This study will therefore adopt the broad definition and defines corporate governance in the context of banking as the manner in which systems, processes, procedures and practices of a bank are managed so as to allow for positive relationships and the exercise of power in the management of assets and resources (Ranti, 2011). This is with the aim of advancing the interest of shareholders, and stakeholders including depositors, investors, and customers with improved accountability, monitoring and transparent administration. The chapter also discusses the corporate governance variables and financial performance variables relevant to the study.

The chapter further provides an account of literature on bank regulation and central banking and different tools of regulation and control. This section discusses how banks are regulated and the rationale and types of regulation. Within this discussion, different tools of regulation applied in the financial markets were examined. These instruments of regulation include capital requirements, licensing regulation, government safety nets and regulatory monitoring. Also, the chapter discusses the corporate governance of financial institutions with particular focus on Ghanaian banks in the financial system.
Considering that banks in Ghana are dominant financial institutions in the financial sector by adopting effective corporate governance practices are essential to achieving and maintaining public trust and confidence in the Ghanaian banking system, which are crucial to the proper functioning of the banking sector and economy as a whole. Poor corporate governance can contribute bank failures, which can in turn pose significant public costs (BCBS, 2010).

This chapter also provides account of the supervisory and regulatory structures in Ghana. In this section, the discussions covers institutional regulation which maintains separate regulatory agencies across segregated business lines of financial services such as banking, capital market, insurance and pension funds (Group,30, 2008). In the discussions, the supervisory and regulatory functions are carried by the Bank of Ghana, SEC, National Insurance Authority and the National Pension Regulatory Authority (FINSSP, 2012). Finally, the chapter reviews the roles and structure of Bank of Ghana in the Ghanaian banking system. This section discusses the Bank of Ghana’s independence and the monetary policy and supervisory tools.

This chapter is organized as follows. Section 2.2 discusses the historical overview of corporate governance while Section 2.3 offers a working definition of corporate governance. Section 2.4 reviews the corporate governance structures and their influence on firm performance while Section 2.5 presents an account of literature review on bank regulation and central banking. Section 2.6 discusses corporate governance of the Ghanaian financial sector while Section 2.7 reviews supervisory and regulatory authorities in the Ghanaian financial systems. Section 2.8 discusses also the role and structure of Bank of Ghana while Section 2.10 summarizes the chapter.
2.2 Historical Overview of Corporate Governance

The word governance originates from the Latin word, “gubernare”, meaning to rule or to steer and the Greek word, “kubepunois” which means to steer. Nobert Wiener used the Greek root as the basis of cybernetic - the science of control in man and machine. The idea of the steer man- the person at the helm- is + particularly helpful insight into the reality of governance (Tricker, 1984). Corporate governance has been an issue since 1600 when Queen Elizabeth I granted the first royal charter to the East Indian Company to trade into the Far East (Baskin & Miranti, 1997). The basic issue then was who had power and the degree of accountability for its use. The court of directors was selected by the court of proprietors who were the investors in this company. The court of directors then appointed the chief executive officer who accounted to them (Cadbury, 2002). The governance structures of this company were not different from what we have in the capitalist world today (Warren, 2000). Adam Smith (1776) noted in his 'Wealth of Nations' that, as managers do not own the company, it should not be expected that they will watch over the company the way the owners will do. This conflict of interest was not a major issue at the time Adam Smith made this observation because of the size of shareholdings in a company at that time and the low numbers of passive investors (Cadbury, 2002).

The debate on corporate governance continued when Berle & Means (1932) posited in their book, ‘The Modern Corporation and Private Property’ that due to very small and disperse shareholding which makes it easier for shareholders to sell their shares on the stock exchange market if dissatisfied, there was an increased distance between shareholders and managers to the extent that shareholders were not able to exert the necessary influence on managers to act in their interest. Cadbury (2002) noted that, before Berle and Means made these observations, a similar observation had been made by the Liberal Industrial Inquiry of 1926 and 1928 in Great Britain. The issues raised by Berle and Means, and the Liberal Inquiry report were not followed through on both sides of the Atlantic, because the 1930s saw the greatest economic depression (Cadbury, 2002). The rather peaceful corporate world after the 1930s’ economic depression was broken when Penn Central, the U.S. largest railway corporation collapsed in 1970. The
collapse was partly caused by the failure of the board of directors to do their work of controlling and monitoring the management because they did not know the actual state of the company (Cadbury, 2002).

Veasey, (1993) observed that the term “corporate governance” appeared in American law journals and gained prominent usage in the 1970s as a result of corporate disturbances like the Watergate scandal and the discovery that major American companies had engaged in secret political contributions and corrupt payments to their boards of directors. In the UK, corporate governance became a major issue in the 1980s and 1990s because of issues involving the Robert Maxwell Group of companies and the Bank of Credit and Commerce (BCCI). This led to the British government appointing Sir Adrian Cadbury to investigate the causes of corporate governance scandals and frauds. Subsequently, the recommendations of the Cadbury Committee Report (1992) which focused on the financial aspects of corporate governance have had a tremendous impact on the development of corporate governance worldwide.

Since the beginning of the 1990s, and with the financial scandals and or the bankruptcies which ravaged firms in the US and Europe, like those of Enron (2001), Vivendis Universal (2002), Ahold (2003) and Parmalat (Italy) (2003) governance of firms became a hot topic for the media and the financial literature. Several reports have been published on the subject: principle of corporate governance in the U.S in 1992, the Sarbanes-Oxley Act in 2002, Greensbury, Higgs, and Hampel in the UK in 1995, 1998 and 2003, Vein in 1995, and Bouton in 2002 in France. These reports were translated into new laws and regulations showing the limitations of the existing corporate governance mechanisms, thus provoking scholarly controversies on the definition of governance as well as on the models which are to secure shareholders’ interest (Trabelsi, 2010).

The recent global financial crisis has encouraged moves toward better corporate governance, therefore has driven governments to make changes to their corporate governance structures and requirements in the financial markets (OECD, 2010, Kirkpatrick, 2009). The UNCTAD report (2010) & OECD, (2010) highlighted corporate governance deficiencies in the areas, for example, risk management practices, remuneration and
compensation systems, board practices, disclosures and transparency. These reports have facilitated new global corporate governance codes and guidelines (OECD, 2010, BCBS, 2010, 2015 and the UK FRC, 2012; 2016). However, in developing countries, such as Ghana most of these components of corporate governance have been missing due to weak regulation, perceived corrupt judiciary, political interference and the lack of capital market discipline. Ghana, being an emerging market with recent findings of huge oil and gas reserves, cannot be an exception. Strong corporate governance structure is imperative for any country to ensure the economic health of its financial institutions.

2.3 Corporate Governance Definitions

Corporate governance is not easy to define as a result of the perpetually expanding boundaries of the subject (Roche, 2005). Corporate governance can be defined as the relationship among shareholders, board of directors and the top management in determining the direction and the performance of a corporation (Wheelan and Hunger, 2006). Definitions vary according to context and cultural situations (Armstrong & Sweeney, 2002) and the perspective of different researchers. Some schools of thought argue that the primary responsibility of firms is maximization of the wealth of the shareholders (Sundaram & Inkpen, 2004). Other schools of thought also argue that a firm has an obligation, not only to its shareholders but all stakeholders whose contribution is necessary for the success of the firm (Donaldson, 1983; Freeman, 1984). Corporate governance is about oversight, process, independence and accountability. It has been defined either narrowly or broadly by different scholars and practitioners depending on their background and focus (Salacuse, 2002).

The narrow definition lays emphasis on the rules in capital markets governing equity investments and publicly listed firms. This includes listing requirements, insider dealing arrangements, disclosure and accounting rules, and the protection of minority shareholders’ rights. This definition is more specific to the provision of finance and focuses on how outsider investors protect themselves against expropriation by insiders. This also includes protection of minority rights and the strength of creditor rights, as re-
flected in collateral and bankruptcy laws (Claessens, 2003; Mayer, 1997). Narrow definitions are based on satisfying the interest of the shareholders. This definition is close to the one advanced by Shleifer & Vishny (1997) in their seminal review on corporate governance. They refer to corporate governance as dealing with the ways in which suppliers of finance to corporations assure themselves of getting a return on their investments. This definition can be expanded to address the various types of suppliers of finance. Thus, one can define corporate governance as being concerned with the resolution of collective action problems among dispersed investors and the reconciliation of conflicts of interest among various corporate claimholders (Becht, Bolton and Roell, 2005). However, broader definitions extend the narrow definitions and based on satisfying the stakeholders (Gillan, 2006; Sternberg, 2004).

The broader definition however broadens the scope to cover not only internal structures and their formal rules but also the external environment and the informal practices that evolve in the absence of weakness of the formal rules (Dcyk, 2001). This definition is in tandem with the one used by Sir Adrian Cadbury, the head of the committee established to investigate the Financial Aspects of Corporate Governance frauds in the United Kingdom. Cadbury (1992) defines corporate governance as the system by which companies are directed and controlled. An even broader definition characterizes a corporate governance system as “the complex set of constraints that shape the ex-post bargaining over the quasi-rents generated by firms” (Zingales, 1998). This definition focuses on the division of claims. It can be expanded to include the complex set of constraints that determine the quasi-rent (profits) generated by the firm in the course of relationships and to shape the ex-post bargaining over them.. The Organization for Economic Cooperation and Development (OECD, 2004) defines corporate governance as a system on the basis on which companies are directed and managed.

It is upon this system that specifications are given for the distribution of competencies and responsibilities among the parties included (board directors, executive management and shareholders). Consistent with the OECD definition, BCBS (2006; 2010; 2015) defines corporate governance from a banking perspective as the manner in which banking business and the affairs of an individual bank are governed by their board of
directors and senior management. Bank regulators play a crucial role in the corporate governance of banks. In this connection, the FDIC has a different view of corporate governance than Shleifer & Vishny (1997), OECD (2004) and BCBS (2006; 2010). The FDIC said “corporate governance generally can be defined as the process of managing an organization’s affairs or ensuring accountability. It includes a range of activities, such as setting business strategies and objectives, determining risk appetite, establishing culture and values, developing internal policies, and monitoring performance (FDIC, 2005). Corporate fairness, transparency, and accountability are viewed as goals of corporate governance. To some, corporate governance simply means more than active and involved participation by the board of directors; others emphasize corporate “democracy” or broader shareholder participation (FDIC Outlook, Fall, 2005).

Arun & Turner (2004) support the broader definition of corporate governance by arguing that the special nature of banking requires not only a broader view of corporate governance, but also state intervention in order to restrain the behaviour of bank management. They further argue that the unique nature of banking firms whether in the developed or developing countries require that a broader view of corporate governance, which encapsulates both shareholders and depositors, be adopted for banks. They posit that, in particular, the nature of the banking firms is such that regulation is necessary to protect depositors, investors as well as the overall banking system. This study will therefore adopt the above view and define corporate governance in the context of banking as the manner in which systems, procedures, processes and practices of a bank are managed so as to allow for positive relationships and the exercise of power in the management of assets and resources (Ranti, 2011). This is with the aim of advancing the interest of shareholders, and other stakeholders with improved accountability, monitoring and transparent administration. This study also recognizes that board of directors, ownership structure and bank size are essential to the definition of corporate governance.
2.4 Corporate Governance Mechanisms

The aim of corporate governance as a mechanism is to deal with problems arising from control and ownership separation (Shleifer and Vishny, 1997). Governance mechanisms are sometimes grouped into ‘internal and external’ mechanisms. The agency or finance approach focuses on internal governance mechanisms where the behavior of managers who have incentives to deviate from shareholder value-maximization is efficiently restrained by the board of directors representing the shareholders. This approach also recognizes the role of the external governance mechanisms, whereby the external markets for capital, for managers, and for corporate control help in providing market discipline and enforcing internal arrangements. Two types of governance mechanisms – external and internal for mitigating agency problems are proposed by agency theory (Jensen, 1993). Internal control mechanisms include board of directors, ownership structure, executive compensation and financial policies (Agrawal and Knoeber, 1996; Dennis and McConnel, 2003). Keasey and Wright (1997) suggested that the key internal control mechanisms include ownership structure (institutional and managerial ownership), board structure (board size, composition and committee structures), CEO duality, internal auditing and information disclosure. Whereas external control governance mechanisms include the market for corporate control, legal system, and the factor and product market (Bushman and Smith, 2001). External governance mechanisms are also known as the collection of rules, external to the banking firms which complement good internal corporate governance because they expose management to disciplining forces external to the bank and regulatory authorities.

It is suggested that these external control mechanisms are able to provide protection and checks of the operations of the firm, enabling discipline of the management and shareholders. Farinha (2003) extended the previous arguments and added some items such as the role of reputation, security analysts, dividend policy and debt policy. Meanwhile, Hassan (2009) researched the corporate governance in Australia and categorized the monitoring of corporate governance mechanisms into three groups: (i) mechanisms within the company that included board size, board composition, board committees, CEO duality, CEO tenure, CEO remuneration, director ownership and managerial own-
ership, (ii) mechanisms outside the company that included ownership concentration, debts and corporate takeovers; and (iii) government regulation, external audits and accounting standards.

In general, the impact of corporate governance mechanisms on firm financial performance produced mixed and inconclusive results all over the world. These evidences however are still not convincing in proving a connection between good corporate governance practices and firm performance (Heracleous, 2001). In the next section, a detailed and comprehensive review of studies in corporate governance mechanisms relevant to this study is presented, identifying a specific set of corporate mechanisms (board characteristics, foreign ownership structure and bank size) and their impact of bank financial performance. The next sub-sections review and discuss these corporate governance mechanisms and financial performance connected to the current study.

2.4.1 Board of Directors

The fundamental role of the board of directors is to monitor the managerial side of a firm and to minimize the problems inherent in the principal-agent relationship. In this sense, the principals are the owners, the agents are the managers and the boards of directors act as the monitoring mechanism. If the interests of the agent and the principal are misaligned, an agency problem exists. There is always the potential for agency problems, mainly that agents will pursue their own objectives at the expense of the principals, for which reason principals appoint members of the board of directors as well as agents to ensure that the firm is working in the interests of its owners. This divergence of interests and the need to oversee agents causes the firm to incur agency costs, including monitoring and bonding costs as well as and residual losses (Jensen and Meckling, 1976). Ultimately, the principals bear these costs, thus the reduction of agency costs is part of the duty of maximizing shareholders' value. The board of directors is the apex of hierarchical corporate control systems, and its primary role is to monitor the management by agents on behalf of principals (shareholders) who elect its members. The more power and control the board exercises over managers, the less opportunity managers (agents) have for activities not geared to the maximization of shareholder value (Liu and Fong, 2010). Thus, the board of directors is essentially a monitoring mechanism to protect
principals’ interests (Jensen and Meckling 1976). An independent board is generally viewed favourably as part of an efficient governance mechanism, because independence from management clearly enhances the ability of the board to exercise its function of overseeing the former on behalf of principals (Liu and Fong, 2010). Consequently, the board of directors has the power to engage, dismiss and compensate top-level managers, to ratify and monitor important decisions (Fama and Jensen, 1983; Gillan, 2006; Yermack, 1996; Booth et al., 2002; Baranchuk and Dybvig, 2009) and to ensure that executive directors are pursuing the interests of principals. According to Fama (1980), the board of directors is viewed as an important tool or device to scrutinize company manager decisions.

From an agency theory viewpoint, the role of the board of directors is to provide the most effective device to attain corporate governance that ensures their interests; in other words, it is instituted primarily in order to mitigate agency problems (Fama, 1980). Solomon (2010) recommended some principles to be complied in the construction of boards to ensure the best structure: meeting frequently, effective communication between board members and shareholders, willingness to consider suggestions from each other, high level of integrity, concern about financial risks and awareness and rationale to solve financial problems, and to take any course of action to improve the efficiency of the company. Walker (2005) stated that a significant concern to which attention should be given in the construction of a board structure is the appropriate appointing and compensation of directors. The effectiveness of a board is measured by the extent to which it adds value to the company. The board should set the company’s strategic aims, ensure that the necessary financial and human resources are in place for the company to meet its objectives and review management performance. The board should set the company’s values and standards and ensure that its obligations to its shareholders and others are understood. (UK Combined Code, 2016). The following sections discuss three different mechanisms (e.g. board size, board committees and Board composition or non-executive directors) and their impacts on bank performance.
2.4.2 Foreign Ownership Structure

In many developing countries, there are limited sources of domestic finance for investment (Leuz et al 2010), which has prompted economic liberalization in many emerging markets, enabling investment in domestic equity securities by foreign investors (Bekaert et al 2007). This has resulted in large increase in investment in emerging markets since the mid-1990s. In common with other countries in the Sub-Saharan Africa, Ghana has made great strides in creating the necessary legislative reforms and establishing a legal environment conducive to foreign investment. As confirmed by previous literature, foreign investors are inherently at a disadvantage compared to domestic or local investors due to their lack of knowledge and expertise in the local financial and legislative environment (Stulz, 2005). Through financial liberalization in the emerging markets had stimulated domestic savings and growth as well as increased flow of foreign direct investment (Demirguc-Kunt & Detragiache, 1998). In Ghana, liberalization of the financial sector under FINSAP (1989-2000) and FINSSP (2002-2006) had resulted in increase in the number of banks and non-bank financial institutions in the financial sector with increased foreign sector participation (Bawumia, 2010).

According to Bank of Ghana (Financial stability report, 2014) and Bawumia (2010) that in 1989, there were only three foreign owned banks and the end of 2014 the numbers had increased to 15 universal banks. One of the common barriers to foreign investment in the developing markets is poor corporate governance practices. Weak corporate governance was identified as a barrier to investment in Swedish companies by foreign portfolio investors by Giannetti and Simmonov (2006), but weak corporate governance partially associated with developing and emerging markets. Weak institutional, poor protection of investors and high concentrated ownership in emerging markets such as Ghana has giver arise to conflict between controlling or majority shareholders more often than managers and shareholders (La Porta et al 1999; Shleifer & Vishny, 1997). Also, the negative relationship between foreign ownership and profitability had been attributed to the lack of motivation and negotiation power of foreign shareholders compared to local or domestic firms.
Young et al (2008) assert that the existence of foreign investors play an important role in applying good corporate governance practices in companies. They believe that the ability of the foreign investors to monitor the companies is higher than the local ones. Foreign investors have the ability and incentive to intervene in corporate governance to affect monitoring or complement existing poor monitoring by domestic investors (Gillan & Starks, 2003). Foreign firms including banks offer expertise in risk management practices and more superior culture of corporate governance, thus resulting better performance.

A number of unique features and characteristics make Ghana attractive for foreign investors in the financial sector, mainly because it is relatively safe environment, with political stability, huge oil and gas findings, strong democratic dispensation and stable macro-economic climate. In addition, since 1988, key legal developments have taken place in financial industry. These include the promulgation of the following acts: Banking Act 2004 Act 673; Foreign Exchange Act 2006 Act 723; Credit Reporting Act 2007 Act 726; Borrowers and Lenders Act 2008 Act 773; Ghana Investment Promotion Act 2001 Act 590 and Anti Money Laundering Act 2008 Act 749. Additionally, in 2003, the Bank of Ghana introduced the concept of universal banking to replace the increasingly fragmented banking system. Universal banking concept, which involves the removal of restrictions on banking activity, was introduced to allow banks to choose the type of banking services they would like to offer in line with their capital, risk appetite, and business orientation. The introduction of universal banking was a basically a recognition that the financial system had to become integrated and thus the old divisions between commercial banks, development banks and merchant banks had become anachronistic (Bawumia, 2010). Hence, considering the important impact of the foreign investors on bank performance in the developing countries as explained above, this study will investigate the impact of foreign ownership on bank performance for the period 2006-2014.
2.4.3 Bank Size

Different researchers report an ambiguous relationship between the bank size and firm performance (Agrawal and Knoeber, 1996; Himmelberg et al., 1999; Nenova, 2003; Durnev and Kim, 2005). Short and Keasey (1999) and Joh (2003) argue that larger banks have better opportunity than the smaller ones in creating and generating funds internally and accessing external resources. In addition, larger banks might benefit from economies of scale by creating entry barriers with a positive effect on firm performance. Furthermore, Jensen (1986) points out that firm size may be used as a proxy for the agency problem. He reports that managers have motivation to increase the firm size beyond the target which will indicate more power, when the amount of assets under their control is larger. Fama and Jensen (1983), Booth and Deli (1996) and Boone et al. (2007) argue that as the bank size increases the firm becomes more diversified. This means that larger can explain the natural complexity of the company. Also, it means that larger firms need more advice on the board. In addition, larger firms are correlated with complex operations in order to pursue the company strategies more efficiently. Serrasqueiro and Nunes (2008) recommend larger firm sizes to benefit performance.

This is because, large firms have better opportunity to raise funds and more diversified strategies. In addition it has wide variety of expertise management. Black et al. (2006b) show that the firm size positively affects firm performance. On the other hand, other researchers (Nenova, 2003; Garen, 1994; Agrawal and Knoeber, 1996) report that large firms are subjected to more inspections and scrutiny. Thus, it might be costly for the controlling families to extract private profits (Nenova, 2003). Agrawal and Knoeber (1996) report a negative relationship between the firm size and firm performance. They argue that larger firms might not be as efficient as the smaller firms due to reduced control by management over strategic and operational activities as firm size increases. Garen (1994) argues that the cost of complying with corporate governance codes requirements will be comparatively low for the larger companies. However, this cost will increase if the companies are subject to public media scrutiny. This is because; they will be subject for high levels of media investigations than the smaller companies. (Garen, 1994).
Finally, Jensen and Meckling (1976) argue that as the firm size increases the agency costs are likely to increase. The increase of costs is due to the need for more control that resulted from managerial discretion and opportunism. Moreover, the growth of the firm will result in increasing the internal control tools for forecasting and designing. This will raise the need for aligning the interest of the managers and the shareholders (Jensen and Meckling, 1976). In line with previous studies (e.g., Muth and Donaldson, 1998; Elsayed, 2007; Topak, 2011; Al-Matari et al., 2012; Lehn et al., 2009) who used total assets as a proxy for bank size, this study will measure the bank size by using the natural logarithm of total assets.

2.5 Financial Performance

The two most common types of financial performance measurements used in corporate governance studies are the accounting and stock market based measures (Kiel & Nicholson, 2003). Most commonly used in the accounting based measures are return on assets (ROA) and return on equity (ROE) (Kiel & Nicholson, 2003; Baysinger & Butler, 1985). Epps & Cereola (2008) defined ROE as the net income divided by shareholders' equity, while Haniffa & Hudaib (2006) defined ROA as the earnings after tax divided by total assets. Accounting based performance uses accounting numbers taken from a company’s annual reports, which include income and expenditure statements, balance sheets and statements of changes in the financial position. This approach remains as an important dimension in determining how well a company is performing in the market place. It helps managers to effectively plan, control and achieve the goals of the company (Reid & Myddeton, 1993). Accounting ratios have been widely used in bank governance studies (Mitton, 2002; Hassan & Bashir, 2003; Joh, 2003), and commonly used ratios are return on assets (ROA) and return on equity (ROE).

The ROA is an indicator of short term performance which is calculated as net income divided by total assets (Finkelstein & D’Aveni, 1994). This is a percentage that shows how profitable a company’s assets are generating revenue (Finkelstein & D’Aveni, 1994; Kiel and Nicholson, 2003). It is a measure which assesses the efficiency of assets
employed (Bonn, Yoshikawa, and Phan, 2004) and indicates to investors the earnings
the firm has generated from its investments in capital assets (Epps & Cereola, 2008).
Cheung et al. (2007) also defined ROE as operating profit after tax divided by book value equity at the end of each financial year. ROE measures the rate of return on shareholder equity of the common stock owners (Ma & Tian, 2009). It measures a firm’s efficiency for generating profits from every capital and also shows how a firm uses its investment to generate earnings (Baysinger & Butler, 1985; Dehaene-et-al, 2001). The primary aim of a firm is to generate for the benefit of the shareholders. Therefore, return on equity is a measure that shows investors the profit that is being generated from the capital invested by the shareholders (Epps & Cereola, 2008).

2.6 Bank Regulation and Central Banking

There is no conformity in the literature either regarding the definition of the term “supervision”, or on the difference between “regulation” and “supervision”. Regulation, at its simplest definition, “refers to the promulgation of authoritative set of rules, accompanied by some mechanism, typically a public agency, for monitoring and promoting compliance with these rules (Baldwin, Scot and Hood, 1998). Banking regulation in its strictest sense refers to the framework of laws and rules under which banks operate. Narrowly defined, supervision refers to the banking agencies’ monitoring of financial conditions at banks under their jurisdiction and to the ongoing enforcement of banking regulation and policies (Spong, 2000). The policy justification for banking regulation principally encompasses three main principles: (i) to ensure the safety and soundness of banks in order to prevent systemic risk, and to maintain payment systems. Merton (1979) and Edwards & Scott (1977) noted that the soundness of individual banks provides assurance to depositors and borrowers that promote the public welfare; (ii) to promote efficient and effective banking systems that finances economic growth, (iii) to protect small depositors who do not have incentive to or lack experience in monitoring banks. As a result, depositors need a regulator to represent their interest as financial institutions play a major role in capital formation and distributions.
2.6.1 The Rationale for Financial Regulation

The rationale for a theory of financial regulation is the need to recognize first that regulation is required to promote a stable economic structure in order to prevent the price and output volatility that can lead to financial crises. According to IMF, 2009, wp /09/07) opine that the rationale for financial regulation rests on two objectives: the desire to mitigate systemic risk and the desire to protect consumers. The economy theory of regulation was first published by Stigler in 1971 and the theory’s central element was the integration of the analysis of political behavior with economic analysis. The evolution of the theory has centered on two basic schools of thought, namely, positive theories of regulation and normative theories of regulation (Joskow & Noll, 1981).

As elucidated in the Body of Knowledge on Infrastructure Regulation (cited in www./regulationbodyofknowledge.org/on 10/3/2011), positive theories of regulation which include theories of market power, interest group theories and theories of government opportunism attempt to explain the need for regulation. Theories of market power and interest group theories endeavor to explain stakeholders’ interests in regulation while theories of government opportunism explain why restrictions on government discretion need to be regulated in order to facilitate the efficient provision of financial services. On the other hand, normative theories of regulation postulate that regulators should encourage competition where possible. It is argued that through information gathering, regulators should assist in reducing the costs of information asymmetries and provide operators with performance improving incentives (Botha & Makina 2011).

The economic rationale for financial regulation is that financial market activity generates externalities that are not easily addressed by private agents. The problem is that externalities generate social costs in the event of failure, especially when this cost is greater than the private cost and social cost does not form part of the decision making function of the financial institutions, especially banks. The two principal strands of the rationale for regulating financial markets are: (i) to mitigate the problem of systemic risk and (ii) to regulate conduct of business in the financial market. Falkena et al (2001), further assert that the main objective of financial regulation is to protect the consumer and achieve a high degree of economic efficiency in the market. The protection of the con-
sumer arises from either the institution failing the client who holds funds within it or where the institution’s conduct of business is unsatisfactory.

Llewellyn (1999) opines that there are three main objective of financial regulation: (i) ensuring sustain systemic stability, (ii) maintenance of safety and soundness of financial institutions, and (iii) protection of consumers. Goodhart et al (1999) opine that there are three main reasons for financial sector regulation: (i) there is a need to protect customers against monopolistic exploitation, (ii) there is a need to provide smaller, retail customers with protection, and (iii) there is also a need to ensure systematic stability. Systemic regulation is necessary when social costs of a bank failure exceed the private costs, and such potential social costs are not incorporated in the decision making of the bank. The regulators’ concern is systemic risk that is the risk that the failure of one or more troubled financial institutions could trigger a contagious collapse of otherwise healthy banks (Dale & Wolfe, 2003). Llewellyn (1999) argued that regulators should recognize four areas before setting the economic rationale for regulation in financial institutions. Firstly, there are distinctions between regulation, monitoring, and supervision. Secondly, regulators supply regulatory, monitoring and supervisory services to various stakeholders that might have different demands. Thirdly, regulation imposes a range of costs, and regulators are risk averse. Fourthly, regulators may change the behavior of regulated financial firms by imposing external rules or through creating incentives for firms to behave in a particular way.

2.6.2 Types of Financial Regulation

Goodhart et al, (1999) suggest two types of financial regulation: (i) prudential and systemic regulation, and (ii) conduct of business regulation. Prudential regulation is a slightly different from systemic regulation. Systemic regulation is created when the social costs of the failure of financial firms exceed the private costs. This is the “safety and soundness” of financial institutions objective, for purely systemic reasons. Prudential regulation is about the safety and soundness of a financial institution for consumer benefits, because a bank failure may result in consumer losses. Conduct of business regulation takes in a range of interventions to regulate the activities of financial market participants, aiming to correct informational asymmetries in retail and whole financial mar-

Prudential regulation is aimed to ensure the safety and soundness of a banking system, focusing on both financial stability and the protection of depositors. In other words, its main focus is on the safety and soundness of the banking system and on non-bank financial institutions that take deposits. Prudential control is exercised first at the market entry by 'chartering' that is the obligation to file an application for a charter. To obtain a license the owners have to supply sufficient equity capital. A minimum capital is required as a cushion against losses. The chartering of new financial institution is also subject to screening of the proposed managers to prevent undesirable people from controlling them. According to Mishkin (1997) an adverse selection problem arises as financial activities may attract entrepreneurs wishing to engage in speculative activities. In principle, there are regulatory levers that prudential regulations use to moderate banks’ risk taking, including quantitative restrictions on aggregate lending or limitations on lending criteria such as loan to value or loan to income ratios. Other measures include capital adequacy guidelines and liquidity limits. A central instrument of prudential regulation consists in capital adequacy rules, minimum capital requirements, ownership and controls, restrictions on activities and licensing regulation.

Equity capital provides the necessary cushion against losses, since shareholders may want to benefit from the leverage effect and to increase their return on equity by providing as little capital as necessary. Leaving aside any potential systemic dimension, Llewellyn (1999) summaries the need for prudential regulation of financial institutions when: the institution performs a fiduciary role; consumers are unable to judge the safety and soundness of institutions at the time purchases or contracts are made; post contract behavior of the institution determines the value of contracts; when the institution may become more risky because of a change in its behavior after a long term contract has been taken out by customers; and there is a potential claim on an insurance fund or compensation scheme because the costs of hazardous behavior of an individual financial institution can be passed on to others.
In some developing countries, prudential regulation is needed as a mechanism to mitigate the effects on financial sector underdevelopment or constraints due to a low degree of monetization, smallness of market, political interference, poor accounting systems and lack of highly qualified staff. While in developed economies, prudential regulations have become reactive and less adaptable to changes in the banking sector. Irrespective of the quality of the prudential regulatory environment (Brownbridge & Kirkpatrick, 1999), the adoption of universal licensing regime changes the existing regulatory design (Tharkor, 1996) thereby creating further endogenous risk factors that have contributed to the present need for micro-prudential and macro-prudential regulations in recent times.

The conduct of business regulation aims to establish the rules of good practice and business management of banks in relation to their customers. This form of regulation examines how firms operate in financial markets. Research by Nier (2009, wp/09/07) suggests that conduct of business regulation is necessary to regulate trading activity and products offered in the financial markets. From the point of view of investor protection more broadly, it is required to regulate activities in both retail and wholesale markets, e.g. to encourage disclosure of information in securities’ prospectuses and discourage insider trading and to establish standards for disclosure of information pertaining to financial products and standards for sales practices in general, or constrain the permissible investments undertaken by investment funds. It is generally applied to enable detection of fraudulent activity that may come to generate losses for consumers in the retail markets or investors in wholesale markets. Cranston (2002) extends the scope of prudential regulation by distinguishing between preventive and protective regulation.

Protective regulation involves those techniques which are designed to forestall crises by reducing the risks facing banks. These include vetting the controllers and monitoring the management of banks, capital, solvency and liquidity standards, and large exposure limits. Preventive regulation in the form of the lender of last resort and deposit insurance schemes are used to prevent systemic risk (Heremans, 1999). Cranston (2002) further argues that preventive and protective techniques clearly overlap where moral issues show up in the form of banks taking higher risks resulting to stronger demand for protec-
tive techniques. Protective interventions are in the form of lender of last resort and deposit insurance provision. Preventive regulation is the form of structural (i.e. restriction on entry and on business activities) and prudential (i.e. capital adequacy standards, inspection and examination; asset restriction and diversification rules) measures. (Hermans, 1999). Financial regulation can also be approached from either a proactive or reactive perspective. Proactive regulation takes its roots either from accommodative and regulatory forbearance policy or from compliance or rule based intrusive regulation and supervision. Under a regulatory forbearance regime, the regulatory attitude is taken for granted by banks and financial institutions.

This contrasts with the compliance and rule based intrusive regulation (Dermine, 2013) and supervision which is an extreme version of regulation and experience shows that they do not seem to produce desired results. This is because financial markets are always changing, there is global competition, prescriptive standards have not been able to prevent misconduct and more importantly there is lack of commitment by senior management to prescriptive regimes. A principle-based, risk-focused regulatory regime aims to deliver and provide a broad framework within which financial institutions can operate and plan operations, rather than focusing the presented processes to be completed by them. The approach relies largely on the regulator being clear about regulatory outcomes it wants and the marshaling the supervisory and enforcement efforts to ensure that these outcomes are achieved. If effectively implemented, it is expected to enhance access to finance, reduce transaction costs, provide efficient financial services and lead to the adoption of good corporate governance practice.

2.6.3 Central Banking Tools of Regulation and Controls

In this section, we examine different tools of regulation applied in financial markets, and these instruments of regulation include restrictions, such as entry and exit policy, capital requirements, regulatory monitoring and safety net activities (Bangor University, Chartered Banker on Financial crises and Regulation, 2013; Dewatripont & Tirole, 1999). First, licensing regulation is one of the tools used by regulators to restrict entry into banking market. Regulators in most countries do not allow just anyone to enter the banking system, but rather screen entrants to better assure they are “fit and proper.”
Yet, opponents to the implementation of such conditions argue that they mainly result in greater barriers to entry which hinders competition and innovation in the banking sector. Demirguc-Kunt et al., (2003) and more recently Ben Naceur et al., (2011) found that lower barriers to entry into banking markets are associated with reduced cost of intermediation. Another study by Barth et al., (2004), showed that restricting entry into the banking market reduces performance as measured by overhead costs. The authors also found that limiting foreign banks’ entries is negatively related to banking sector development and increases the likelihood of the occurrence of a banking crisis. Conversely, Pasiouras et al., (2007) found that requirements on entry to banking have no impact on bank efficiency.

Second, capital regulation is a center piece of government intervention in banking because it affects the degree of risk taking by bank owners and acts as a buffer to absorb unexpected losses. Minimum capital is required by bank regulators in many countries to protect their financial institutions against the cost of financial distress, it aims to enhance the stability of the financial system by providing a cushion against unexpected losses when banks enter into risky positions so that bank failures can be avoided. Bank capital refers to the part of bank financing that comes from shareholder funds, subordinated debt, certain types of reserves, and hybrid debt over equity instruments (Banking Supervision and Regulation report 2009, HL. 101). The first internationally agreed standards for bank capital regulation was established in 1988 by the Basel Committee of the Bank International Settlement. Under the Basel 1 Accord, bank assets were assigned a risk-weighting and banks were required to hold capital equal to at least 8% of their risk weighted assets. Capital regulation is a useful scheme in terms of reducing the risk shifting incentives of banks. Since the degree or risk distortion is larger with greater leverage (lower bank capital), regulatory measures designed to move a bank, which is critically undercapitalized, to a higher level of capitalization will reduce incentives for excessive risk-taking.

Third, as lender of last resort, central banks sustain financial system stability by being ready to lend to banks and other financial institutions in the event of a financial panic in the system. For the banks, the most important component of the safety net is the lender
of last resort. The risk of contagion effect is a concern of the regulator because market mechanisms cannot insure against liquidity shocks due to market failures. Bagehot (1873), as noted by Freixas and Rochet (1999), was the first to state that the central bank can prevent the risk of contagion by implementing the policy of a lender of last resort. Under the LOLR function, the role of the central bank is to make sure that solvent banks can meet their depositors’ withdrawal demands. In doing so, the central banks lend the needed funds to solvent but illiquid banks against good collateral at a penal rate of interest. Such a mechanism was developed in the UK and Europe in the 19th century as a response to banking failures (Bankers Magazine, 1866, cited Wood, 1999).

Fourth, since the onset of the global financial crisis in August 2007, central banks from developed economies such as the USA, EU and UK have provided systemic liquidity in interbank and other wholesale markets. The role of the central banks as providers of market liquidity during times when financial markets have become disorderly and illiquid, has been referred to as that of the market maker of last resort (MMLR) (IMF, 2009, wp/09/70). Central banks have amended their monetary operations to relieve liquidity stress. They have, for example, reduced the penalties associated with banks missing their reserves targets and reduced the discount rate at which banks could access standing facilities. When banks became reluctant to lend to each other, central banks increasingly interposed themselves between banks that were short of liquidity and those that were long. Buiter (2008) compares the effectiveness of these policies during the crisis across a number of central banks, including the European Currency Board, the Bank of England, and the US Federal Reserve Bank.

However, the phenomenon of central banks providing systemic liquidity to the banking system and wider financial markets in crisis times is not new. The Bank of Japan took similar action during the early 1990s, when the collapse of asset prices put bank balance sheets under stress. Central banks throughout Latin America have provided systemic liquidity in response to a number of banking crises in the region since the mid-1990s (Jacome, 2008). Provision of systemic liquidity in interbank markets against credit-risky collateral can, in the longer run, put central banks’ balance sheets at risk. It can complicate the implementation of monetary policy, as the central banks need to sterilize
ever larger amounts of liquidity and communicate the distinction between its monetary policy stance and the objectives of liquidity provision (Nier, 2009). In emerging economies, systemic liquidity provision can lead to a sharp depreciation of the exchange rate and in the longer run, increase inflation (Jacome, 2008).

Fifth, for depositors, the most important component of the government safety net is deposit insurance. This is a government backed guarantee in which depositors are paid off, in full or in part, on their deposits no matter what happens to the bank. Deposit insurance can be explicit in the sense of a contractual obligation of the government of deposit insurance agency, or implicit in the sense that political incentives make tax payer bailouts of insolvent banks inevitable. According to Bangor University Business School (financial crises and banking regulation (2011/02) explicit deposit insurance existed in only 20 countries in 1980 but in 87 countries by the end 2003. The IMF working paper (2014, Wp.14/118) put the explicit deposit insurance schemes in 189 countries and 5 countries with implicit schemes around the world at the end 2013.

However, deposit insurance can also create problems for regulators. These include: (i) moral hazard, which arises because insurance can change the behavior of banks and depositors. Beck et al., (2011) argue that deposit insurance schemes are likely to reduce the incentive for depositors and creditors to perform effective monitoring and to institutionalize the liability of the government. This would cause banks to take excessive risk that could hinder banking sector performance and stability. Barth et al., (2004) show that a generous deposit insurance scheme increases the likelihood of occurrence of a major banking crisis. Similarly, Barth et al., (2010) found that deposit insurance schemes have a negative effect on banks’ efficiency. However, Klomp et al., (2011) found that deposit insurance schemes do not have any significant impact on banks’ risk.

2.7 Corporate Governance of the Ghanaian Financial Sector

The issues of corporate governance continue to attract considerable national and international attention and have again appeared at the top of the agenda with the current global financial meltdown. Corporate governance is about effective, transparent and accountable governance of affairs of an organization by its management and board. It is
about a decision-making process that holds individuals accountable, encourages stakeholder participation and facilitates the flow of information. The ongoing global financial crisis has further reinforced the message that governance of firms, especially of financial institutions, should always aim at protecting the interests of all stakeholders, which include shareholders, depositors, creditors, regulators and the public. Financial institutions in Ghana are charged with upholding the public trust and protecting deposits. The organizational structure of the Ghanaian financial system can be said to consist of a set of rules, regulations and the aggregation of financial arrangements, institutions and agents that interact with each other and the rest of the world to foster economic growth and development of the nation (Onoh, 2002).

According to FINSSP 11 (2012) the financial system in Ghana is made up of financial institutions, such as universal banks, insurance companies, insurance brokerage firms, specialized banks, capital market, investment fund managers, finance companies, leasing companies, discount houses, micro finance companies, bureau de change, mortgage institutions, rural and community banks and development finance institutions, each covering a particular area of activity or activities (Mordi, 2004). It performs the core function of financial intermediation, adequate payment services as well as the fulcrum for monetary policy implementation. Any disruption in the financial system will undoubtedly have catastrophic effect on the economy (Milton, 2000). For this reason, stakeholders in the financial arena have strong interest in the good governance in the financial institutions. In this vein, parliaments, governments and the private sector are prepared to promote good governance in the financial system (Arun & Turner, 2004).

The unique feature of the Ghanaian banking system within the entire financial sector demands extensive attention on the quality of governance systems in banks. Banks usually account for the lion share of a financial system in most of the economies and this dominance is overwhelming in case of the developing countries such as Ghana which is actually in greater need of a sound financial system. According to IMF country report (2014) and Ghana Statistical Service, 2014), the banking assets constituted about 75% (GHC 51.4 billion) of the total financial assets as at December, 2014. Any turbulence or failures of the banking sector would push Ghana’s economy into serious
problems. The corporate governance of banks in Ghana is important for several reasons. First, banking institutions in Ghana have special significance in the Ghanaian economy and their bad management would have far reaching consequences for the economy as a whole. Banks play a primary role in intermediation of savings investment as well as servicing the economic agents with an efficient payment system mechanism. Failure of banks due to poor governance structures would mean that the impact on the economy would be very damaging and dest Second, banks in Ghana are typically one of the most important sources of finance for the majority of firms. Third, banks in Ghana are the main depository for the economy's savings and provide the means for payment. Given the importance of banks, their governance now assumes a central role in view of the peculiar contractual form of banking, corporate governance mechanisms for banks should encapsulate depositors and shareholders Fourth, good governance complements traditional supervision of banking institutions, protects the interest of depositors and other interests in banks in Ghana, builds and maintains public confidence in the banking sector, ultimately contributes to its integrity and credibility (World Bank, 2016).

Finally, banking institutions in Ghana are uniquely vulnerable to liquidity shocks which can result in institutional, and potentially, financial instability. Sound corporate governance supports prudential supervision and regulation, enhancing the role and the effectiveness of the financial institution supervisor. Banking sector in Ghana is constituted of 28 banks and almost all of them are universal banks (Bank of Ghana Monetary Policy report, 2014). The three largest banks are owned by the state, fifteen are owned by foreign investors and the rest are owned by the private domestic investors. Of them, 7 banks are listed with the Ghana Stock Exchange (GSE) as of December 2014. The total assets of the banking sector stood at GHC 51.44 billion while the banking sector total deposits liabilities was GHC 32.4 billion as at end of December 2014 (Bank of Ghana Financial Stability report, 2014). The total banks’ paid capital also stood at GHC 2.65 billion while the shareholders’ funds stood at GHC 7.57 billion as at the end of December 2014.

The legal and regulatory framework for corporate governance practices in the financial system in Ghana is contained in the Companies Act 1963 Act 179, Securities Industry
Law 1993 (PNDCL, 333) as revised by the Securities Industry (Amendment Act 2000) Act 590, Ghana Stock Exchange Listing rules (2006; L I. 1509), Banking Act 2004 Act 673 as amended Banking Act 2007 Act 738. In the context of this study, the regulatory framework of Ghana’s corporate governance in the financial sector has been divided into six sections namely the responsibilities and accountability of the board of directors; board composition; committees of the boards; relationship to shareholders and stakeholders and the rights of shareholders; financial affairs and auditing; ownership structure and control. Section (i) specifies the principal objective of the board of directors of a corporate entity. The board of directors is to ensure that bank entity is properly managed in order to safeguard and enhance shareholder value. Directors should ensure that good governance is upheld in the bank entity. This section brings out the primary responsibility of the board of directors and they are to ensure good corporate governance is practiced within the banking entity. The principal duties of the board of directors are specifically stated to: (i) provide strategic guidance for the banking entity in keeping its goals, (ii) oversee and supervise the management of the business, (iii) develop succession plan, appoint, train and replace of senior management and (iv) supervise and maintain internal control system within the business.

The Section (i) also brings out how the size of the board should be. It states that, the board’s size of banking entity ought to be arrived at with the belief of promoting the board’s effectiveness as well as ensuring appropriate representational needs. However, no specific number is set with regards to board membership for public listed companies, but it goes on to mention between 8-16 members, but for unlisted banking firms with a minimum of 3 without capping of the maximum directors. On the leadership structure, the section states that there should be separation of the roles of board chairperson and CEO (Mallin, 2007). In addition, specifies, the composition of the board should include a balance of executive directors and non-executive directors with the complement of independent directors such that no individual or small group of individuals can dominate the board’s decision taking (Serebour-Agyeman, Aboagye and Ahali, 2013).

The Section (ii) directs that board to constitute board committees as it may deem appropriate in helping the banks in carrying out its duties. It further stipulates that the con-
stitution of audit and risk committees may include non-executive directors (SEC code, 2003; 2010; BOG draft governance regulation (2013). The Section (iii) stipulates that corporate governance structures employed by the board of directors should not be geared towards stakeholders’ benefit at the expense of shareholders. In addition, this section emphasizes the rights of shareholders. This include: secure methods of ownership registration; conveyance and transfer of shares; participation in voting; electing of board of directors; and sharing in the profits of the corporate business. The Section (iv) deals with financial governance, financial reporting and disclosure of price sensitivity information responsibilities of the board, duties of external auditors; deviations from standards; rotation of audit personnel and removal or resignation of auditor. The Section (v) deals with the presentation of annual audited accounts of banking entity before its shareholders.

The SEC and Bank of Ghana regulatory measures include: proper fit test for appointment of directors, disqualification of directors on the ground of conviction, appointment of qualified and experience directors, without capping of the number of directors, eligibility of close relatives of the directors for the position in bank board, limitation of the director’s loans to 2% of paid up value of the shares held by the directors, and criminalizing insider trading. These regulatory responses may lead, it is expected, to better disclosure of financial information, uplifting standard of banking activities. Recently, the financial markets of developing economies like Ghana have experienced rapid changes due to the growth of wider range of financial products. As a result of this, banks have been involved with high risk activities such as trading in financial markets and different off-balance sheet activities more than ever before (Greuning and Bratanovic, 2003), which necessitates an added emphasis on good governance of banks in Ghana.

Given that Ghanaian banking sector is relatively less efficient and less experienced for asset and liability management, good governance is even more required to establish a sound banking system. The Ghanaian banking context has unique characteristics which include (i) greater foreign institutional ownership, (ii) high block ownership including both government and private individuals (iii) weaker shareholder activism, and (iv) poor record of implementing and enforcing both the banking and corporate laws. Bank
board has less independence due to dominance of government and family-appointed directors who set the addendum of the board meeting to implement their own agenda. The management and the board are intertwined which reduces the opportunity to prevent insider trading; the independent or non-executive directors who have social or family connections and political connections with controlling shareholder group fails to provide independent judgment and minority shareholders’ rights are largely ignored (Berglot & Claessen, 2004).

The existence of conflict between director ownership dominated board members and minority shareholders has been a regular feature in the Ghanaian private sector banks like other developing countries (World Bank ROSC, 2005; 2010). Given the existence of political appointees, director ownership dominated board and the dominance of majority shareholders over minority shareholders, the implementation good governance practices in Ghanaian banking sector may experience serious setbacks which may not yield expected results. Banking sector in Ghana has been featured by myriad of decreasing profitability, increasing non-performing loans, increased loan loss provisions, eroded credit discipline, low loan recovery rate, inferior asset quality, excessive interference from the government and owners of the private domestic banks, regulatory arbitrage, weak regulatory and supervisory role, and high cost to income ratios (IMF Country Assessment reports, 2010; 2011; 2012; 2013). Internal control systems, risk management practices along with accounting and audit qualities are believed to have been substandard (World Bank ROSC, 2005; 2010). These reports by the IMF and World Bank have all raised serious concerns and criticized the quality of governance in the banking sector.

2.8 The Supervisory and Regulatory Authorities in the Ghanaian Financial System

This section describes the Ghanaian external corporate governance environment. Specifically, it describes the main stakeholders charged with the responsibility of formulating and implementing policies, as well as supervising and regulating the external govern-
ance environment. It also point out some challenges that the system faces. Figure 1 below depicts the whole functional regulatory structure in Ghana. Generally, it shows four major parts. Firstly, it shows that the regulation of universal banks, rural and community banks, savings and loans companies and non-bank financial institutions. Secondly, it depicts the regulation of the market in which instruments are traded and market participants (securities). Thirdly, it shows the regulation of the market participants in insurance business. Finally, it shows the regulation of market participation of pension funds.

Figure 1 also shows that the Ministry of Finance and Economic Planning of Ghana remains at the apex board regulatory structure. It oversees the statutory regulation of all financial intermediaries in Ghana. The Sector Ministry has the overall responsibility to develop, implement and supervise the financial governance structure in Ghana (FINSSP, 11, 2012). It carries out its functions through four major statutory bodies, the Bank of Ghana, the Securities and Exchange Commission, the National Insurance Authority and the National Pensions Regulatory Authority. Bank of Ghana is the apex supervisory financial institutions in Ghana which is empowered by the Bank of Ghana Act 2002 Act 612 to promote monetary stability and a sound and healthy financial system in Ghana. This regulatory institution is saddled with following responsibilities: (i) the issuing of legal tender currency in Ghana, (ii) the maintenance of external reserves to safeguard the international value of the Ghanaian domestic currency, (iii) the promotion of monetary stability and sound banking system; and (iv) to act as a banker and financial adviser to the government of Ghana.

The Securities and Exchange Commission is responsible for the supervision and issuance of licenses for the operation of the securities market such as stocks, bonds, brokerage, investments and mutual funds. SEC is to ensure that Ghanaian investors are protected from fraudulent market operators and corporate insiders offering shares for subscription or for sale. The National Insurance Authority has been mandated to perform a wide spectrum of functions including licensing of entities, setting standards and facilitating the setting of codes for practitioners. The Authority has been also mandated to approve rates of insurance premiums and commissions, provide a bureau for the resolution of complaints and arbitrate insurance claims when disputes arise (National
Insurance Authority, annual report, 2013). The insurance industry is another growing sub-sector of the Ghanaian financial sector with only 4% of the total financial assets (IMF, 2014) National Pensions Regulatory Authority has supervisory powers over the pensions companies. The NPRA regulates the three tier pension systems in Ghana. The three tier system as follows: (i) Tier 1 mandatory defined benefit public social security scheme administered by SSNIT, (ii) Tier 2 mandatory defined contribution and privately managed occupational pension scheme, and (iii) Tier 3 voluntary occupational and personal private pension scheme (FINSSP, 11, 2012). The current financial regulatory structure is too fragmented and does not make for effective coordination and management of systemic risk. The existing regulatory structure fails to recognize the reality of the convergence of financial services reflected in universal banking, bancaassurance, etc with financial institutions offering products that cut across the traditional sub-sectors for regulation (FINSSP, 11, 2012).

2.8.1 Some of the challenges facing the existing Ghanaian Financial Regulatory Structure

The Ghanaian financial regulatory structure faces a number of challenges (e.g. IMF, 2011/11/131; IMF 2012, 2014/14/129). First, the traditional borders between the banking, securities, pensions and insurance sectors of the Ghanaian financial market in the post sector reform period had become blurred, as demonstrated by the emergence of hybrid financial products, the increased use of risk transfer instruments and distribution agreements between the four sectors, and the growing role of financial conglomerates. In this context, the issue arises as to whether a structure based on specialist agencies supervising different parts of the business of financial conglomerate may lose sight of the institution as a whole (Lleweylln, 2006). According to IMF country report (2011/11/131), the exact scope of financial conglomerates in Ghana’s financial sector is not fully known. However, the IMF reported that at least nine banks which accounted for 55% of the banking system, have subsidiary securities firms and in some selected cases industrial and insurance companies. Since the banks are not yet supervised on a consolidated basis and there is no mapping of shareholders and common directors, it is possible that affiliate companies exist, thus allowing for related party lending to occur.
unnoticed. These growing inter-linkages increase the potential for risks to have a system wide impact.

Second, in Ghana, the structure of regulatory agencies was devised from a different structure of the financial system than exists now. The universal banking concept in 2003, financial innovations and structural changes in the financial system over the last decade have challenged many of the assumptions made in the time current regulatory structure was created. This raises the issue of whether functional regulatory structure should mirror the evolution of the structure of the system and the business of regulated firms (Llewellyn, 2006). Third, according to the IMF (2011/11/13; 2012/12/149; IMF, 2014, 14/129), Ghana’s financial system is dominated by foreign owned bank, of the 28 universal banks operating in Ghana. 15 are subsidiaries of foreign banks and their market share is estimated at 55% of bank assets. The growing internationalization and regionalization of the Ghanaian financial markets had provided the markets with cross border contagion issues, cross border supervision and consolidated supervision problems, pricing efficiency and risk dispersion, and encouraged product innovation and complexities (Llewellyn, 2006). The Bank of Ghana does not have regulatory capacity and resources to undertake consolidated supervision despite the predominance of foreign owned banks and the growing importance of financial conglomerates (IMF, 2012; 2013). Fourth, regulatory arbitrage has been a major challenge to the current regulatory structure. A potential danger resulting from a multiplicity of agencies is that overall effectiveness is impaired as financial firms engage in various forms of regulatory and supervisory arbitrage. The problem has been put by Adams and Taylor (2000) in the following way: regulatory arbitrage “can involve the placement of a particular financial service product in that part of a given financial conglomerate where supervisory costs are the lowest or where supervisory oversight is least intrusive. This may lead firms to “design new financial institutions or redesign existing ones strictly to minimize or avoid supervisory oversight” (Adams and Taylor, 2002). This can also induce “competition in laxity” as different agencies compete in order to avoid a migration of institutions to competing agencies.
In Ghana, for instance, a case of regulatory arbitrage accrued in 2004, when Securities Discount Company Investment and Loan (SDCIL) a subsidiary of Securities Discount Company regulated and supervised by Securities and Exchange Commission, which the holding company Securities Discount House Company was regulated and supervised by the Bank of Ghana. As a result of the liquidation of SDCIL for non-payment of loans, this led to the collapse of the holding company Securities Discount House Ltd. This transaction provided a space for regulatory arbitrage because looser regulations in the financial sector (Bank of Ghana Report, 2006).

Fifth, the proliferation of local institutions and subsidiaries of foreign institutions after the deregulation of the financial sector posed considerable regulation and supervisory challenges for the Ghanaian regulators, since most of these regulators lacked managerial capacity, and cross border regulatory experience. Finally, the current regulatory structure also faces the challenges of keeping up with and adapting to the impact of domestic competition and global competition pressures (Bamber et al, 2001, Rossouw et al., 2002). These include changes in international financial regulations and standards (e.g. IFRS and Basel II & III)
2.9 The Structure and Role of the Bank of Ghana

The Ghanaian government wholly owns the Bank of Ghana. The Bank of Ghana is the apex regulatory body for banks and non-banking financial institutions operating in Ghana by the virtue of Bank of Ghana Act 2002 Act 612, and Banking Act 2004 Act 673 as amended by Banking Act 2007 Act 738. Under the Bank of Ghana Act 2002 Act 612 oversight responsibility has been entrusted to one governor and two deputy governors and nine independent directors appointed by the Government of Ghana with backgrounds in economics, accounting, banking, legal and risk. The Governor is the chairman of the board of directors as well as the chief executive officer. The two Deputy Governors support the Governor in the running the affairs of the central bank. As depicted in Figure 2 the first (1st) Deputy Governor has responsibility for banking operations, the center for training and professional development, currency, risk management and information technology, while the second (2nd) Deputy Governor oversight for bank supervision, other financial institutions regulations, legal and administration, financial stability and research departments.

A central bank, reserve bank, or monetary authority is a public institution that usually issues currency, regulates money supply, controls interest rates and also supervises the banking sector (Solomon, 2013). Central banks exist in most countries for the purpose of acting as bankers to other banks thereby ensuring a smooth operation of the banking system. They also act as bankers to the governments. In this function, the central banks control money supply, funding of government’s business and implementation of monetary policy of the government (Begg et al., 1991). The Central banks possess a monopoly on issuance of the national currency which usually serves as the nation’s legal tender (Arthur & Sullivan, 2003). Example includes the Bank of England, the Bank of Japan, the Federal Reserve of the U.S.A, the Central Bank of Nigeria and the Bank of Ghana. Central Banks around the world play other functions which include: implementing monetary policies, determining interest rates and managing the money supply. According to the IMF (2009, WP 09/07) the role of central banks in financial stability include, determining interest rates; provision of systemic liquidity, lender of last resort, oversight of payment and settlement system, regulating and supervising the banking
industry, managing country foreign exchange reserves including gold reserves, and also issuance and coordinating government debts.

The Bank of Ghana is pivotal in the management of the Ghanaian economy. Its role is not only to regulate and monitor the financial system, but also to ensure its development, prevent financial distress which could undermine confidence in the system as well as facilitate sustained growth. The pervasive role of the Bank of Ghana is also appreciated in the light of its continuous monitoring of the domestic and international economies. Its knowledge of the economic environment is the major source of information for economic planning. Bank of Ghana possesses a monopoly in the printing of national currency (Cedi), which serves as the nation’s legal tender. The Bank of Ghana is also responsible for the stability of the monetary system through its monetary policy function, for the oversight of financial system infrastructure, that is systemically important to the country, in particular payment systems, and for “maintaining a broad overview of the system as a whole”.

In addition, the Bank of Ghana also has statutory responsibility for the payment and settlement systems in Ghana. This responsibility is enshrined in the Bank of Ghana, Act (2002) Act 612 which empowers the Bank of Ghana to “promote, regulate, and supervise payment and settlement systems”. Specifically, the Payment System Act 2003 Act 662 also authorizes the Bank of Ghana to establish, operate, promote, designate and supervise payments, funds transfer, clearing and settlement system in the interest of the public (Bank of Ghana, 2013). Bank of Ghana also performs a variety of other functions, such as managing the supply of currency, managing the payments system, acting as the government’s fiscal agent, advising government on the exchange rate or public debt, supervising and regulating the domestic banking system, and stabilizing the banking system by acting as lender of last resort. The Bank of Ghana also play an international role, by cooperating with other central banks through international organizations such as the International Monetary Fund, World Bank and Bank for International Settlement (BIS) and take part in international forums such as IMF annual meetings.
FIGURE 2 THE STRUCTURE OF BANK OF GHANA

Source: Bank of Ghana Website (2012)
2.9.1 Dimensions of Bank of Ghana’s independence

The Bank of Ghana’s independence has various dimensions, namely institutional independence, functional independence, personnel independence and operational independence. First, institutional independence is also referred to as goal autonomy which can be defined as the ability of a central bank to remove political influence in defining its policy objectives (Walsh 2005). Under the goal independence, the Bank of Ghana has the right to set its own policy goals, whether inflation targeting, control of money supply, or maintaining a managed floating exchange rate. Under this type of independence, the Bank of Ghana announces their policy goals in partnership with the Ministry of Finance and Economic Planning. This increases the transparency of the policy setting process and thereby increases the credibility of the goals chosen by providing assurance that they will not be changed without notice. In addition, the setting of common goals by the Bank of Ghana and Ministry of Finance and Economic Planning helps to avoid situations where monetary and fiscal policy are in conflict; a policy combination that is clearly sub-optimal.

Second, functional independence is also referred to as instrument independence which can be defined as the ability of the central bank to freely implement policy in pursuit of monetary goals (Walsh, 2005). Instrument independence refers to the ability of central bank to use full range of monetary policy instruments without restrictions from the executive and legislature. The Bank of Ghana Act 2002 Act 612 has given Bank of Ghana the independence to determine the best way of achieving policy goals, including the types of instruments used and the timing of their use. For example, Bank of Ghana’s instruments commonly used for open market operation include government treasury bills, Bank of Ghana treasury bills, and prime commercial papers (Bawumia, 2010). The setting of monetary instruments values (like the level of the repurchase agreement rate; policy rates and discount rate) are entirely up to the Bank of Ghana. However, the Bank of Ghana Act 2002 Act 612 further goes to provide for Minister of Finance and Economic Planning powers that may influence the manner in which the central bank carries its mandate. This essentially means that instrument independence is granted to the Bank of Ghana by the Act 612 but this independence is limited by the powers granted to the
Finance Minister. The Ministerial powers appear to be in conflict with the provisions of the Act on independence and in my view there is a need to reform the Ghanaian legislation on central banking to make the Bank of Ghana truly independent.

Third, turning to personnel independence, the Bank of Ghana Act 2002 Act 612 provides for a minimum term of office of four years for both the Governor and two deputy Governors and this protect them against arbitrary dismissals. Personnel independence of the central bank refers to the influence the government has in appointment procedures. It is not feasible to exclude government influence completely in appointments to a public institution in the developing country such as the central bank, however, the level of influence may be determined by criteria such as government representation in the board of the central bank and government influence in the appointment procedures, terms of office and dismissal of the governing board of the bank (Eijffinger & De Haan, 1996). Under this type of independence the central bank also has the authority to run its own operations (appointing staff, setting budgets, and so on.) without excessive involvement of the government. The Bank of Ghana Act 2002 Act 612 provides for the appointment of Governor as the Chief Executive Officer of the Bank of Ghana and two Deputy Governors. The Governor and two deputies are to be appointed by the President of Ghana through a transparent and competitive process and with the approval of the Council of State to hold office for a term of 4 years and eligible for another term of four years. This guarantees the tenure of office of the governor and two deputies. The President of Ghana also in conjunction with the Council of State under the Bank of Ghana Act 2002 Act 612 also appoints nine independent directors with varied experience in finance, economics and law to the board for a term of four years.

Finally, operational independence is an essential prerequisite for an effective regulatory regime and for maintaining a fair and equitable financial system. Regulator must therefore operate independently, without fear, favour or prejudice. Operational independence relates to the central bank’s freedom to pronounce ruling on the basis of the laws passed by legislature. Under the Bank of Ghana Act 2002 Act 612, the Bank of Ghana’s operational independence includes the freedom to approve, disapprove and revoke licenses, decide to conduct on and off-site examination, as well as take enforcement ac-
tion against a person or entity based upon evidence of violation of a law or regulation. The two dimensions of central bank operational independence: - independence from political interference and freedom regulatory capture- are equally important and call for a balanced approach to regulation that will not promote one at the expense of the other. However, recent IMF country reports (2011,11/131; 2012, 2013), noted that regulatory gaps such as the disorderly existence of banks, regulatory forbearances and low compliance with the Basle Core principles have undermined the Bank of Ghana’s operational independence.

2.9.2 Bank of Ghana’s Monetary and Regulatory Tools

Bank of Ghana exists in Ghana for the purpose of acting as banker to other banks thereby ensuring a smooth operation of the Ghanaian banking system. It also acts as a banker to the government. In this function, the Bank of Ghana controls money supply, funding of the government’s business and implementation of monetary policy of the government. The Bank of Ghana is the authority with the mandate of manipulating monetary policy; through monetary policy tools, to achieve desired macroeconomic objectives which include; the achievement of price stability with respect to both domestic and external prices. Prior to the financial sector reform in 1988, the Bank of Ghana operated a system of managing the amount of money in the economy by using direct controls and a fixed exchange rate system (Alexander et al., 1995; Roe and Sowa, 1997)

Direct instruments function according to regulations (granted to the central bank) that directly affect either the interest rate or the volume of credit, for example, administratively set interest rate ceilings, individual bank credit ceilings and direct lending. Direct instruments became increasingly ineffective as money and financial markets developed: besides, they created distortions, including financial repression, and promoted financial disintermediation, and fiscal dominance. As part of a broader set of financial reforms in early 1990s, the Bank of Ghana had used indirect monetary instruments like reserve requirements, open market operations, repurchase agreements (Repos) and rediscount facilities to control the money supply. These monetary instruments are used to impact base money (an operating target) which in turn impacts broad money (the intermediate target) and finally prices.
First, the Bank of Ghana controls the money supply directly by adjusting the level of reserves which universal banks are required to hold against their liabilities (the "reserve requirement"). The central bank uses this reserve ratio which it fixes, to increase or decrease the volume of money in circulation in the country. If the Bank of Ghana wants to increase the amount of money supplied to the public especially in a period of deflation and thereby expand credits, it will lower the reserve ratio of the commercial banks. On the other hand, if the Bank of Ghana wants to decrease the amount of money supplied especially in a period of inflation and thereby contract credit, it will raise the cash ratio of the commercial banks. Therefore, the higher the reserve ratio, the lesser the power of commercial banks to grant credit, hence; limiting wealth creation and vice versa. The Bank of Ghana’s level of minimum reserve ratio itself had fluctuated over the years, reflecting liquidity conditions in the banking system, reaching its highest level of 27% in 1990 but progressively lowered until it reached its lowest point of 5% in 1993 (Yahya, 2001). The minimum reserve requirement ratio has hovered between 8% and 10% over the period 1996-2011. In July 2013, in response to rising inflation and sharp depreciation of the local currency (Cedi) was raised to 11% but in 2014 was reduced to 10% (Bank of Ghana Monetary Policy Committee, 2014).

Second, open market operation is one of the monetary tools used by the Bank of Ghana to regulate money in circulation. The OMO entails the sale or purchase of eligible bills or government securities in the open market by the Bank of Ghana for the purpose of influencing deposits, banks’ reserve balances, the level of base money and consequently the overall level of monetary and financial conditions (Bawumia, 2010). Like the Federal Reserve Bank of New York and Central Bank of Nigeria, OMO enables the central bank to influence short term rates and reach other monetary targets of either reducing money in circulation or otherwise and create seasonal or cyclical shift of funds between sectors (Fedpoints, 2001). The Bank of Ghana sells out securities to its primary dealers through their clearing banks and the accounts of the dealers are debited upon the delivery of the security (contraction of monetary policy). This reduces reserves from the banks and reduces liquidity in the hands of purchasers. On the contrary, where the Bank of Ghana is bent on increasing bank reserves and liquidity in the hands of the purchasers, it buys securities from the primary dealers and credits their accounts of
their clearing banks (expansionary monetary policy). Selling securities reduces the amount of money in circulation while buying securities increases it. This activity also changes interest rates.

Third, in 1998, as part of financial sector reforms, Bank of Ghana introduced repurchase agreements (Repos) instrument, which has since become the principal instrument for the provision of central bank funds. As part of these transactions, Bank of Ghana purchases government securities from the universal banks on condition that the sellers simultaneously repurchase the securities forward. The tenor of the repurchase agreements is usually ranges from overnight to 14 days. According to Bawumia (2010, p. 58), repurchase agreements have proved to be flexible cash management tool by the Bank of Ghana to manage the reserves and excess cash position of the universal banks.

Fourth, Bank of Ghana in their capacity as Lender of Last resort (LOLR) has traditionally extended credit to banks that see an outflow of liquidity and are unable to finance these interbank money markets. In almost all countries, bank regulation involves the provision of a government safety net for banks and their deposits. For the Ghanaian banks the most important component of the safety net is the lender of last resort (LOLR) of the central bank. Under the LOLR function, the role of the Bank of Ghana is to make sure that solvent banks can meet their depositors’ withdrawal demands. In doing this, the Bank of Ghana lends the needed funds to solvent but illiquid banks against good collateral at a penal rate of interest. The Bank of Ghana’s lender of last resort component promotes market discipline to the extent that the central bank provides unsubsidized support to illiquid but solvent Ghanaian banks (Cocris and Ungureanu, 2007). According to Healy (2001), the involvement of central banks in their lender of last resort role and monetary objectives has led them to be intrinsically interested in the stability and general health of the financial system.

Fifth, the Bank of Ghana’s licensing regulation is one of the tools used to restrict entry into the banking market and also to ensure that only sound and healthy banks with “supervisable” structures or strong home supervisors enter into the market (IMF, 2013).
Banking licensing is a cornerstone of bank regulation in Ghana because it is supposed to prevent weak banks from entering the banking market whether established locally or foreign banks seeking to establish a presence as a subsidiary or branch. Bank chartering is also adopted primarily to prevent “over-banking” and to keep dishonest or inexperienced people from operating banks, either of which would lead to bank failure and possible depositor losses and hence endanger public confidence in the entire banking system. The threshold condition for a new license acquisition and authorization requires that the Bank of Ghana is satisfied that the directors, controllers and managers of the proposed bank are fit and proper persons. The Bank of Ghana’s assessment criteria for licensing are in line with the requirements of the Banking Act 2004 Act 673 and also consistent with Principles 3 of the BIS Core Principles for Effective Banking Supervision (2006; 2012).

Sixth, Opoku-Agyeman (2015) asserts that capital regulation is a center piece of government intervention in banking because it affects the degree of risk-taking by bank owners and acts as a buffer to absorb unexpected losses. Ghana has a long history of increases in the minimum capital requirements, since the first banking ordinance was enacted in 1948 (Bawumia, 2010). In 2008, the minimum stated capital for universal banks was increased to GHC 60 million (US $ 16 million). Foreign banks were required up to 2009 to meet the requirement while domestic banks were given up to 2012 (Bank of Ghana quarterly report, 2008). Bank capitalization serves as a cushion to increase shares of risky assets since well-capitalized banks need to borrow less to support a given level of assets and face lower costs of funding because of the low prone to bankruptcy risks. High level of capitalizations also sends positive signals about the solvency of the bank solvency lowering the risks of bankruptcy and credit default. In Ghana, there exists no deposit insurance scheme like Nigerian Deposit Insurance Corporation and US Federal Deposit Insurance (Opoku-Agyeman, 2015). As a result, the level of bank capitalization should be able to send strong signals to depositors about the banks’ solvency and guarantee the safety of deposits.
Lastly, the Bank of Ghana’s supervisory role is to help in the prevention of Ghanaian banks from engaging in excessive risk taking behavior and thus improve bank development, performance and stability (Barth et al., 2004). Bank supervision entails not only enforcement of rule and regulation, but also judgment concerning the soundness of bank assets, its capital adequacy and management. The Bank of Ghana is responsible for the supervision and regulation of the banking sector and fulfills this through on-site and off-site monitoring, which includes data collection, placement of corrective actions and the imposition of sanctions and penalties. The prudential supervision activities of the Bank of Ghana include, the on-going monitoring of the health of an institution and banking system, especially capital adequacy, asset quality, liquidity, earnings, management, internal control systems: the sanctioning or imposition of penalties in cases of non-compliance; and crisis management, including insolvency procedures. The Banking supervision department (BSD) of the Bank of Ghana performs comprehensive inspections yearly or half yearly on the banks’ operating in Ghana by assessing their strengths and weaknesses on the basis of CAMELS methodology. CAMELS' has been a tool used by the Bank of Ghana to assess the financial conditions of Ghanaian banks (BSD working manual, 2008).

2.9.3 Critique of the Bank of Ghana’s Monetary Policy and Supervisory tools

The instruments available to the Bank of Ghana to meet its numerous objectives can be classified as ineffective (interest rates and reserve requirements), dependent on external circumstance when they are effective, or when either of the two conditions do not apply, rife with uncertainty about effectiveness. For example, in the face of excessive monetary financing of the fiscal deficits, the Bank of Ghana’s monetary policy tools proved to be ineffective. In the post sector reform period, the financial sector has remained shallow. In Ghana, the two key indicators often used in gauging the extent of a financial system in the economy. According to IMF report (2014); and FINSSP, 2012), the economy pointed to a little deepening of the Ghanaian financial system over the past couple of years. The M2+ % of GDP (the ratio of broad money to GDP) declined from 36.3% in 2006 to 23.8% in 2014, while the ratio of the private credit sector to GDP has averaged 16.5% over the same period, compared to the average figure of 90%
M2+% to GDP and 80% private sector credit % of GDP of Mauritius (various IMF country reports; World Bank Development reports 2006-2014).

These indicators thus reflect the poor contribution of the financial system to the growth of the economy over the period. High budget deficits and persistent inflation have been two of the intractable problems that had confronted and inhibited the growth and development of the Ghanaian economy. These records of inflation episodes have been cited in the works of Cudjoe (2004); Hug (1989) Kwakye (2010); ISSER (2001-2005), as well as the Bank of Ghana Monetary Policy Committee reports, World Bank Development reports (2010-2012) and IMF country reports (2012-2014). However, the main cause of Ghana’s macroeconomic instability could be attributed to the persistent and large government budget deficits that the Government financed through the banking system.

Second, the Bank of Ghana’s ability to implement an effective and independent monetary policy is seriously impaired by the Bank of Ghana Act 2002 act 612, which saddles the central bank with too many objectives that sometimes conflict with each other and currently makes monetary policy a tool for financing the government’s budget deficits. For example, the Bank of Ghana Act 2002 Act 612 allows the government to borrow from the central bank in any year up to 10% of its expected revenue (Bawumia, 2010). Open market operations are potentially the most effective arrow in the Bank of Ghana’s quiver. But the Bank of Ghana is seriously hampered in using OMO’s by its subservient relationship to the Ministry of Finance and Economic Planning, which gets first claim on the auction, proceeds to meet the government’s public sector borrowing requirement with the Bank of Ghana the residual claimant.

Third, reserve requirements are not costless, however, on the contrary, the Bank of Ghana requires that universal banks to hold 10% of their deposits in reserve, as non-interest bearing balances at the Bank of Ghana, imposes a cost on the private sector equal to the amount of forgone interest on these reserves or at least on the fraction of these reserves that banks hold only because of legal requirements and not because of the needs of their customers. The higher the level of reserve requirements, the greater the costs imposed on the private sector; at the same time, however, higher reserve re-
quirements may smooth the implementation of monetary policy and dampen volatility in the reserve market, (Feinman 1993). The government's imposition of higher reserve requirements on the banking sector may also give the government a cheap source for funding for its large budget deficits.

Fourth, licensing regulation by the Bank of Ghana has been subverted by political interference (Lewis & Stern, 1997). For instance, the issuance of universal bank licenses to two former governors of Bank of Ghana who just retired from active service in contravention of the banking law. These findings have highlighted lax regulation and supervision of the banking sector, weaknesses in enforcement and regulatory forbearance. Failures on the part of the Bank of Ghana to impose stricter rules on the fit and proper test, and limit on individual person shareholdings in the domestic private banks have resulted in connected persons and politically exposed persons holding banking licenses. These have reduced the franchise value of holding a banking license and had also reduced incentives on bank owners to facilitate bankruptcy or other serious actions such as serious breaches of banking laws and regulations that could result in the loss of their license (Caprio, 1996; Caprio & Summers, 1993).

Finally, there has been some criticism leveled against CAMELS methodology. There has been a supervisory problem due to a lack of effective information and coordination owing to their structural nature and weak legal backing. Second, CAMELS ratings are basically historical but not a forward looking approach. The Bank of Ghana will have to supplement CAMELS with a more risk-based and forward looking approach that would involve considerable qualitative judgment.

2.10 Conclusion

Corporate governance is the system by which firms are directed and controlled. It deals with the ways which suppliers of finance can ensure that they will get a return on their investment (Cadbury Committee, 1992; Shleifer & Vishny, 1997). Because the literature includes several definitions to clarify the meaning of corporate governance from different perspectives and understandings, this chapter defined corporate governance from two perspectives: shareholders and stakeholders. With a view to the objective of
the thesis to investigate the impact of corporate governance on bank performance, the broader definition is more relevant since it provides direct link between corporate governance and financial performance of banks.

Second, this chapter also reviewed the literature on bank regulation and central banking. The main objective of reviewing the bank regulation and central banking is to protect the consumer and achieve a high degree of economic efficiency in the financial markets. In the discussions, different tools of regulation and controls in the financial markets were examined and these included the licensing regulation, capital requirements, regulatory and supervisory monitoring and government safety nets (Dewatripont & Tirole, 1999). Third, the chapter also explores how corporate governance in the financial sector is required to maintain public trust and confidence in the banking industry; to run an efficient financial system without excessive risk exposures; to establish and an efficient and reliable depository and financing system to fuel the wheels of the Ghanaian economy. Finally, the chapter examined the structure of the supervisory and regulatory authorities in the Ghanaian financial sector. The chapter then discussed the role and structure of Bank of Ghana, its independence and the monetary and regulatory tool used in the banking system.
3.0 Chapter: Theoretical and Empirical Literature Review

3.1. Introduction

This section discusses the relevant extant theories that attempt to link corporate governance structures and bank financial performance. This section further discusses four theories of corporate governance (agency, stewardship, stakeholder and resource dependence theories). Specifically, it seeks to achieve two main overarching goals. Firstly, it attempts to offer a review of existing theoretical literature that tries to link corporate governance structures to firm financial performance. The central aim is to describe the theoretical blocks on which the study is based. The second objective of this chapter is to carry out a comprehensive review of the the empirical literature on corporate governance structures and financial performance. Specifically, it traces the extant corporate governance and financial performance relationship literature to develop hypotheses among the variables examined in this study.

The chapter is organized into (12) twelve sections. Section 3.1 discusses the background to the theoretical and empirical literature review while section 3.2 discusses the relevant extant theories that attempt to link corporate governance and financial performance. Section 3.3 reviews the integration of four governance theories while Section 3.4 discusses the overview of corporate governance theories. Section 3.5 presents an account of a theoretical and empirical literature on board size and financial performance while Section 3.6 reviews the theoretical and empirical literature on board composition and financial performance. Section 3.7 presents an account of a theoretical and empirical literature on board committees and financial performance while Section 3.8 reviews theoretical and empirical literature on bank size and financial performance. Section 3.9 presents an account of theoretical and empirical literature on foreign ownership structure and financial performance while Section 3.10 discusses the overview of the existing literature. Section 3.11 presents the research gaps in the literature while Section 3.12 offers the summary.
3.2 Theoretical Perspectives of Corporate Governance

This section discusses the relevant extant theories that attempt to link corporate governance structures and firm financial performance. Theories underlying corporate governance have drawn from a variety of disciplines such as accounting, economics, finance, law amongst others (Rwegasira, 2000; Mallin, 2007; Solomon, 2007). As a result, prior studies have adopted several theoretical perspectives. Common among them include agency, stewardship, stakeholder and resource dependency theories. These four theories are relevant to this study of the relationship between corporate governance and financial performance of universal banks in Ghana. They are based on the governance structures, and process that affect the performance of banks.

In this study, and in many others that will be reviewed in this chapter, corporate governance is approached from finance perspective, using a quantitative research methodology. In fact, much of prior studies have been carried out based on the four governance theories with the agency theory being adopted as the principal underlying theory. However, given the complex nature of corporate governance, and in line with previous studies by Nicholson and Kiel, 2003; Haniffa and Hudiab, 2006) as well as recent calls for the adoption of multi-theoretical approach to corporate governance research (van-Ess et al., 2009; Filatochev and Boyd, 2009) where applicable, agency theory is complemented with stewardship, stakeholder and resource dependency theories. This gives the study a multi theoretical orientation. In a study to analyze the mainstream academic thoughts on the roles of boards, Hung (1998) indicates that there is no single competent theory or model to explain the role played by boards. Hung (1998) explains that the roles of boards and how they perform is consistent with and at the same time reflects some of the main arguments of four different school of thoughts also referred to as governance theories. These include agency theory, stewardship theory, stakeholder theory and resource dependency theory. This is because of the board involvement in such complex phenomenon that no single theoretical perspective can adequately capture the entire process involved, that is the reason why this study adopts a multi-theoretical approach. The following sections discuss the four theories and explanation on corporate governance mechanisms in terms of each theory. These governance theories are dis-
cussed in under-listed sections in turn and particular emphasis is placed on those theories that are applicable in explaining the governance structures of banks in a complementary rather than contradictory manner. In the next sub sections, the four governance theories (agency, stewardship, stakeholders and resource dependency theories) will be discussed comprehensively.

3.2.1 Agency Theory

This theory has its origin in the principles of the Modern Corporation. It is based on the idea that players in a firm can be categorized into two groups: the principals who are the owners of the firm and the agents who manage the firm (Jensen & Meckling, 1976; Eisenhardt, 1989). The agency theory explains that a principal-agent relationship leads to conflict which can then result in extra costs associated with resolving conflict between principals and agents (Jensen & Meckling, 1976; Eisenhardt, 1989). It has been argued that agency theory has been the most dominant issue in corporate governance and principal-agent theory is generally considered the starting point of this debate. Agency theory hypothesizes that in the modern corporation, in which share ownership is widely held, managerial actions depart from those required to maximize shareholder returns (Mallin, 2007).

The key tenet of the theory is that the manager acts in his personal interest and is self-centered. Jensen and Meckling (1976) espouse that the theory considers that, to solve problems that emerge in the principal-agent relationship, it will be in the right place to design contracts that spell out the specific rights of both the agents and principals. These could be internal rules that determine how relationships, rights and responsibilities, and the means of evaluating and rewarding managers within a firm (Fama & Jensen, 1983). Shleifer & Vishny (1997) postulate that residual rights are however accorded the agent to take discretionary decisions in allocating funds because of the instability of the business environment which means that on-the-spot decisions may be needed because of contingent occurrences. The provision of residual rights is as a result of the fact that writing a perfect contract is an impossible quest. This, however, has proven to be a main source of the problems that emanate between shareholders and agents due to the regular abuse of these rights by the latter (Shleifer & Vishny, 1997).
Agency theory also considers that in a large corporation where ownership is widely dispersed, those shareholders who only hold small shares do not have the luxury of spending resources for monitoring the behaviour of managers (agents). Eisenhardt (1989,) among other authorities have presented different conditions under which agency problems can arise. Eisenhardt posits two main explanations under which agency problems can occur: "(a) the desires or a goal of the principal and agent conflict and (b) it is difficult or expensive for the principal to verify what the agent is actually doing". The postulations of the agency theory therefore directly imply that the board has an ominous task of monitoring the agents who are entrusted with the resources of the owners of a firm in order to ensure the improvement of the firm’s performance. Agency theory supports the delegation and concentration of control in the board of directors and the use of compensation incentives. Fama (1980) indicates that to ensure that principal-agent conflicts are contained in the board of directors and executive compensation schemes are necessary in order to align the interests of both the agent and the principal. To conclude, agency theory recognizes the possibility for the board to exhibit inherent biases. The theory therefore posits that to check these biases, a board should be composed of a majority outside members or preferably independent directors who can most likely be fair in their dealings with principals and agents. The theory also suggests that the position of the chairman of the board should be separated from that of the CEO (Bosch, 1992; Cadbury, 1992; Kiel & Nicholson, 2003; OECD, 2004: BCBS, 2006; Le et al, 2006). From the agency theory perspective, non-executive directors and independent directors contribute to effective corporate governance by exercising control over senior managers’ decision-making, because they are seen as the check and balance mechanism to enhance board’s effectiveness. Furthermore, NEDs are expected to bring independence into the board and add to the diversity of skills and expertise of the directors (Abdullah, 2004)
3.2.2 Stewardship Theory

The stewardship theory of corporate governance holds that, because people can be trusted to act in the public good in general and in the interests of their shareholders in particular, it makes sense to create management and authority structures that, because they provide unified command and facilitate autonomous decision making which enables companies to act quickly and decisively to market opportunities. This approach leads, for instance, to the combination of the roles of CEO and board chairperson and for audit committees to be either non-existent or lightweight. Stewardship theory assumes that managers are honest, and motivated more by intrinsic rewards than extrinsic rewards, and sel motivated to maximize collective interests (Nicholson and Kiel, 2003; Davis-et al., 2003).

Stewardship theory offers an alternative to agency theory by suggesting that when a convergence of values exists between principals and agents or when organizations promote unselfish values, responsible behavior is resolved by internal means (Dicke, 2000). A steward protects and maximizes shareholders’ wealth through firm performance, because, by so doing the stewards utility function are maximized (Davis et al., 1997). Lack of trust referred to by agency theory regarding authority and ethical behavior is what is replaced by this theory which is one of the key distinguishing features of it (Donaldson & Davis, 1991). With stewardship theory, directors and managers are seen as stewards of a firm whose main concern is to maximize the wealth of its shareholders (Davis et al., 1997). Further, the theory postulates that managerial decisions are not solely dependent on financial motives, but that there are other factors such as achievement and recognition, the intrinsic satisfaction of successful performance, and the manager’s respect for authority and the work ethic (McClelland 1961; Argyris, 1964; Herzberg, 1966; Muth & Donaldson, 1998). As a result, proponents of stewardship theory contend that superior corporate performance will be linked to the majority of executive directors as they naturally work to maximize profits for shareholders.

Donaldson (1990) opine that inside directors have a better understanding of the business and are in a much better position to run the firm than people from outside who barely have adequate information and understanding of the business. Similarly, stew-
ardship theory opposes the idea that the CEO position should be separated from that of the chairman of the board and argues consequentially in favour of CEO duality – the argument that the same person holding the position of chairman of the board should also be the chief executive officer (Davis, et al., 1997). Donaldson and Davis (1991) therefore had cause to argue that the with the CEO duality, the performance of the firm stands to improve greatly because there is clear and unified leadership. To conclude, the stewardship theory strongly argues that managers and boards of directors are good stewards of a firm and they should be given utmost trust. The theory argues in favour of CEO duality and that the board of directors of a firm should largely be composed of insiders, or executive directors, so as to harness the superior knowledge and experience of such directors who have a deeper understanding of a firm’s operation. And therefore shareholders should give the managers in particular, the room to operate.

3.2.3 Resource Dependence Theory

Resource dependence theory posits that corporations depend on the environment and other organizations for required resources (Pfeffer and Salanick, 1978). According to this theory, corporate governance is a set of mechanisms that ensure efficient management of the network of interdependencies and access to scarce resources and their management. The resource dependence theory underpins the penchant for outside directors. The resource dependence school of thought spearheaded by writers such as Burt (1983) view outside directors as a critical link to the external environment of the firm. Such board members, according to the theory, may provide access to valued resources and information especially in times of adversity (Daily & Dalton, 1994a; 1994b; Sutton & Callahan, 1987). The resource dependency theory, however considers the board of directors as resources that are used by a firm in order to produce output (Johnson et al., 1996; Hillman et al., 2000). To this extent, various resource dependence theorists have posited that the introduction of a board of directors as an internal corporate governance structure is not only meant to keep oversee managers but also to ensure that firm and critical resources that are needed to maximize financial performance are promptly made available (Pfeffer, 1973).
The resource dependence theory suggests that a firm is an open system which depends on eternal organizations and environmental contingencies in many cases to promote efficiency in the performance of the firm (Pfeffer & Salancik, 1978). One important tenet of resource dependence theory is that organizations attempt to exert control over their environment by co-opting the resources needed to survive (Pfeffer & Salancik, 1978). Boards of directors also function as boundary spanners, thus enhancing the prospects of a firm's business. For example, the outside links and networks that board members exercise may positively benefit the development of a business and its long-term prospects. Pfeffer and Salancik (1978) observe, "When an organization appoints an individual to a board, it expects the individual will come to support the organization, will concern him (or herself) with its problems, will favorably present it to others, and will try to aid it".

The appointment of outside directors, independent directors and board interlocks can be used to manage environment contingency. In an earlier study, Pfeffer (1972) showed that board size and the background of outside directors are important in managing an organization’s needs for capital and the regulatory environment. Muth and Donaldson (1998) argue for the importance of network connections, which, according to resource dependence theory, enhance firm performance. Thus, the resources dependence theory views the board as a resource that cannot only supplant its need for other resources, but also influence the environment in its favour, thus improving firm performance.

3.2.4 Stakeholder Theory

The stakeholder theory adopts a pluralistic approach to organizations. According to Freeman (1984), a stakeholder is “any group or individual who can affect or is affected by the achievement of a corporation’s purpose. Stakeholder theory assumes that corporation is a nexus of both implicit and explicit contract among a broad range of stakeholders. Stakeholders include employees, customers, suppliers, stockholders, banks, environmentalists, the state and other groups who can help or hurt the corporation. In the stakeholder theory, the objectives of a corporation are achieved by balancing the interests of all groups or individuals. By including the participation of stakeholders on boards, corporations are likely to respond to the interests of society as a whole. In the
stakeholder approach, it is expected that compromises and negotiation will occur in a board’s deliberations. According to Wang and Dewhirst (1992), the stakeholder’s approach is best explained by how members of a board think about the interests of corporate constituencies and thus how organizations are actually managed (Wang and Dewhirst 1992).

Related to the above discussion, John and Senbet (1998) provide a comprehensive review of the stakeholder theory of corporation governance which points out the presence of many constituents with competing business interests. This approach attempts to align the interest of managers and all stakeholders. Stakeholder theory, as discussed by John and Senbet (1998), emphasizes the role of non-market mechanisms, citing as an example, the need to determine an optimal size of a board of directors especially in view of the tendency for board size to exhibit a negative correlation with firm performance. In their critique of stakeholder theory, Sundaram and Inkpen (2004a) argue that the objective of shareholder value maximization matters most because it is the only objective that leads the decisions that enhance outcomes for all stakeholders. They argue that identifying a myriad of stakeholders and their core values is an unrealistic task for managers (Sundaram and Inkpen 2004b). Freeman-et-al, (2004) focus on two core questions: ‘what is the purpose of the firm?’ and ‘what responsibility does management have to stakeholders? They posit that both these questions are interrelated and managers must develop relationships, inspire stakeholders, and create communities where everyone strives to give their best to deliver the value the firm promises. Thus, the stakeholder theory is considered to better equip managers to articulate and foster the shared purpose of their firm. Other key issues, such as flow of information from senior management to middle level managers and others, interpersonal relations, the working environment, etc are all enticing issues that should be considered (Jensen 2001).

In conclusion, the theories reviewed in the above theoretical perspectives focus on how corporate governance affect firm performance. Agency theory focuses on conflicting interests between principals and agents, and maximizing shareholder returns. Therefore, agency theory considers outside directors, board leadership structure, and board committees as optimal monitory devices that will maximize the value of firms, while steward
theory views managers as stewards of the corporation and considers that a combined leadership structure (CEO duality) and executive directors are likely to maximize shareholders wealth. On the other hand, stakeholder theory suggests that the composition of the board should consider representatives of all interested parties in order to ensure consensus among stakeholders. The board is a mechanism for addressing conflicts and creating the necessary cohesion. The representation of all stakeholder groups on board is, therefore necessary for effective corporate governance (Donaldson & Preston, 1995) while resource dependence theory places emphasis on outside directors as critical link to the external environments of the firm, and their opportunities to gather information and network in various ways. In the agency theory, corporate governance mechanisms play an important role in ensuring the alignment of the interests of principals (owners) and agents (managers), thus enriching the firm’s capability to maximize shareholder wealth and thereby improve firm performance, while stewardship, stakeholder and resource dependence theories provide different explanation for the mechanisms by which the board of director’s function and how it affects firm performance, and in some aspects there is overlap between these three theories and agency theory.

3.3 Integration of the four theories

Each of the theories reviewed give primacy to a particular view on how boards should deal with board decisions.
Table 3.1. Integration of the four governance theories

<table>
<thead>
<tr>
<th>Theory</th>
<th>Role of board</th>
<th>Implications for board</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agency theory</td>
<td>Managerial role</td>
<td>Outside directors are mechanisms for shareholders to retain ownership and control rights and monitor performance</td>
</tr>
<tr>
<td>Stewardship theory</td>
<td>Managerial empowerment</td>
<td>Board must be controlled by management and managers corporate assets efficiently</td>
</tr>
<tr>
<td>Resource dependency</td>
<td>Co-optation</td>
<td>Board with strong external link is a co-optation mechanism for access to external resources</td>
</tr>
<tr>
<td>Stakeholder theory</td>
<td>Uphold interests of all stakeholders (shareholders, employee, customers, banks, societies government and suppliers)</td>
<td>Maximizing the shareholders returns is not sale objectives interest of all stakeholders should be upheld.</td>
</tr>
</tbody>
</table>

Researcher’s own compilation from Bathula, H. (2008)

The analysis in this section indicates that prior literature on corporate governance use a number of theories. This is because scholars from different disciplines take different perspectives while dealing with the issues of corporate governance. This creates a lack of unifying theory to the study of corporate governance. Trickler (2009) posited that this issue and state that; “corporate governance, as yet, does not have single theory widely accepted theoretical base or a commonly accepted paradigm, that the subject lacks a conceptual framework that adequately reflects the reality of corporate governance. As all the theories discussed suffer from several limitations, none of the governance theories in isolation can provide a complete understanding of corporate governance (Daily et
Among various theories discussed, the agency theory perspective was the most popular and has received maximum attention from researchers and academics (Jensen & Meckling, 1976; Fama & Jensen, 1983) as well as practitioners. Based on the objective of each of these theories, one realizes that they are all relevant as they are geared towards shareholders’ wealth maximization. Agency theory has provided the basis for governance codes, standards and principles developed by international bodies and countries (OCED, 1999, 2004, 2014; BCBS, 2006, 2010, 2015; UK Combined codes, 2006; 2012; 2016; Kings Reports (SA) 2002, 2010; CBN Codes (Nigeria) 2006; 2014). Boards are appointed by shareholders to monitor and control managerial decision making to protect the shareholders’ interest. In particular, the monitoring role is expected to be effectively performed through non-executive directors or independent directors and that the position of board chairman and CEO should be held by different persons (Cadbury, 2002, UK Combined code, 2006; 2012; 2016).

However, stewardship theory suggests otherwise, that executive directors and CEO duality are expected to perform better than the agency theory. Other scholars (Boyd, 1995; Hillman & Dalziel, 2003) have taken a different approach and have not limited themselves to a particular distinctive perspective. Boyd (1995) argues that the seemingly opposing theoretical perspectives of both agency and stewardship theories can be corrected, but under different environmental conditions, by using a resource dependency theory. Hillman & Dalziel (2003) integrated the agency and resource dependency perspectives and argued that each has board capital and it affects both board monitoring (agency perspective) and the provision of resources (resource dependency perspective) and that board incentives moderate these relationships.

Hendry and Kiel (2004) argue that the choice of a particular theoretical perspective depends on ‘situational and contextual factors’ such as board power, environmental uncertainty and information asymmetry. However, given the complex of corporate gov-
ernance, and in line with prior studies (Nicholson & Kiel, 2003; Haniffa & Hudaib, 2006) as well as recent calls for the adoption of multiple theoretical approach to corporate governance research (Van Ess et al., 2009; Filatotchev and Boyd, 2009), where applicable agency theory in complemented with stewardship, resource dependency and stakeholder theories.

3.4 Overview of Corporate Governance Theories

Various corporate governance theories have been analyzed with respect to their advantages and drawbacks, but the phenomenon of boards of directors cannot be explained thoroughly by adopting a single theoretical approach. Table 3.1 provides a comprehensive overview of the corporate governance theories and their key proponents. Theoretical pluralism is recommended for this study as a critical process of corporate governance research. Eisenhardt (1989) argued that apart from agency theory additional perspectives will facilitate the capture of the complexity of the phenomenon. Stewardship theory argues that managers have the same interests as shareholders; whilst resource dependency theory emphasizes on the linkage role of directors with the external environment. Regarding the validity of agency theory and stewardship theory, Donaldson and Davis (1999) stated that “each may be valid for some phenomenon but not for others”. Hillman and Danziel (2003) recommended to link agency theory and resource dependency theory.

Furthermore, Daily, Dalton and Cannella (2003) concluded that “a multi-theoretical approach to corporate governance is essential for recognizing that the many mechanisms and structures that might reasonably enhance organizational functioning. A multi-theoretical approach will help to overcome the limitations of different theories and allow the study to focus more on the “inner workings of boards” Hermalin & Wiesbach, 2003; Pettigrew, 1992). Considering the limitations with each of these theoretical stances, adopting a multi-theoretical approach is useful as indicated in previous studies (Chen & Roberts, 2010, Ntim & Soobaroyen, 2012). Furthermore, considering the complexity of issues surrounding the banking sector, it is appropriate to use a multiple theoretical approach in examining the corporate governance, as well as bank size and their impact on the performance of banks. Review of different perspectives clarifies that there is a need
to take an integrated approach rather than a single perspective to understand the effect of corporate governance on bank performance.

Therefore, this study adopts a combined or multi-theoretical approach as it provides a stronger basis for explaining the effect of corporate governance on financial performance of universal banks within the Ghanaian context. The next section utilizes the above four theoretical perspectives to identify specifics board characteristics, foreign ownership structure and their influence on bank performance and the development of hypotheses for the study. The following sections present more comprehensive review of theoretical and empirical literature in order to explain how corporate governance mechanisms might affect the firm financial performance.

3.5 Board size - financial performance relationship.

Corporate board size is considered to be one of the most important board structure variables. As a corollary, the extant literature has sought to provide a theoretical and empirical nexus between corporate board size and firm financial performance with mixed results (Lipton & Lorsch, 1992; Yermack, 1996). One theoretical (agency theory) proposition is that larger boards are bad, while smaller boards are good and effective at improving financial performance (e.g. Lipton & Lorsch, 1992; Sonnenfeld, 2002). Firstly, this is because while they plan, organize, direct and control the business of the organization, the size of the board has also got financial cost implications. That is “ceteris paribus” larger boards consume more pecuniary and non-pecuniary company resources in the form of remuneration and perquisites than smaller boards. Secondly, Jensen (1993) argues that when a board gets too big, it does not only become difficult to coordinate, but also comparatively easier to control by a dominant CEO due to associated director shirking and free-riding. Some authors argue that when boards grow, they become less likely to function effectively (Jensen, 1993), may create a diminish sense of individual responsibility and might be more involved in bureaucratic problems: increasing board size might inhibit board process due to the potential group dynamics problems associated with large groups. More specifically, Lipton and Lorsch (1992) suggested that cor-
porate board size must preferably fall between eight (8) and nine (9) directors. They argue that as corporate board size goes beyond a maximum number of ten (10) directors; additional costs of having larger boards typically associated with slow decision making are higher than any marginal gains from intense monitoring of management’s activities. Finally, Yawson (2006) argued that larger boards suffer from higher agency problems and are far less effective than smaller boards. Thus, limiting corporate board size may improve efficiency.

Another strand of theoretical literature from a resource dependence perspective, suggests that boards are chosen to maximize the provision of important resources to the firm (Pfeffer and Salanick, 1978; Klein, 1998; Hillman and Dalziel, 2003). Klein (1998), for instance, suggests that the advisory needs of a CEO increases with the extent to which the firm depends on the environment for resources. So, increasingly board size links the organizations to its external environment and secures critical resources. In response to resource dependence and regulatory pressures, organizations create large boards to encompass directors from different backgrounds (Pearce II and Zahra, 1992; Pfeffer, 1972; Lipton and Lorsch, 1992 and Jensen, 1993) observed that when corporate board expand beyond seven or eight people they are less likely to effectively control management and are easier for the CEO to dominate.

A contrary theoretical view (agency and resource dependency) is that larger boards may possibly be better for corporate financial performance (e.g. John and Senbet, 1998; Yawson, 2006). The theoretical literature also suggests that larger boards are associated with diversity of skills, business contacts and experience that smaller boards may not have, which offer greater opportunity to secure critical resources (Haniffa and Hudaib, 2006). It is apparent that a board’s capacity for monitoring increases as more directors are added. This has been the position of Romano et al., (2012) and Andres and Vallelado (2008) who argued that a large board size should be preferred to a small size because of the possibility of specialization, for more effective monitoring and advisory functions. Similarly, larger boards offer greater access to their firm’s external environment which reduces uncertainties and also facilities securing critical resources such as finance, raw material and contracts (Pearce II and Zahra, 1992; Goodstein et al., 1994).
Some other authors argue that larger boards are positively associated with higher corporate performance, because larger boards might be more effective in monitoring financial reporting as they have the ability to appoint directors with relevant and complementary expertise and skills and, thus, draw from a broader range of knowledge and experiences (Xie et al., 2003; Van de Berghe and Levrau, 2004). Stewardship theory also contends that superior performance will be linked to the majority of executive directors and CEO duality as they naturally work to maximize profits for shareholders.

As can be seen from Tables 3.1, 3.2 and 3.3, prior studies have found some mixed results on the relationship between board size and performance (Yermack, 1996; Ramano et al., 2012; Adams & Mehran, 2012; Wintoki et al., 2012; Coles et al., 2008; Bennedsen et al., 2008). The first strand of empirical studies reports that board size impacts negatively on firm performance. Yermack, (1996) was one of the first to investigate the relationship between board size and financial performance in a sample of 452 US large companies between 1984-1991. Generally, he reports an inverse relationship between corporate board size and performance (Tobin’s Q). Ramano et al., (2012) argue that when boards grow, they become less likely to function effectively (Jensen, 1993), may create a diminished sense of individual responsibility and might be more involved in bureaucratic problems. Wang et al., (2012) investigated the relationship between board size and firm performance across 68 US Bank holding companies over the 2005-2007, and found a negative relationship between board size and bank profitability. This can be explained by the fact that increasing the board size leads to increased agency problems which makes the board less effective. Larger boards are more difficult to coordinate and may experience problems with communication, organization, participation, providing worst financial reporting oversight and lowering corporate performance (Canyon & Peck, 1998; Mak & Kusnadi, 2005; Eisenberg et al., 1998).

Using a sample of 212 large US bank holding companies over 1997-2004 and several indicators of bank risk, Pathan (2009) finds that board size is negatively related to risk taking. For the non-crisis period, Minton et al., (2010) reported a negative relationship between board size and bank performance. They argue that small board size was favoured to promote critical, genuine and intellectual deliberation and involvement among
members which presumably might lead to effective corporate decision making and improved performance (Yermach, 1996; Jensen, 1993; Vafeas, 2000). Grove et al., (2011) found some evidence for an inverted U-shaped relationship between board size and ROA. Furthermore, using 230 listed firms in Singapore and Malaysia from 1999-2000, Mak & Kusnadi (2005) reported an inverse relationship between board size and firm value in both countries. These findings provide empirical support to the conclusions of Reddy et al., (2008) for the New Zealand listed firms. They reported a negative relationship between board size and firms' profitability.

Similarly, using a data sample of 85 default and 243 no default US commercial banks over the period 2007-2010, Berger et al., (2012) found a negative but statistically insignificant relationship between board size and probability of default. They support the view that firms with larger boards tend to be ineffective as they may not be able to make good and informed decisions due to the fact that too many directors may be unproductive as effective communication may pose a serious challenge among members. The larger the board size the more expansive are the experiences that can be tapped which helps in the corporate decision making especially with the presence of outside directors seating on the board. Also, Dahya et al., (2008), found a negative relationship between performance-related top management turnover and board size in a sample of 400 UK listed companies between 1988 to 1996. Haniffa and Hudaib (2006) report a negative relationship between board size and financial performance as measured by Tobin's Q, in a sample of 347 Malaysian listed companies. Staikouras et al., (2008) examined 58 large European banks over the period 2002-2004. They found that return on assets (ROA) and return on equity (ROE) are statistically significant and negatively related to board size. In a large board size there is a problem of communication between board members, quick decision making could not be possible, which causes a great detriment to firm performance.

Using a larger sample size of 2746 UK listed firms from 1981-2002, Guest (2008) found board size to have a strong negative impact on firm performance measured by ROA and Tobin’ Q. Using a sample of 44 Republic of Ireland listed firms over the period 2001-2002, O’Connell and Crammer (2010) reported a significant negative
relationship between board size and firm performance measured by ROA. They argue that small board size was favoured to promote critical, genuine and intellectual deliberation and involvement among members which presumably might led to effective corporate decision making, monitoring and improved performance (Lawal, 2012).

The second strand of empirical studies found a positive relationship between board size and financial performance Sheikh et al., (2012) Adams and Mehran, 2012; Kajola, 2008; Sanda et al., 2010; Coles et al., 2008). Sheikh et al., (2012) found that when board size increases the market responds favourably. In their study, they report that large boards provide better monitoring for companies with poor operating performance due to their diversity of backgrounds and communications skills. Using data from 147 Singaporean firms from 1995-1999, Mak and Lin (2005) found that board size has a positive impact on firm performance. Their results support that large boards have better access than smaller ones to the external environment by offering better chances to have wide resource for finance and raw materials. This is line with resource dependence theory that large boards offer greater access to their firm external environment, which facilitate and secure critical resources (Pearce and Zahra, 1991).

Bathula (2008) studied the association between board characteristics and firm performance of a sample of 156 New Zealand listed firms over the period 2004-2007, and found that board size was positively related to firm performance measured by Tobin’s Q. Beiner et al.,(2006) and Henry (2008) independently reported a similar statistically significant and positive relationship between board size and Tobin’s Q for a sample of Swiss and Australian listed firms, respectively. These studies provide empirical support to the conclusions of previous studies in UK and Australia respectively. Similarly, using a sample data of 8165 US firms over the period 1992-2001, Coles et al., (2008) found a positive relationship between board size and firm performance measured by Tobin’s Q and ROA. These authors suggested that larger boards are able to promote effective monitoring due to their ability to distribute the work load over a greater number of observers. It is argued that larger boards can improve financial performance because they have diversity experiences and skills which help them make better decisions (Setia-Atmaja, Tanewski & Skully, 2009). Stepanova & Ivantsova (2012) support this argument.
by pointing out that due to the fact that the banking sector differs from other sectors, and thus additional skills, experience and knowledge provided by larger boards leads to better bank performance.

Also, Sanda et al., (2010) found a positive correlation between board size and firm profitability, as proxied by a return on equity (ROE), in a sample of 93 Nigerian listed firms from 1996-1999. Busta (2008) examined two samples; they consisted of 69 publicly traded banks from the 5 principal E.U. countries banking sectors (Germany, France, UK. Italy, and Spain) over the period between 1996-2005, and the second sample consisting of 125 banks operating in 15 E.U countries including Switzerland for the same period and found that board size is positively related to the market-to-book ratio and return on capital employed (ROCE). Using a sample of US bank holding companies data over period of 34 years, Adams and Mehran (2012) found that board size is positively related to performance, as proxied by Tobin’s Q. They argue that increases in the board size were due to additions of directors who also sit on subsidiary board appear to be important. Also, Aebi et al., (2012) find that board size is positively related to indicators of 372 US banks’ performance as measured by buy and hold and ROE over 2007-2008.

Using a sample of 72 Zimbabwe listed firms from 2002 to 2004, Mangena and Tauringana (2008) also reported a positive nexus between board size and financial performance in an environment of severe political and economic uncertainty. Kajola (2008) found a positive relationship between board size and financial performance, as measured by return on capital employed (ROCE) and profit margins in a sample of 23 Nigerian listed companies from 2000-2006. Other authors argue that larger boards are positively associated with higher corporate performance (Pearce & Zahra, 1992) and that a larger board might be able to appoint directors with relevant and complementary expertise and skills and, thus draw from a broader range of knowledge and competencies (Van de Berghe and Levrau, 2004). Dalton & Dalton (2005); Klein, 2002) views were anchored on the premise that large board size promotes diversity which gives the firm a competitive edge in different fronts ranging from more expertise, experiences, competencies, skills resource-cooptation, corporate strategy innovation, creativity and provi-
sion of broad services. In addition, Jackling and Johl (2009) argue that a large board improves the quality of strategic decisions in an manner that will eventually affect performance, as it will lead to greater depth of intellectual knowledge.

The third strand of empirical studies reports that board size has no significant impact on firm performance (Bennedsen et al., 2008; Wintoki et al., 2012; Andrest et al., 2005). Wintoki et al., (2012) examined the relationship between board size and firm performance across 6000 US listed firms from 1991 to 2003 after criticizing prior studies for not controlling for the potential problems of endogeneity. They addressed the endogeneity problems by using the dynamic GMM and found no causal relationship between board size and firm performance measured by ROA. The results made through for all OECD countries by Andres et al., (2005) indicate that there is no relationship between firm value and the size of board of directors. Using a sample of 6850 Danish firms for the period 1999-2003, Bennedsen et al., (2008) found that there is no relationship between board size and profitability as measured by ROA. These findings support the view that larger boards offer greater exposure to the external environment than smaller boards which improve access to resources and therefore impact positively on performance (Goodstein et al., 2006). Similarly, Ehikiyoa (2009) and Belkhir (2009) found there is no empirical support of agency theory or stewardship theory suggestion about the impact of board composition on the firms’ performance.

With specific reference to banking, prior studies have found mixed results on the relationship between board size and bank performance (Adams & Mehran, 2012; Aebi et al., 2012; Al-Sahafi et al., 2015; Grove et al., 2011). Adams & Mehran, (2012) reported a statistically significant and positive relationship between board size and Tobin’s Q. and ROA. They argue that larger boards might be more effective in monitoring financial reporting, because the bank might be able to appoint directors with relevant and complementary expertise and skills, thus draw from a broader range of knowledge and experiences (Van de Berge and Levrau, 2004). Other studies report that improving board size negatively affects banks’ performance (Trabelsi, 2010; Al-Sahafi et al., 2015; ). They argue that larger boards are more difficult to coordinate and may experience problems with communication, organization, participation, providing worst financial reporting
oversight and thus lower bank performance. Using a sample of unbalanced panel data of 69 commercial banks from six (6) OECD countries with 620 bank year observations from the period 1996 to 2006, De Andre and Valledado (2008) found an inverted “U” shaped relationship between board size and financial performance as measured by Tobin’s Q, return on assets (ROA) and return on equity (ROE).

Empirical Literature on Ghana

Focusing on Ghana where this thesis is based, the empirical evidence is also mixed. For example, Kyereboa-Coleman and Biekpe (2006a, 2006b) found that board size has a positive association with firm performance among Ghanaian listed companies, evidence supported by Abor and Biekpe (2007) and Isshaq et al., (2009). They argued that larger boards are better than the smaller ones in improving firm performance. They also argued that in small boards the powerful position of the CEO enable him to override the decisions made by the board members in accordance with their own interests leading to increase agency problems and correspondingly undermining the performance of the firm. Ghanaian large board size also plays an important role in improving and enhancing outcomes of decisions because of idea sharing and contributions, which might increase the likehood of the better firm performance.

In contrast, Kyereboa-Coleman and Amidu (2008) found a negative relationship between board size and firm performance of SMEs in Ghana. This lends empirical support for previous Ghanaian studies by Tornyeva and Wereko, (2012). They argued that reducing board size helps in avoiding any rider problems or poor coordination and communication which results from larger boards. As the board size increases problems of coordination and communication result, leading to decreased ability of the board to control management thereby increasing agency problem. They also noted that most of the bank boards are dominated by individual family members, controlling or majority shareholders which impair independent judgment decision making process. Of particular interest to this thesis is Kyereboa-Coleman and Biekpe (2006b) recommendation of the optimal board size of 10 for the Ghanaian banks, a recommendation supported by Adusei (2011) but in disagreement with Sanda et al., (2010). Consistent with Adusei
(2011), the Ghanaian SEC code (2003; 2010) and Bank of Ghana’s draft regulation on bank governance (2013) regard board size as an effective governance mechanism and recommend the board size of listed companies including banks to be between a minimum of eight and a maximum of sixteen members in order to promote effective and responsible management of a particular firm. Given the recommendation of the SEC code (2003;2010), and the Bank of Ghana draft corporate governance regulation recommendation of a minimum of 3 directors without capping the maximum; it is expected in this thesis that larger boards will have a positive impact on bank performance.

As can be seen from the mixed results that, there is no consensus as to whether larger or smaller boards are better to monitor the firm. Thus, the board size issue is primarily concerned with board ability to monitor and control managers. Therefore, if monitoring is implemented it is more likely managers’ behaviors will be controlled and agency costs are reduced which might result in better firm performance. Based on the above discussions, this current study hopes to fill a gap in the governance literature by measuring how bank board size and financial performance are related. From the above argument, the following hypothesis is formulated:

**H01: Larger board size should lead to higher bank performance**

Prior studies have provided the theoretical view that larger boards may possibly be better for corporate financial performance (John & Senbet, 1998; Yawson, 2006). In particular, larger boards are associated with diversity in skills, business contacts and experience that smaller boards may not have, which offers greater opportunity to secure critical resources (Haniffa & Hudaib, 2006). It is therefore expected in this thesis for the board size to have a positive impact on bank financial performance.
Table 3. Empirical research showing a positive relationship between board size and firm performance in US, UK and Other countries

<table>
<thead>
<tr>
<th>Author (Year)</th>
<th>Study period</th>
<th>Sample size</th>
<th>Performance</th>
<th>Summary results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coles et al (2008)</td>
<td>1992-2001</td>
<td>8165 US firm year observation from IRRC</td>
<td>Tobin's Q ROA</td>
<td>Larger board size is positively associated with firm performance (Q) in complex firms. This is opposite in simple firms where smaller board size is positively related with firm performance (Q) The result suggests that either very small or very large boards are optimal. i.e. Tobin's Q increases (decreases) in board size for complex (simple) firms, and the relationship is driven by the presence of NED.</td>
</tr>
<tr>
<td>Adams &amp; Mehran (2012)</td>
<td>1986-1999</td>
<td>35 US listed banks</td>
<td>Tobin's Q ROA</td>
<td>Board size has a positive and statistically significant correlation ROA with Tobin's Q but has no impact on ROA</td>
</tr>
<tr>
<td>Authors</td>
<td>Sample</td>
<td>Time Period</td>
<td>Measures</td>
<td>Findings</td>
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<tr>
<td>Kiel &amp; Nicolson (2003)</td>
<td>1996</td>
<td>348 Australia listed companies</td>
<td>Tobin's Q ROA</td>
<td>Board size is positively correlated with firm performance</td>
</tr>
<tr>
<td>Kajola (2008)</td>
<td>2000-2006</td>
<td>20 listed Nigeria companies</td>
<td>ROE Profit margin (PM)</td>
<td>There is a positive and significant relationship between board size and firm performance (ROE) but no significant relationship between board size and PM</td>
</tr>
<tr>
<td>Jackling &amp; Johl (2009)</td>
<td>2006</td>
<td>180 Indian listed Companies</td>
<td>Tobin's Q ROA</td>
<td>There is a significant and positive relationship between larger board size and firm performance.</td>
</tr>
<tr>
<td>Sanda et al (2010)</td>
<td>1996-1999</td>
<td>93 Nigerian listed firms</td>
<td>Tobin's Q P/E Ratio, ROA, ROE</td>
<td>Board size is significant and positively associated with firm performance (Tobin's Q) but has no impact on ROA. They recommended optimal number of 10 for Nigerian companies</td>
</tr>
</tbody>
</table>
### Table 3. 2 Empirical literature showing a negative relationship between board size and firm performance in US, UK and Other countries

<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Sample</th>
<th>Year</th>
<th>Measure</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wang et al. (2012)</td>
<td>68 US BHCs</td>
<td>2007</td>
<td>Efficiency index based on CAMEL indicators</td>
<td>Negative relationship between board size and efficiency</td>
</tr>
<tr>
<td>Staikouras et al 2008</td>
<td>58 European banks</td>
<td>2002-2004</td>
<td>ROA &amp; ROE</td>
<td>Negative relationship between board size and performance</td>
</tr>
<tr>
<td>Study</td>
<td>Sample Description</td>
<td>Time Periods</td>
<td>Measured Outcomes</td>
<td>Findings</td>
</tr>
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<td>---------------------</td>
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<tr>
<td>Guest (2008)</td>
<td>1981-2002</td>
<td>2746 UK larger sample size</td>
<td>Tobin's Q , ROA, Share returns</td>
<td>Board size has a strong negative impact on Tobin's Q, profitability and share returns.</td>
</tr>
<tr>
<td>Author(s)</td>
<td>Year Range</td>
<td>Sample Size</td>
<td>Variables</td>
<td>Summary</td>
</tr>
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<td>------------------------</td>
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<tr>
<td>Bozec (2005)</td>
<td>1976-2000</td>
<td>25 Canadian SOE</td>
<td>ROS, ROA, Sales Efficiency, NIE, Asset Turnover</td>
<td>A negative relation is found between board size and firm performance (ROS, sales efficiency &amp; assets turnover) but no impact on ROA, &amp; NIE</td>
</tr>
<tr>
<td>Mak &amp; Kusnadi (2005)</td>
<td>1999-2000</td>
<td>230 Singapore &amp; Malaysian firms for each country</td>
<td>Tobin's Q</td>
<td>The results show a negative relationship between board size and firm performance</td>
</tr>
<tr>
<td>O'Connell &amp; Cramer (2010)</td>
<td>2001</td>
<td>44 Ireland listed firms</td>
<td>RET, Financial Q, ROA</td>
<td>Board size exhibits a significant negative association with firm performance. The relationship is significantly less negative in smaller firms</td>
</tr>
</tbody>
</table>
Table 3.3 Empirical research showing no relationship between board size and firm performance in US, UK and Other countries

<table>
<thead>
<tr>
<th>Author (Year)</th>
<th>Study period</th>
<th>Sample size</th>
<th>Performance</th>
<th>Summary results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bennet &amp; Robson (2004)</td>
<td>1994-1997</td>
<td>1445 UK SMEs</td>
<td>Change in profitability per employee</td>
<td>There is little evidence of strong association between board size and firm performance</td>
</tr>
<tr>
<td>Dulewicz &amp; Herbert (2004)</td>
<td>1997-2000</td>
<td>75-80 UK listed firms</td>
<td>CFROTA, Sales turnover</td>
<td>No significant correlation between whether larger or smaller board size and firm performance</td>
</tr>
<tr>
<td>Bennedsen et al (2008)</td>
<td>1999</td>
<td>6850 Danish firms</td>
<td>ROA</td>
<td>Board size has a negative significant impact on firm performance</td>
</tr>
<tr>
<td>Wintoki et al (2012)</td>
<td>1991-2003</td>
<td>6000 US listed firms</td>
<td>ROA</td>
<td>After re-examined the relationship between board structure and firm performance, they find no causal relation between the two</td>
</tr>
</tbody>
</table>

Source: Researchers Compilation (Various literatures)
3.6. Board Composition - Financial Performance Relationship

Board composition is a debated corporate governance issue since it could influence board deliberations and the capability to control top management decisions and results. Although there is not an optimal formula (Vance, 1978), board independence has become a relevant issue in the corporate governance agenda. Board composition is considered as the proportion of outside directors on the board and is related to the level of independence of the board. Having greater proportion of outside directors on a board could be considered to be a management innovation as one of other mechanisms to mitigate agency costs between management and shareholders (Chizema and Kim, 2010). Hence, according to the agency theory, the non-executive directors are assumed to be important monitors that supervise and control the executives. The agency perspective on the monitoring role of the board structure is that non-executive directors are better positioned than executive directors to carry out the monitoring function since they are presumably independent and more concerned for their reputation in the labour market (Fama, & Jensen, 1983).

Fama, (1980) and Fama & Jensen (1983) suggested that non-executive directors in the board add to firm value by providing expert knowledge and monitoring services. Based on the resource dependency theory, it can be argued that the non-executive directors might contribute to the profitability of a firm in terms of their expertise by giving advice to the management on strategic plans and investments, and in terms of their reputational integrity by enabling the firm to have network relationships with the community and other stakeholders. From these perspectives, we expect a positive causal relationship between board independence. On the contrary, there is a stewardship theory perspective which suggests that insider directors are better equipped to undertake a monitoring function than the non-executive directors since they possess superior information that enables them to evaluate top managers (Baysinger and Hoskinsson, 1990). Advocates of the stewardship theory suggest that the combined leadership provides a unified leadership structure and the inside directors facilitate superior firm performance.

Supporting this argument is that the non-executive directors are usually part timers and this limits the extent of their monitoring, and that they lack all the complete infor-
mation necessary for making decision (Bozec, 2005). From this perspective, the non-executive director representation would have a negative impact on firm performance. As can be seen from Tables 3.4, 3.5 and 3.6, prior studies found some mixed results on the relationship between board composition (NEDs) and firm performance (Romano et al., 2012; Adams & Mehran 2009; Bino & Tormar, 2007; Staikouras et al., 2008; Gordini, 2012; Bozec, 2005; Managena et al., 2012; Haniffa & Hudiab, 2006; Babatunde & Olaniran, 2009).


These findings suggest that boards dominated by outside directors offer higher performance. Such board members may provide access to valued resources and information especially in times of adversity (Daily and Dalton, 1994). They also argue that outside directors have the incentive to act as monitors of management because they want to protect their reputations as effective, independent decision makers. These reports support that greater proportion of outside directors is associated with enhanced
performance in terms of efficiency. O’Connell and Cramer (2010) examine the relationship between board composition and firm performance for 77 listed companies in Ireland, and found that board with a high proportion of independent directors have a positive effect on firm performance.

Using a panel data of 14 listed banks on the Amman stock exchange for the period 1997-2006, Bino and Tomar (2007) found that board composition has a significant positive impact on bank financial performance, as measured by Tobin’s Q, return on assets (ROA) and return on equity (ROE). Similarly, Alonso and Gonzalez (2006) examined a sample of 66 commercial banks operating in six (6) OECD countries from 1996 - 2003. They found a significant positive relationship between the proportion of non-executive directors and financial performance, as proxied by Tobin’s Q and return on assets (ROA). Staikouras-et-al., (2008) examined 58 large European banks over the period 2002-2004. They found that board composition is positively related to both return on assets (ROA) and return on equity (ROE), but is statistically insignificant in all cases. These authors argued that non-executive directors are in a better position to carry out the monitoring function than executive directors. Jensen (1983), states that the independence of non-executive directors helps in constructive criticism, because they will give their opinions without sycophancy or coercion. In addition, non-executive directors will help in reducing information asymmetry between the shareholders and the executive directors. This will reduce the agency problem and hence increase the shareholders wealth.

Gordini (2012) reported a positive relationship between non-executive directors and firm performance as a result of their contributions such as skills, experiences and their linkage to the external resources. He concludes that the greater the percentage of outside directors on the board will result in better firm performance and add value to the company. These findings are consistent with the view of agency theory and resource dependence theory, namely that non-executive directors are effective monitors and a disciplining device for managerial behaviour. Using a data of 296 large financial firms for the period 2004-2008, Erkens et al., (2012) found a positive relationship between non-executive directors and equity raised. If the representation on the board of non-
executive directors increased the effectiveness of monitoring, then the performance of the company should improve. Having a higher proportion of outside directors on the board increases the independence of the board.

In contrast, other researchers reported that board composition (as a percentage of non-executive directors) is negatively correlated with firm financial performance (Yermack, 1996; Bozec, 2005; De Andres and Valledado, 2008; Mangena et al., 2012, Sanda et al., 2005). Yermack (1996) finds a negative relationship between performance and proportion of outside directors. Using a sample data of 25 Canadian firms from 1976-2000, Bozec (2005) found that the relationship between board composition and firm performance is negative. Similarly, Mangena et al., (2012) reported a statistically significant and negative relationship between the proportion of non-executive directors and firm performance measured by Tobin's Q, in a sample of 157 Zimbabwean listed firms from 2000 to 2005. This indicates that the benefit of board independence, objectivity and experience expected from the representation of outside directors to influence board decisions appear to hold back managerial initiative through too much monitoring. Cheng (2008) in their study of 2980 US firms (including 122 financial firms) over the period 1996-2004, found that there is a negative relationship between firms' performance and board composition.

Similarly, Sanda et al., (2005) reported that Nigerian firms with a low percentage of outside directors performed better than those with more non-executive directors. This suggests that whilst NEDs can bring independence and objectivity to bear upon board decisions, they can also stifle managerial initiative through excessive monitoring. De Andres and Valledado (2008) stated that there a number of reasons why empirical evidence may not support the positive relationship between non-executive directors and bank performance. Non-executive directors are only employed on a part time basis and are likely to have other commitments, which may result in devoting insufficient time to the company. They may lack the expertise required to understand certain technical issues in the business and they not possess sufficient information when called upon to make key decisions. More recently, Bhagat & Bolton (2008) confirmed the existence of a negative relationship between board independence and operating performance.
Erkens et al., (2012) reached similar conclusions by using a sample of 296 financial firms from 30 countries. They found that firms with more independent boards experienced worse stock returns during the 2007-2009 financial crises.

A third stream of empirical studies do not support the outside directors or non-executive directors impact on financial performance (Haniffa & Hudaib, (2006); Choi and Kim, 2007, Babatunde and Olaniran, 2009; Minton et al., (2010)). Consistent with Muller-Kahle and Lewelly, 2012) did not find any link between outside directors and performance. Minton et al., (2010) reported no link between board composition and performance for a sample of US publicly traded financial institutions with total assets greater than 1billion for the period 2007-2008. Further, Haniffa & Hudiab (2006) report a statistically insignificant relationship between the percentage of NEDs and financial performance for a sample of 347 Malaysian listed firms. Using panel data from 60 listed companies on the Nigerian Stock Exchange for the period between 2002-2006, Babatunde and Olaniran (2009) found no significant evidence to support the idea that outside directors help to promote firm performance. Similarly, using a data of 298 US banks for the period 2007-2008, Fernandes and Fich (2010) found that independent directors have no significant relationship with stock performance. Hence, the argument for board composition is that the skills and the knowledge base they bring to the firm are of no importance to firm performance (Bonn, Yoshikawa & Phan, 2004). Similarly, Ehikioya (2009) and Belkhir (2009) found that there is no empirical support of agency theory or stewardship theory suggestion about the impact of board composition on the firm’s performance.

With reference to banking industry, the results regarding the effectiveness of outside directors and bank performance are mixed. The majority of the existing studies about banks show a significantly positive relationship between board composition and banks’ profitability, highlighting how banks with a higher presence of non-executive or independent directors on their boards perform better than the others (Al-Hawary, 2011; Al-Sahaf, 2015; Staikouras et al., 2007). Their empirical studies support the industry views that the appointment of non-executive directors to bank boards’ as a positive corporate governance practice (BCBS, 2006; 2010; 2015). This is because the presence of
non-executive directors can potentially improve the independence of bank boards and its decisions. By contrast, a group of researchers' reports that board composition is negatively correlated with bank performance (Adusei, 2011; Al-Manaseer et al., 2012; De Andres and Vallesado, 2008). They support the view that non-executive directors often command less knowledge about the banking business and find it too difficult to understand the complexities of the bank. This problem is exacerbated by the fact that outside directors are usually part timers who normally also sit on boards of other banks (Jirapon et al., 2009). Other empirical studies show no significant relationship between board composition and bank performance (Romano et al., 2012; Adams & Mehran, 2008; Zulkafli & Samad, 2007).

**Empirical literature on Ghana**

In Ghana, the evidence is not different from the existing literature. For example, Kyereboa-Coleman and Biekpe (2006a; 2006b) found a negative association between board composition and Ghanaian listed firm’s performance. This is supported by Owusu (2012) who found that NEDs to be statistically significant and negatively related to ROA among Ghanaian listed firms. They argued that firms with higher proportions of NEDs are likely to experience lower performance because NEDs are part time workers, unfamiliar with operations and company business, which are unable to comprehend the complications and difficulties that face the company. They also argued that NEDs may not have total commitment to the cause of the firm because of outside commitments. As a result, NEDs may not be on top of issues affecting the business and this would limit their contribution to the performance of the firm.

By contrast, Adusei (2011) reported a significant positive relationship between board composition and the financial performance of banks in Ghana. Abor and Biekpe (2007) also reported a significant positive relationship between NEDs and firm performance among SMEs in Ghana. Tornyeva & Wereko (2012); Kyereboa-Coleman and Amidu (2008) reported a positive relationship between non-executive directors and firm performance among Ghanaian insurance firms and listed companies respectively. They
concluded that the greater percentage of NEDs contribute positively to firm performance as a result of skills, experiences, and their linkage to the external resources.

They conclude that the greater the percentage of NEDs in the board will result in better firm performance and add value to the firm. This is because of close monitoring and their valuable advices and contribution to the company. However, the Ghanaian SEC governance code (2003; 2010) and Bank of Ghana’s draft corporate governance regulations (2013) recommend a balance of executive directors and non-executive directors on the board to monitor the activities of management. This means that the inclusion of non-executive directors on the board should therefore ensure effective monitoring of the executive directors whose interests are not aligned with shareholder value maximization.

As can be seen above the mixed results, there is no consensus as to whether non-executive directors or executive directors are better to monitor the firm. Thus, board composition issue is primarily concerned with a non-executive directors’ ability to monitor and control managers. Therefore, if monitoring is implemented it is more likely managers’ behaviors will be controlled and agency problems are reduced which might result in higher firm performance. While there is a great deal of empirical literature on corporate governance, very little of it concerns the board composition (non-executive directors) of banks; all of it assumes that banks conform to the concept of the firm used in agency theory. This study attempts to investigate the relationship between board composition and financial performance in the Ghanaian universal banks.

Based on the monitoring hypothesis of agency theory that outside directors’ representation gives a strong position for the boards to monitor executive directors and the resource dependency theory, the hypothesis this research would test is:
H₀₂: Board composition is positively associated with bank performance.

Most of the prior studies have provided theoretical support for the agency theory proposition that non-executive directors perform their monitoring function effectively and bring independent judgment to board decisions. This is particularly important because the existence of the NEDs as the most effective internal control mechanism for monitoring of executive director's behaviour (Fama and Jensen, 1983) may be achieved, and therefore could ultimately lead to better performance.
<table>
<thead>
<tr>
<th>Author (Year)</th>
<th>Study period</th>
<th>Sample size</th>
<th>Performance Measurement</th>
<th>Methods</th>
<th>Summary results</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>firms</td>
<td></td>
<td>Regression Analysis</td>
<td></td>
</tr>
<tr>
<td>Jacking &amp; Johl</td>
<td>2006</td>
<td>180 Indian listed</td>
<td>Tobin's Q</td>
<td>Fixed Effects</td>
<td>Proportion of outside directors has positive and significant impact on firm performance.</td>
</tr>
<tr>
<td>(2009)</td>
<td></td>
<td>firms</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>firms</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yasser et al,</td>
<td>2003-2008</td>
<td>792 Pakistan listed</td>
<td>Tobin's Q</td>
<td>Multivariate</td>
<td>Proportion of outside directors is significant and positively associated with firm performance (Tobin's Q) but has no relationship with ROA</td>
</tr>
<tr>
<td>(2011)</td>
<td></td>
<td>companies</td>
<td>ROA</td>
<td>Regression Analysis</td>
<td></td>
</tr>
<tr>
<td>Study</td>
<td>Time Period</td>
<td>Sample Size</td>
<td>Measured Variables</td>
<td>Methodology</td>
<td>Findings</td>
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<tr>
<td>Trabelssi (2010)</td>
<td>1997-2007</td>
<td>14 Tunisian bank</td>
<td>Tobin’s Q, ROA,</td>
<td></td>
<td>The higher the proportion of outside directors, the higher the firm performance as measured by Tobin’s Q, &amp; ROA</td>
</tr>
<tr>
<td>Cornett et al (2009)</td>
<td>2007-2008</td>
<td>300 US publicly traded</td>
<td>Tobin’s Q</td>
<td>Panel Data Analysis</td>
<td>Proportion of outside directors is statistically significant and positively relationship with firm performance</td>
</tr>
<tr>
<td>Bino &amp; Tomar (2007)</td>
<td>1997-2006</td>
<td>14 Jordanian listed Banks</td>
<td>Tobin's Q, ROA</td>
<td>Multivariate Regression Analysis</td>
<td>Proportion of outside directors has positive impact on firm performance (Tobin's Q &amp; ROA)</td>
</tr>
<tr>
<td>Staikouras et al., (2008)</td>
<td>2000-2006</td>
<td>58 large European Bank</td>
<td>ROE and ROE</td>
<td>Panel data analysis</td>
<td>Proportion of outside directors has positive significant impact on bank performance</td>
</tr>
</tbody>
</table>
### Table 3. Empirical research showing a negative relationship between NEDs and performance in USA, UK & Other countries

<table>
<thead>
<tr>
<th>Author (Year)</th>
<th>Study period</th>
<th>Sample size</th>
<th>Performance Variable</th>
<th>Methods</th>
<th>Summary results</th>
</tr>
</thead>
<tbody>
<tr>
<td>de Andres and Vallelado (2008)</td>
<td>1995-2005</td>
<td>69 European large banks from 6 countries</td>
<td>Tobin's Q, ROA, shareholder market return</td>
<td>Number of non-executive directors out of the total number of directors</td>
<td>Inverted U-shaped relation between board independence and performance</td>
</tr>
<tr>
<td>Pathan (2009)</td>
<td>212 large US bank holding companies (BHCs)</td>
<td>1997–2004</td>
<td>Total risk, idiosyncratic risk, systematic risk, assets return risk, Z-score</td>
<td>Percentage of independent directors</td>
<td>Negative relationship between NEDs and Asset Return</td>
</tr>
<tr>
<td>Authors</td>
<td>Year</td>
<td>Companies</td>
<td>Variables</td>
<td>Methodology</td>
<td>Results</td>
</tr>
<tr>
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<tr>
<td>Yasser et al., (2011)</td>
<td>1996-2005</td>
<td>792 Pakistan listed companies</td>
<td>Tobin's Q; ROA; ROE</td>
<td>Panel data analysis</td>
<td>Companies with proportion of outside directors perform positively with Tobin's Q; ROE; ROA.</td>
</tr>
<tr>
<td>Cornett et al., (2010)</td>
<td>2007-2008</td>
<td>300 US publicly traded banks</td>
<td>Q-ratio</td>
<td>OLS; Logistic regression</td>
<td>Representation of independent NEDs on the board has significant and negative relationship with firm performance. This is however not the case if NEDs are not independent.</td>
</tr>
<tr>
<td>Dulewicz &amp; Herbert (2004)</td>
<td>1997-2000</td>
<td>300 UK questions were answered by board chairman</td>
<td>CFROTA Sales turnover</td>
<td>2SLS</td>
<td>The larger the proportion of NEDs the lower was the subsequent growth of sales. However, there is no significant correlation between proportion of NEDs and firm performance (CFROTA). Again, no performance differences were found on either the Combined Code (1/3) or the Smith (50%).</td>
</tr>
<tr>
<td>Guest (2008)</td>
<td>1981-2002</td>
<td>2746 UK larger sample size</td>
<td>Tobin's Q ROA Share returns</td>
<td>GMM. OLS and Fixed effects</td>
<td>Proportion of outside directors has significant negative impact on firm performance variables.</td>
</tr>
<tr>
<td>Authors, Year</td>
<td>Sample Description</td>
<td>Time Period</td>
<td>Measures</td>
<td>Variables</td>
<td>Results</td>
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<tr>
<td>Yeh et al., 2011</td>
<td>20 largest financial firms from each G8 country</td>
<td>2005-2008</td>
<td>Stock return, ROE, ROA</td>
<td>Proportion of independent directors in committees</td>
<td>Performance is better for financial institutions with more independent directors on auditing and risk committees particularly in civil law countries and in firms with excessive risk-taking.</td>
</tr>
<tr>
<td>Hardwick et al., 2011</td>
<td>UK life insurance firms</td>
<td>1994-2004</td>
<td>Profit efficiency</td>
<td>Proportion of non-executive directors on the board</td>
<td>Significant positive or negative depending on whether there is separation of the CEO and board chairman positions and whether there is an audit committee.</td>
</tr>
<tr>
<td>Adams and Mehran (2012)</td>
<td>35 US BHCs</td>
<td>1964-85</td>
<td>Tobin’s Q</td>
<td>Fraction of outside directors</td>
<td>Insignificant negative relationship between NEDs and Tobin’s Q.</td>
</tr>
<tr>
<td>Aebi et al., 2012</td>
<td>372 US banks</td>
<td>July 1, 2007, to December 31, 2008</td>
<td>Buy-and-hold returns and ROE</td>
<td>Percentage of outside directors</td>
<td>Negative but mostly insignificant with ROE.</td>
</tr>
</tbody>
</table>
Table 3. 6 Empirical studies showing no relationship between the proportion of NEDs and firm performance in USA, UK & Other countries

<table>
<thead>
<tr>
<th>Study</th>
<th>Year Range</th>
<th>Sample Size</th>
<th>Performance Measurement</th>
<th>Method</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daily &amp; Dalton (1992)</td>
<td>1989</td>
<td>100 US listed firms</td>
<td>ROA</td>
<td>OLS</td>
<td>Proportion of outside directors has no impact on firm performance</td>
</tr>
<tr>
<td>Berger et al., (2012a)</td>
<td>85 default and 243 no default US commercial banks</td>
<td>2007-2010.</td>
<td>Probability of default</td>
<td>GMM</td>
<td>Number of outside directors in the board</td>
</tr>
<tr>
<td>Source</td>
<td>Methodology</td>
<td>Sample Size</td>
<td>Year</td>
<td>Variable</td>
<td>Relationship</td>
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<tr>
<td>Muller-Kahle and Lewelly (2011)</td>
<td>Matched-pair sample of US firms in the financial industry</td>
<td></td>
<td>1997–2005</td>
<td>Dichotomous variable which takes a value of 1 if the firm is Subprime Specialist and 0 otherwise</td>
<td>Ratio of outside to total number of directors</td>
</tr>
<tr>
<td>Minton et al., (2010)</td>
<td>US publicly-traded financial institutions with total assets greater than $1 billion</td>
<td>2007-2008 2003-2006/08</td>
<td>Stock returns, Tobin's Q, probability of receiving TARP money Several risk indicators</td>
<td>Percentage of directors that are not employed or affiliated with the firm</td>
<td>Not significant for performance, but independence is associated with higher probability of receiving TARP money Negative but not always significant</td>
</tr>
</tbody>
</table>

Sources: Researcher's Own Compilation:(Various Literatures)
3.7 Board committees- financial performance relationship

Board committees are an important component of the board structure of banks in Ghana, which affect bank performance. Board committees as part of the manner in which boards are organized, play vital roles by rendering objective and non-biased supervisory and consultancy services to the company with the aim of preserving the interest of shareholders (Harrison, 1987). Prior literature suggests that board committees help improve the effectiveness and efficiency of corporate boards (Jiraporn et al., 2009). The existence of board committees is considered by regulators in their regulatory decisions. Board committees act in order to obtain the most effective operation of the board (Van Den Berghe and Levrau, 2004). Board committees are important corporate governance tools to monitor corporate activities and can play a valuable role in the protection of shareholder value (Kesner, 1988). Ramano et al., (2012) argued that board committees are important governance tools which monitor corporate activities and protect shareholder value. Bussoli (2012) cited that board committees are the yardstick for the better functioning of banks, as the number of board committees is statistically significant to bank performance. It is becoming a widely accepted practice that properly governed banks should have audit, risk, remuneration, nomination, ethics and compliance committees of the board in place to assist in delivering a system for objective monitoring of the bank’s activities (BCBS, 2010; 2015; Nigeria CBN code, 2006, 2014; Bank of Italy, 2008; South Africa’s Kings Report 11, 2010).

The Cadbury Report (2002) pronounces that the establishment of board committees is one way to avoid board meetings being otherwise burdened. Of particular interest to this thesis are the audit, risk, remuneration and nomination committees whose functions are well considered as important by the BCBS (2006; 2010 and 2015) corporate governance principles. In this respect, given the focus of this thesis on audit, risk, remuneration and nomination committees, the functions of these board committees. Arguably, the existence of board committees may improve corporate accountability, legitimacy and credibility by performing specific functions (Weir et al 2002). The agency theory principle of separating the monitoring and executive function is established to monitor the execution functions of audit, remuneration and nomination (Roche, 2005). Corporate failures in the
past focused criticism on the inadequacy of governance failures to take corrective actions by boards’ committees of failed firms. The importance of board committees was espoused by the business world. As a result the Basel Committee for Banking Supervision (2006; 2010; 2015) recommend that banks’ boards should appoint board subcommittees to address the following five functions; audit; risk management; compensation nomination, ethics and compliance.. Therefore, BCBS (2006; 2010; 2015) argued that these committees should be composed exclusively of independent or non-executive directors to strengthen the internal control systems of banks. Shareholders are able to have greater confidence in boards when there are named board committees to address the key responsibilities and disclose their existence to investors (Davis, 2002).

Agency theory also suggests that the central monitoring function of the board is to ensure that corporate activities are properly audited (Jensen and Meckling, 1976; Fama and Jensen, 1983). Fama and Jensen (1983a) suggested that boards perform advisory roles, overseeing long-term investments and strategy formulations. To address the specific needs of firms, boards establish committees to perform various functions which may be either of an advisory nature or of a monitoring nature (Klein, 1998). In firms where management is in greater need of advice, such as a firm with greater growth opportunities or a firm facing greater uncertainty, managers are more willing to share information with board members (Adam and Ferreira, 2007). Utilizing the platforms of specialization would be more effective in this process (BCBS, 2006). Consequently, Reeb (2007) posited that firms with complex operations or firms whose managers have a greater need for advice would perform better with larger board, and the cost of larger boards are mitigated in the presence of a greater number of board committees.

According to Harrison (1987), there are two generic types of board committees; monitoring or oversight and operating. Monitoring committees are intended to protect shareholder interests by providing objective, independent reviews of corporate executives and affairs. According to BCBS (2006; 2010; 2015) monitoring committees are made up of audit, risk, remuneration and nomination. Operating board committees advise management and the board on major business decisions and such committees are strategic committee; finance and investment committee. Despite the increasing popularity of
board committee structures, there are conflicting theoretical propositions as to the nexus between board monitoring committees and financial performance. One line of theoretical literature suggests that the establishment of monitoring committees can impact positively on firm performance (Harrison, 1987; Sun and Cahan, 2009).

The principal function of an audit committee concerning banks is to review management information and to meet regularly with internal and external auditors to review financial statements and the external reporting process, to review the audit processes (both internal and external) and the internal controls (Bosch, 1995; Klein, 1998). This information allows an audit committee to assess the extent to which a board is fulfilling its duties and responsibilities. Risk committee of the board provides oversight of senior management activities in managing credit, market, liquidity, operational, compliance, reputational and other risks. Culp and Miller (1995) posited that a corporate risk management committee increased firm performance by reducing cost associated with external financing and transactions, while lowering corporate taxation and minimizing agency costs. By reducing agency costs associated with market imperfections, risk management can reduce cash flow volatility, thus increasing cash flows to the owners of the firms (Santomero, 1995). In contrast, Tufano (1996) found few theoretical studies that support risk management practices as a means of maximizing a firm exposure to risks (e.g. hedging).

Compensation committees typically determine and review remuneration packages for senior management (Klein, 1998), taking into consideration the company’s needs together with the interest of shareholders and other stakeholders (Bosch, 1995). Remuneration packages awarded to directors and senior managers have long drawn shareholders and media attention (Pease and McMillan, 1993). Nomination committees assist board members in nominating new members to a board, which reduces the involvement of the entire board members including the CEO from the nomination process (Petra, 2007). The benefit of a nomination committee is that they will appoint individuals who will act as advocates for shareholders (Byrd & Hickman, 1992). Roche (2005) stated that in order to balance the power of the CEO, Asian firms have created nomination committees to strength the monitoring function of boards.
As seen from Tables 3.7, 3.8 and 3.9, the empirical literature concerning the relationship between board committees and firm performance is mixed (Bussoli, 2013; Kim & Black, 2012; Bozec, 2005; Lam & Lee, 2012; Klein, 1998; Kajola, 2008). The first strand of the empirical literature suggests a positive relationship between board committees and financial performance (Wild, 1994; Liang & Weir, 1999; Vefaes, 1999b; Black & Kim, 2012; Bussoli, 2013; Puni, 2015; Young & Bucholtz, 2010). Using a sample of 260 US listed firms from 1966 to 1980, Wild (1994) investigated the market reactions before and after the establishment of audit committees. He reported a statistically significant improvement in share returns following the establishment of audit committees, indicating that the presence of audit committees can improve managerial accountability to shareholders. Similarly, using a sample of 606 large US listed companies; Vefaes, (1999a) documented a positive relationship between board committees and the quality of a new board of directors on a board. Klein, (1998) examined the relationship between board committee composition and firm performance. She found a significant positive relationship between the percentage of executive directors on board committees dealing with long-term strategic investment decisions and various accounting and marketing measures of firm performance. Board committees enhance corporate accountability, legitimacy and credibility by performing specialist functions (Weir et al., 2002). Aebi et al., (2012) argued that the presence of a risk committee indicates a stronger risk management. They support the view that strong internal risk controls are useful in restraining risk-taking behavior at banking institutions.

Using a sample of 115 UK listed firms over the period 1992-1995, Laing & Weir (1999) observed that the presence of audit and remuneration committees do positively affect firm performance measured by ROA. Bussolli, (2013) cited that board committees are the yard sticks for the better functioning of banks, as the number of board committees is positive and statistically significant to banks’ performance. Using a sample data of 31 listed companies on the Ghana Stock Exchange from 2006 to 2010, Puni (2015) reported that remuneration committee regressed positively on corporate financial performance. These results support the empirical evidence that critical processes and decisions are derived from board sub-committees such as audit, remuneration and nomination committees, rather than boards at large. These committees enable the boards to
cope with the limited time factor and the complexity of information that they need to deal with (Dalton et al., 1998). They argue that board committees help in bringing individual director’s specialist knowledge and expertise to bear on the board decision making process (Harrison, 1987). This also allows the main board to devote attention to specific areas of strategic interests and responsibility.

Using a sample of 606 large US listed companies, Vefaes, (1999b) documented a positive relationship between the establishment of nomination committees and the quality of new director appointments. Young and Bucholtz, (2010) found that the presence of a compensation committee is positively associated with the financial performance of New Zealand companies. They support the monitoring hypothesis of the agency theory that board committees are usually made up of independent directors or non-executive directors who are better placed to protect shareholders’ interest by effectively scrutinizing managerial actions (e.g. Klein, 1998; Vefeas, 1999). Consistent with recent evidence by Black & Kim (2012) in Korean 658 large public firms found nomination and audit committees to have a statistically significant and positive impact on large public firms’ performance.

Similarly, Lam and Lee (2012) examined the relationship between board committees and firm performance in a sample of 346 Hong Kong public listed firms from 2001-2003 and found a statistically significant and positive relationship between the presence of nomination committees and firm performance. Laing & Weir (1999) also reported that the companies, which introduced board committees to the board structure, performed better than those without them, and showed a significant improvement in firm performance by firms which introduced audit and remuneration committees. They argue that because of the relative small size of the board committees, they are able to meet regularly and frequently. This provides sufficient time for meaningful dialogue and in reaching consensus decisions quicker (Karamanous and Vefeas, 2005).

The second stream of empirical studies suggests that the presence of board committees impact negatively on firm financial performance (Main and Johnson, 1993; Vafaes, 1999; Bozec, 2005; Lam & Lee, 2012). In a sample of 220 large UK listed companies,
Main and Johnson (1993) examined the role of remuneration committees in UK board rooms and report that the presence of a remuneration committee with higher executive pay, impact negatively on shareholder value and firm performance. Using 307 US listed companies from 1990-1994, Vafaes (1999b) reported a negative relationship between the establishment of board committees namely; audit, remuneration and nomination and firm performance. These studies highlighted that committees may cause encroachment on the functions of the executive and dilution of executive authority, or may pre-empt management responsibility (Rainsbury et al., 2008; Barker 2002) and sometimes the committees are used as a rubber stamp to confirm management decisions.

Adams and Mehran (2005) found a statistically significant and negative relationship between performance and the number of board committees. Using a sample of 25 Canadian firms from 1976-2000, Bozec (2005) found the presence of audit committees to have a negative impact on firm performance. Using a sample of 17 Tunisian banks over the period 2002-2011, Zemzem and Kacem (2014) reported a negative relationship between risk management committees and banks’ performance. Shungu et al., (2014) found that board committees (risk, audit, remuneration, nomination, asset and liability) impact negatively on Zimbabwean commercial banks’ performance. In a sample of 346 Hong Kong listed firms for the period 2001-2003, Lam and Lee (2012) found a statistically significant and negative relationship between the presence of compensation committees and firm performance. Using a sample data of 31 listed companies on the Ghana Stock Exchange from 2006 to 2010, Puni (2015) found a negative relationship between nomination committee and corporate financial performance. They argue that, first the establishment of board committees imposes extra costs in terms of managerial time, travel expenses and additional remuneration for the members of the committees (Vefaes, 1999a). Secondly, board committees can result in excessive managerial supervision, which inhibit executive initiative and vision (Goodstein et al, 1994; Vefaes, 1998). Thirdly, it may also result in duplicating corporate board duties and responsibilities. This will have additional costs implications for firms.
The third stream of studies suggests no empirical relationship between board committees and financial performance (Klein, 1998; Vafaes and Theodorous, 1998; Laing and Weir, 2002; Petra, 2007; Kajola, 2008). Using a sample of 486 US firms over the period 1992-1993, Klein (1998) examined the association of the presence of board committee (audit, compensation and nomination) and financial performance but found no statistically significant relationship. Vafaes & Theodorous (1998) investigated the impact of board committees (audit, remuneration and nomination) on the financial performance of 250 UK listed companies in 1994. They found no evidence in favour of the idea that the existence of board committees significantly affected firm financial performance. Also, Kajola (2008) reported no significant relationship between the presence of audit committees and performance in a sample of 20 Nigerian listed firms from 2000 to 2006. These studies support the argument that board committees are not significance and relevant as far as firm performance is concerned.

With specific reference to banking industry, empirical results between board committees and bank performance have been found to be mixed. The majority of the existing studies about banks show a significantly positive relationship between board committees and banks’ profitability. Highlighting how banks with board committees control banks’ management opportunistic behaviour, monitor closely bank activities, and reduce bank risk-taking appetite (Sevam et al., 2006; Anderson et al., 2004; Barth et al., 2004). However, other studies reported that board committees negatively affect banks’ profitability. They support the view that the establishment of board committees imposes extra costs in terms of managerial time, travel expenses and additional remuneration for members of the committees (Vefaes, 1999).

**Empirical evidence from Ghana**

Focusing on Ghana where this thesis is based, prior studies examining the impact of board committees on firm performance have also found mixed results. Kyerebo-Cooleman and Amidu (2008) reported that the presence of audit committees impacts positively on the performance of SMEs in Ghana. Owusu (2012) also found that the audit and remuneration committees to be statistically insignificant but positively related to
ROA among Ghanaian listed firms. They concluded that the existence of board committees may improve corporate accountability, legitimacy and credibility by performing specific functions. In this respect, and given the focus of this thesis on audit, risk, remuneration and nomination committees, the functions of these board committees may minimize the agency problems with the ultimate improvement in firm performance.

By contrast, Puni (2015) found that nomination committee regressed negatively on corporate financial performance, while an audit committee has no significant impact on corporate financial performance. He argued that the creation of board committees add extra costs resulted from management time, travel expenses and additional fees paid to the members of the committees. He further concluded that these board committees can have negative effect on firm performance, a finding supported by Kyereboah-Coleman and Amidu (2008) who reported that the adoption of remuneration committee may increase agency costs. Given that the SEC code (2003; 2010) and Bank of Ghana draft regulation on corporate governance (2013) recommend that monitoring by board committees is expected to have a positive influence on firm performance. It is therefore argued in this thesis that the presence of board committees in the Ghanaian universal banks could help reduce agency costs and expected to have positive impact on bank performance.

As can be seen from the above mixed results that, there is no consensus as to whether banks with board committees are able to monitor and control managers or not. Thus, board committees issues are primarily concerned with the board’s ability to control and monitor managers. Therefore, if monitoring is implemented it is more likely that manager behavior will be controlled and agency costs are reduced which might result in better firm performance. Based on the above discussions, this study is to examine the relationship between board committees (risk, audit, nomination and remuneration) and bank performance in Ghana that whereas, there is paucity of prior literature related to this relationship. Therefore, the following hypothesis is proposed to be empirically tested.
H₀₃: The presence of board committees (risk, audit, and remuneration and nomination committee) should lead to better bank performance.

Arguably, the impact of the presence of board committees on bank performance in this area is at its emergent stage (Dalton et al., 1998; Laing & Weir, 1999). However, and given the important functions of board committees in an attempt to reduce agency problems, provide an interesting area for further research. This is particularly important in a developing country context as it may help to provide further insights on the board committees-performance relationship. It is therefore argued in this thesis that the presence of audit, risk, nomination and remuneration committees in Ghanaian universal banks could help to reduce agency costs and is expected to have a positive impact on financial performance.
<table>
<thead>
<tr>
<th>Author</th>
<th>Year</th>
<th>Study Period</th>
<th>Sample Period</th>
<th>Performance variable</th>
<th>Method</th>
<th>Summary results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black and Kim</td>
<td>(2012)</td>
<td>2006- 2009</td>
<td>68 large public companies</td>
<td>Tobin’s Q and ROA</td>
<td>Multiple Regression</td>
<td>There is a positive association between nomination committees ; audit committees .and firm performance</td>
</tr>
<tr>
<td>Black &amp; Kim</td>
<td>(2012)</td>
<td>1998 – 2004</td>
<td>658 public listed firms &amp; 611 smaller firms</td>
<td>Tobin’s Q</td>
<td>Panel data analysis</td>
<td>Nomination and audit committees are found to have significant positive impact on large public firms’ performance but not smaller firms. However, compensation committee has no impact on both large public firms and smaller firms.</td>
</tr>
<tr>
<td>Lam &amp; Lee</td>
<td>(2012)</td>
<td>2001 – 2003</td>
<td>346 public listed firms</td>
<td>ROA, ROE, ROCE, MTBV</td>
<td>Multiple regression</td>
<td>Nomination committee is found to have significant positive impact on firm performance. However, a remuneration committee has a significant negative impact on firm performance.</td>
</tr>
<tr>
<td>Author</td>
<td>Year Range</td>
<td>Sample</td>
<td>Time Period</td>
<td>Performance Measure</td>
<td>Methodology</td>
<td>Findings</td>
</tr>
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</tr>
<tr>
<td>Aebi et al.</td>
<td>372 US banks</td>
<td>July 1, 2007, to December 31, 2008</td>
<td>Buy-and-hold returns and ROE</td>
<td>OLS</td>
<td>Risk Committee show positive impact on performance</td>
<td></td>
</tr>
<tr>
<td>Young &amp; Bucholtz</td>
<td>New Zealand Listed Companies</td>
<td>2003 – 2007</td>
<td>Tobin’s Q and ROA</td>
<td>Panel Data</td>
<td>The presence of compensation committee is positively related to financial performance</td>
<td></td>
</tr>
</tbody>
</table>
Table 3. 8 Empirical research showing negative relationship between board committees and firm performance in USA, UK & Other countries

<table>
<thead>
<tr>
<th>Author</th>
<th>Study Period</th>
<th>Sample Size</th>
<th>Performance variable</th>
<th>Methods</th>
<th>Summary results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adams &amp; Mehran (2012)</td>
<td>1986-1999</td>
<td>35 US listed banks</td>
<td>Tobin's Q, ROA</td>
<td>OLS</td>
<td>Board committee has a negative correlation with Tobin's Q but has no impact on ROA</td>
</tr>
<tr>
<td>Bozec (2005)</td>
<td>1976-2000</td>
<td>25 SOE</td>
<td>ROS, ROA, NIE</td>
<td></td>
<td>The presence of audit committee has a negative relationship with firm performance. However, nomination committee has a positive impact on sales efficiency, NIE &amp; assets turnover.</td>
</tr>
</tbody>
</table>
Table 3.9 Empirical research showing no relationship between board committees and firm performance UK, USA and Other countries

<table>
<thead>
<tr>
<th>Researcher</th>
<th>Year(s)</th>
<th>Sample</th>
<th>Metric</th>
<th>Methodology</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kajola (2009)</td>
<td>2000-2006</td>
<td>20 listed Companies</td>
<td>ROE Profit Margin (PV)</td>
<td>Panel data analysis</td>
<td>The presence of audit committee has no significant impact on firm performance measured by ROE &amp; PM</td>
</tr>
<tr>
<td>Dulewicz &amp; Herbert (2004)</td>
<td>1997</td>
<td>300 question answered by board chairman</td>
<td>CFROTA Sales turnover</td>
<td>Multivariate Regression Analysis</td>
<td>No statistically differences in firm performance (CFROTA or Sales turnover) between boards with audit and remuneration committees and those that did not have one.</td>
</tr>
</tbody>
</table>

Researcher's Own Compilation (Various Literatures)
### 3.8 Bank size - financial Performance relationship

Bank size is another important element of performance as banks may enjoy economies of scale in both the adoption of corporate governance norms and financial operations. Bank size is considered to be an important determinant of its performance. Industrial economic theory postulates that if an industry is subject to economies of scale, large institutions will be more efficient, thus are able to produce services at a lower cost. Larger size is expected to have a positive effect on bank profitability. Recent studies have adopted the premise that there is a positive relationship between bank size and profitability based on the view that a larger size should allow a bank to obtain economies of scale (Iannotta et al., 2007) and Mercieca et al., 2007). Boone et al., 2007) found that as firms become larger and more diversified, the size of the board increases.

Larger firms may benefit from economies of scale and they are likely to have easy access to internal or external funds (Baumol, 1959 cited Lehmann & Weigand, 2000; Short & Keasey, 1999). In addition, they may be faced with higher agency costs, implying a higher demand for better monitoring processes, and this may mean that more competent managers are hired (e.g. Himmelberg et al., 1999). Larger firms are also more likely to be monitored closely by institutional or foreign investors, market regulators and the press (Helwege et al., 2007). These arguments suggest that there will be a positive relationship between firm size and performance. Agency costs include monitoring expenditures by principal such as auditing, budgeting, control and compensation systems, bonding expenditures by the agent and residual loss due to divergence of interests between the principal and agents. As bank size increases, agency costs are expected to increase. Since a large span allows for greater managerial discretion and opportunism, thus increasing monitoring cost (Jensen and Meckling, 1976). Bank size accounts for the economies or diseconomies of scale (Naceur & Goaied, 2008). However, complicated management structures in the larger banks with an increasing number of managerial layers may reduce efficiency. In general, large banks in terms of assets have the advantage of providing a larger menu of financial services to their customers which can be associated with more competitive fees and/or rates. Hence, bank size is included as
an independent variable in this study to examine the effect of corporate governance on bank performance. Consistent with the conflicting nature of the theoretical literature, empirical evidence regarding the relationship between the size of a bank and financial performance has proved inconclusive and mixed.

As can be seen from Tables 3.10, 3.11 and 3.12, key studies have found some mixed results (Staikouras & Wood, 2004; Adusei, 2011; Naceur & Omran, 2011; Sanda et al., 2005; Babatunde & Olaniran, 2009; Bino & Tomar, 2007; Micco et al., 2007). The first strand of the empirical literature reports that bank size impacts positively on financial performance (Beiner et al., 2006; Staikouras & Wood, 2004; Pasiouras and Kosmidou, 2007; Al-Khoury, 2011 and Naceur and Omran, 2011; Al-Sahafi et al., 2015). Using a sample of 11 listed banks on the Saudi Stock Exchange over the period 2009-2012, Al-Sahafi et al., (2015) found that there is a strong positive relationship between bank size and financial performance measured by ROA and ROE. This finding is consistent with previous studies that show the same relationship (Fallatah & Dickins, 2012; Pervan & Visic, 2012; Zeitun and Tian, 2007). Staikouras & Wood (2004) constructed the OLS and Fixed Effect Models to examine bank size and profitability of European banks over the period 1994-1998. The authors found that profitability of European banks is positively influenced by bank size. Similarly, Naceur and Omran (2010) found a positive and statistically significant relationship between size and profitability of a bank, because large banks have a higher degree of loans and product diversification than medium and small banks. Trujillo-Ponce (2013) pointed out that a large bank can enjoy economies of scope for the bank resulting from the joint provision of related services. With the number of observations of 43 commercial banks in 6 Gulf Cooperation Council countries over the period of 1998 – 2008, Al-Khoury, (2011) also found that there is a positive and significant relationship between bank size and return on assets. Suffian (2009) found a positive relationship between bank size and profitability of a bank, but it is insignificant at any conventional level. Naceur and Omran (2011) found a positive and significant relationship between bank size and performance.
Using a panel data of 16 Ghanaian insurance companies for the period 2005-2009, Tornyeva & Wereko (2012) found a positive but insignificant relationship between firm size and profitability measured by ROA and ROE. Similarly, Micco et al., (2007) find also, a positive and but no significant correlation. Pasiouras & Kosmidou (2007) studied internal and external factors determining the profitability of domestic and foreign commercial banks operating in 15 European Union countries in the period 1995-2001. The found a positive significant relationship between bank size and financial performance.

By contrast, another group of researchers reported that bank size impacts negatively on performance (Sanda-et-al., 2005; Babatunde and Olaniran, 2009; Ferde, 2012; Al-Manaseer et al., 2012)). Using a sample of 180 companies listed on the Nigerian Stock Exchange for the period of 1996 – 1999, Sanda-et-al., (2005) found a negative relationship between company size and financial performance, as proxied by ROA and ROE. Al-Manasser-et-al., (2012) found a significant negative relationship between bank size and performance as measured by ROA and ROE. The negative effect was explained by the agency problem associated with large banks. Using a sample of 25 listed banks in Bangladesh over the period 2003 -2011, Hoque-et-al., (2012), found a statistically insignificant negative relationship between bank size and performance measured by ROA and ROE. Using a sample data from 15 Ethiopian Commercial Banks for the period 2007 – 2011, Ferede, (2012) found a negative relationship between bank size and financial performance as measured by ROA and ROE. Similarly, using a panel data of 10 Tunisian banks for the period 2000-2010, Rachdi (2014) found a negative relationship between bank size and profitability measured by ROA. Agrawal and Knoeber (1996) reported a negative relationship between firm size and firm performance. They argue that larger firms might not be as efficient as smaller firms due to reduced control by management over strategic and operational activities as firm size increases.

Kasman (2010) found that size has a negative and statistically significant relationship impact on ROA and Net Interest margin on a panel of 431 banks in 39 countries. These studies argued that smaller boards enhance communication, cohesiveness and coordination, which make monitoring more effective. For instance, Jensen (1993) argued that large boards are less effective at monitoring management because of free-riding prob-
lems amongst directors and increased decision-making time. Other researchers, Banchuenvijit, (2012) and Goddard et al., (2005) argue that due to organizational rigidity brought about by bigger firm size and a lot of unnecessary bureaucracies, profitable opportunities that may want urgent attention will easily pass the firm and thus making them less profitable in relative terms and thus negatively impact on firm performance.

The last strand of empirical studies found no relationship between bank size and financial performance (Bino & Tomar, 2007; Ramadan-et-al., 2011; Micco-et-al., 2007). Using a panel data of 14 listed banks on the Amman Stock Exchange over the period 1997 to 2006, Bino and Tomar (2007) found that bank size has no impact on bank performance measured by ROA. This finding agrees with the one presented in Micco-et-al., (2007) that there is no correlation between bank size and performance as proxied by (ROA) return on assets. Ramadan, Kilani and Kaddumi (2011) investigated with 100 observations of 10 banks in Jordanian for the period 2001-2010 and found no statistically significant relationship between bank size and performance.

Empirical evidence on Ghana

In Ghana, the evidence is not different from the existing literature. For example, Gymerah and Amoah (2015) and Adusei (2011) found a positive association between the bank size and profitability among Ghanaian universal banks. They contend that larger Ghanaian banks have better opportunities than smaller banks in creating and generating funds internally and accessing external resources. In addition, large Ghanaian banks might benefit from economies of scale by creating entry barriers with a positive effect on bank performance. The positive coefficient lends empirical support to prior studies by Tornyeva and Wereko (2012) who found a positive but statistically insignificant relationship between firm size and profitability as measured by ROA and ROE among Ghanaian insurance companies. By contrast, Kyereboa-Coleman and Biekpe (2006a) found that bank size has a statistically insignificant negative relationship with financial performance. The negative coefficient also lends empirical support to prior studies (Abor and Biekpe, 2007). They argued that large Ghanaian banks might not be as efficient as the smaller banks due to reduced control by management over strategic
and operational activities as bank size increases. They further concluded that due to organizational rigidity brought about by bigger bank size and a lot of unnecessary bureaucracies, profitable opportunities that may want urgent attention will easily pass the bank and thus making them less profitable in relative terms and thus negatively impact on bank performance. It is therefore argued that large Ghanaian banks might benefit from economies of scale by creating an entry barrier with positive effect on bank performance.

Based on the above arguments, this study attempts to bridge the gap in the existing literature by investigating the association between corporate governance mechanisms and banks' financial performance in the emerging market of Ghana, it focuses on adding a new important variable of corporate governance mechanisms like bank size that improves bank performance. Consistent with the literature (Bennedsen et al., 2008) as a bank increases in size, it is expected that it will enjoy economies of scale, and therefore its financial performance should improve. Consequently, the following hypothesis is to be tested empirically:

**H04: The larger bank size should lead to higher bank performance**

Most of the prior studies have provided theoretical support for the industrial economy theory that large institutions enjoy economies of scale and therefore, its financial performance should improve. Larger firms are also more likely to be monitored closely to institutional foreign investors, market regulators and the press (Helwege et al., 2007). These arguments suggest that there will be a positive relationship between firm size and performance. It is therefore expected in this thesis for bank size to have a positive impact on financial performance.
Table 3. 10 Empirical studies on the positive relationship between bank size and firm performance in UK, USA and Other countries

<table>
<thead>
<tr>
<th>Author</th>
<th>Year</th>
<th>Study Period</th>
<th>Sample Size</th>
<th>Performance &amp; Measurement</th>
<th>Methods</th>
<th>Summary &amp; Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alkhouri</td>
<td>2011</td>
<td>1998 – 2008</td>
<td>43 Commercial banks from 6 Gulf Countries</td>
<td>ROA and ROE</td>
<td>Panel Data</td>
<td>Bank size has a positive relationship with profitability</td>
</tr>
<tr>
<td>Kosmidou &amp; Pasiouras</td>
<td>2007</td>
<td>1995 – 2001</td>
<td>Commercial banks from 15 EU countries</td>
<td>ROA and ROE</td>
<td>Multivariate Regression Analysis</td>
<td>They found a positive significant relationship between bank size and performance</td>
</tr>
<tr>
<td>Authors</td>
<td>Year</td>
<td>Period</td>
<td>Sample Description</td>
<td>Variables</td>
<td>Methodology</td>
<td>Findings</td>
</tr>
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<td>--------------------</td>
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</tr>
<tr>
<td>Ayaidi &amp; Boujelbene</td>
<td>2012</td>
<td>1995 – 2005</td>
<td>12 Tunisian banks</td>
<td>ROA and ROE</td>
<td>OLS</td>
<td>Found to be a significant positive relationship between bank size and performance</td>
</tr>
<tr>
<td>Ben Naceur and Oman</td>
<td>2011</td>
<td>1988 – 2005</td>
<td>173 banks from 10 MENA Countries</td>
<td>ROA and ROE</td>
<td>OLS</td>
<td>Find a positive and significant relationship between bank size and performance</td>
</tr>
<tr>
<td>Staikouras and Wood</td>
<td>2004</td>
<td>1994 – 1998</td>
<td>European banks</td>
<td>Using OLS and Fixed Effect (ROA &amp; ROE)</td>
<td>Panel Data Analysis</td>
<td>Authors found a positive relationship between bank size and profitability</td>
</tr>
<tr>
<td>Stancic et al.</td>
<td>2014</td>
<td>2005 – 2009</td>
<td>74 South East European Banks</td>
<td>ROA, ROE, Tobin’s Q</td>
<td>OLS</td>
<td>Bank size has a positive relationship with performance</td>
</tr>
<tr>
<td>Study</td>
<td>Year 1</td>
<td>Year 2</td>
<td>Sample Description</td>
<td>Methodology</td>
<td>Model</td>
<td>Findings</td>
</tr>
<tr>
<td>----------------------------------------------</td>
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</tr>
<tr>
<td>Alhassan et al.</td>
<td>2015</td>
<td>2007 – 2012</td>
<td>10 Saudi Listed Banks</td>
<td>ROE and ROA</td>
<td>OLS</td>
<td>Positive relationship between bank size and performance</td>
</tr>
</tbody>
</table>
Table 3. 11 Empirical studies on the negative relationship between bank size and firm performance in UK, USA and Other countries.

<table>
<thead>
<tr>
<th>Author</th>
<th>Year</th>
<th>Study Period</th>
<th>Sample Size</th>
<th>Performance &amp; Measurement</th>
<th>Method</th>
<th>Summary &amp; Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Al Mana-seer et al</td>
<td>2012</td>
<td>2004 – 2008</td>
<td>15 listed Jordanian Banks</td>
<td>ROA, ROE, Tobin’s Q</td>
<td>Multivariate Regression Analysis</td>
<td>Bank size is found to be negatively related to profitability</td>
</tr>
<tr>
<td>Study</td>
<td>Year</td>
<td>Period</td>
<td>Sample Description</td>
<td>Method</td>
<td>Model Method</td>
<td>Findings</td>
</tr>
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</tr>
<tr>
<td>Ben Naceur &amp; Omran</td>
<td>2011</td>
<td>1988-2005</td>
<td>173 banks from 10 MENA countries</td>
<td>NIM</td>
<td>Ordinary Least Squares</td>
<td>Found a significant negative relationship between size and performance</td>
</tr>
<tr>
<td>Ahmad Almazri</td>
<td>2011</td>
<td>2005-2009</td>
<td>7 Jordanian Commercial banks</td>
<td>ROA</td>
<td>OLS</td>
<td>Strong negative relationship between bank size and bank performance</td>
</tr>
</tbody>
</table>
Table 3. 12 Empirical studies showing no significant relationship between bank size and firm performance in UK, USA and other countries.

<table>
<thead>
<tr>
<th>Author</th>
<th>Year</th>
<th>Study Period</th>
<th>Sample Size</th>
<th>Performance &amp; Measurement</th>
<th>Methods</th>
<th>Summary &amp; Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ramadan et al.,</td>
<td>2011</td>
<td>2001-2010</td>
<td>10 Jordanian banks</td>
<td>ROA, ROE</td>
<td>Panel data analysis</td>
<td>Found no relationship between bank size and performance</td>
</tr>
<tr>
<td>Micco et al.,</td>
<td>2007</td>
<td>1999-2004</td>
<td>Banks from 119 countries</td>
<td>ROA, ROE</td>
<td>Ordinary Least Squares</td>
<td>No established relationship between bank size and performance</td>
</tr>
</tbody>
</table>

Source: Various Literatures; Researcher’s own compilation
3.9 Foreign ownership – performance relationship

The effect of foreign ownership on firm financial performance has been an issue of interest to academics and policy makers. According to Gorg and Greenaway (2004), the main challenging question in the international business strategy is the outcome gained from foreign ownership of firms. It is mainly accepted that foreign ownership plays a crucial role in firm financial performance, particularly in developing and transitional economies. Researchers (Aydin, Sayim and Yalama, 2007) concluded that, on average, foreign owned companies have performed better than domestically owned firms. It is therefore, not a surprise that the last three decades have witnessed increased levels of foreign direct investments in emerging economies. These authors have put forward two plausible reasons to explain the phenomenon of high performance associated with the foreign ownership of firms.

Foreign owners have the ability to monitor managers, and give them performance-based incentives, leading the managers to manage more effectively and avoid behaviors and activities that undermine the wealth creation motivations of the firm owners. The second reason is the transfer of new technology and tried and tested management practices to the firm, which help to enhance efficiency by reducing operating expenses and generating savings for the firm. On the performance of foreign banks there are two contrasting views, the home field advantage and global advantage hypotheses. The home field advantage hypothesis argues that domestic banks are generally more efficient than foreign owned banks due to organizational diseconomies to operate and monitor from a distance and limited access to soft qualitative information. The global advantage hypothesis argues that foreign banks can be more efficient because of superior managerial skills and high quality human capital inherited from foreign owners (Berger-et-al., 2000).

Foreign-owned banks are typically part of large banking organizations and generally face the same scale of economies and diseconomies as large, domestically owned institutions. They may have advantages in serving multinational customers by setting up branches in countries where their home country customers have foreign affiliates (Goldberg and Sunders, 1981). There are other plausible reasons for the enhanced perfor-
mance of foreign owned banks as compared to their domestic counterparts. Foreign owned banks may also have better access to capital markets, superior ability to diversify risks and the ability to offer some services to multinational customers not easily provided by a domestically owned bank. In developing countries, foreign owned banks may also have access to superior technologies, particularly information technologies for collecting and assessing "hard" quantitative information (Buch, 2003; Buch & Delong, 2004). The impact of foreign ownership upon bank profitability is associated to various reasons (Al-Manaseer et al., 2012). First, the capital contributed by foreign investors minimizes the fiscal costs of restructuring of banks (Tang, Zoli & Klytchnikova, 2000).

Second, foreign banks may offer expertise in risk management and a more superior culture of corporate governance, resulting in more efficient banks (Bonin et al., 2004). Third, the presence of foreign banks heightens the competition and urges local banks to cut costs and enhance their efficiency (Claessens & Fan, 2002). Most of these studies have argued that foreign owned banks are more profitable than their domestic counterparts in developing countries and less profitable than domestic banks in developed economies.

As can be seen from Tables 3.13, 3.14 and 3.15, prior studies found some mixed results on the relationship between foreign ownership and firm performance (Claessens & Van Horen (2012); Kim & Rasiah, (2010); Chari et al., (2012); Lensink & Naaborg, 2007; Barako & Greg, 2007; Shan & Mclver, 2011; Tsegba & Ezi-Herbert, 2011). The first strand of the empirical literature reports that foreign owned banks impact positively on financial performance. Using a data of foreign and domestic banks from 51 emerging and developing economies over the period 1999-2006, Claessens and Van Horen (2012), find that foreign banks tend to perform better when larger and having a bigger market share. They also argue that foreign banks perform better when they come from a high income country, when regulations in the country are relatively weak, and when from home countries with the same language and similar regulation as the host country. Kasman and Yildrim (2006) reported that foreign ownership is positively associated with bank performance in the eight Central and European countries. Similarly, using a sample data of foreign and domestic banks in Turkey, Bayyurt (2013) also reported that for-
eign ownership provides better performance than domestic banks. Similarly, using a sample data of 15 Jordanian commercial banks for the period 2007-2009, Al-Manaseer et al., (2012) found a positive relationship between foreign ownership and financial performance measured by ROA, ROE, and Profit Margin. The study supports that in emerging markets, foreign banks tend to be more profitable than domestic banks due to cost management advantage as a result of a superior operational set up obtained from their home countries (Bonin-et al.,2005). Chari et al., (2012) examined data of US firms over the period 1980-2006 and found that foreign banks impact positively on firm performance measured ROA. Using a sample data of 270 Japanese manufacturing companies over the period 1999-2006, Sueyoshi et al., (2010) found that there is a positive relationship between foreign ownership and operational performance. Similarly, Ghahroudi (2011) examined 3500 Japanese foreign firms over the period 2006-2007 and found a positive relationship between foreign ownership and performance measured by ROA, ROE and Net Profits.

Choi and Hassan (2003) examined the effect of ownership structure and bank performance during 1998-2002 by using an ordinary least squares model and found a significant and positive relationship between foreign owned bank and financial performance. Dauma et al., (2006) used financial data of 1005 Indian firms for the period 1999-2000; found that foreign ownership impacts positively on financial performance measured by return on assets (ROA). Using a data sample of 249 banks from 20 Middle East and North African countries for the period of 1998-2003, Kobeissi (2004) found that foreign owned banks performed better where financial performance was measured by return on assets (ROA) and return on equity (ROE) than both privately owned and state owned banks. These studies provide empirical evidence that foreign banks in developing countries may bring expertise in risk management and better culture of corporate governance rendering foreign banks more efficient (Bonin et al., 2005). Using a global sample, Micco et al., (2007) found that in developing countries, foreign owned banks appear to have higher profitability as measured by return on assets (ROA). This finding confirms that foreign investors have the ability and incentive to intervene in corporate governance to affect monitoring or complement existing poor monitoring by domestic investors (Gillian & Starks, 2003).
On a sample of South East European banks, Staikouras et al., (2008) found that foreign owned banks or banks with higher foreign bank ownership have higher performance and efficiency than the domestic banks. Similarly, using data from 23 Malaysian banks for the period 1995-2005, Kim and Rasiah (2010) found that foreign owned banks have better corporate governance and risk management practices that lead to positive financial performance, as measured by return on assets (ROA) and return on equity (ROE). Arouri et al., (2011) investigated 27 banks in the Gulf Cooperation Council countries for the year 2008 and reported that the foreign ownership level has a significant positive impact on bank performance as measured by ROA. Their findings support the view that foreign banks are more cost efficient than local banks and also provide better and quality services.

By contrast, a group of researchers reported that foreign owned banks impact negatively on financial performance (Lensink and Naaborg, 2007; Barako and Greg, 2007). Using a sample data of 511 banks from 73 countries for the period 1998-2001, Lensink and Naaborg (2007) found a negative relationship between foreign owned banks and financial performance, as measured by return on assets (ROA) and return on equity (ROE). The negative relationship between foreign ownership and performance lends support to the home field hypothesis which argues that domestic banks are generally more profitable than foreign banks due to organizational diseconomies to operate and the ability to monitor from a distance and limited access to soft qualitative information. Barako and Greg (2007) examined all the financial institutions in Kenya for the period of 2000-2004, and found that foreign ownership impacts negatively on financial performance. Using a sample data of 70 Indian banks for the period 1986-1991, Bhathahatya et al., (2007) foreign owned banks impact negatively on performance. Empirical studies by De Young and Nolle (1996), and Elyasiani & Mehdian (1997) found that foreign owned banks are less profit efficient as a consequent of their reliance on purchased funds. Chang et al., (1998) examined US multinational commercial banks and found that foreign owned banks are less efficient than US owned banks. The empirical studies showed that the lower performance of foreign banks compared with locals banks in developed countries were due to different markets, competitive regulation and disclosure conditions.
The third strand of empirical studies shows that there is no relationship between foreign ownership and firm performance (Shan and McIver, 2011; Millet-Reyes & Zhao, 2010; Tsegba and Ezi–Herbert, 2011; Gurbuz & Aybars, 2010). Using a sample data of 540 Chinese from non-financial firms listed in Hong Kong Stock Exchange over 2001-2005, Shan & McIver (2011) found no relationship between foreign ownership and firm performance. Millet-Reyes and Zhao (2010) examined 174 French companies with 650 firm year observations over the period 2000-2004, and found that foreign ownership has no significant impact on firm performance measured by ROA and Tobin’s Q. Similarly, using a sample data of 73 firms listed on the Nigeria Stock Exchange during the period from 2005 to 2007, Tsegba & Ezi-Herbert (2011) found that foreign ownership has no relationship with firm performance measured by EPS and ROA. Gurbuz and Aybars (2010) investigated 205 Turkish listed companies over the period 2005-2007, and found that foreign ownership has no significant effect on firm performance.

**Empirical Literature on Ghana**

Focusing on Ghana where this thesis is based, prior studies examining the impact of foreign ownership on firm performance have also found mixed results between the two. For example, Ntow and Laryea-Afoley (2012) reported that foreign ownership impacted negatively on financial performance among 25 Ghanaian banks over the period 2005-2010. They concluded that foreign investors are inherently at a disadvantage compared to domestic investors due to their lack of knowledge and expertise in the local financial and legislative environment. By contrast, Adams and Agbemade (2012) reported a positive relationship between foreign ownership and financial performance among 24 banks over the period from 2003 to 2007. Other study by Opoku-Agyeman (2015) found that foreign ownership had a positive and significantly impact on financial performance among 27 Ghanaian universal banks. They argue that foreign banks may offer expertise in risk management and a more superior culture of corporate governance, resulting in more efficient banks. They also reckon that existence of foreign investors plays an important role in applying the corporate governance in the companies. They also believed that the ability of the foreign investors to monitor the companies is higher than the do-
mestic ones. Therefore, foreign investors are in better position to improve on the firm performance and add value to the firm.

As can be seen above from the mixed results, there is no consensus as to foreign ownership perform better or not in the developing country. Thus, foreign owners are more likely to have the ability to monitor managers, and give them performance-based incentives, leading the managers to manage more seriously, and avoid behaviours and activities that undermine wealth creation motivations of firm owners. Therefore, if monitoring is strictly implemented it is more likely managers’ behaviour will be controlled and agency problems are reduced which might result in better firm performance. Based on the above discussions, this study aims to contribute to the on-going debate to serve not only the policy makers in deciding which path should be taken in developing countries, but also the literature to fill the gap on the link between foreign ownership and financial performance in developing countries and specifically Ghana. Therefore, the following hypothesis is proposed to be empirically tested.

**H05: Foreign ownership has a positive impact on bank performance**

Most of the prior studies have provided that foreign investors in the developing countries improve corporate performance through effective corporate governance practices (Staikouras et al, (2008): Iannotta et al., 2007). Foreign ownership is found to positively affect bank performance, thus suggesting that good corporate governance standards are imperative to every bank and important to investors and other stakeholders. Therefore, it is expected that in this thesis for foreign ownership to have positive impact on bank performance.
Table 3. Empirical studies showing a positive foreign ownership and firm performance UK, USA and other countries

<table>
<thead>
<tr>
<th>Author</th>
<th>Year</th>
<th>Study Period</th>
<th>Sample Size</th>
<th>Performance Measurement</th>
<th>Methods</th>
<th>Summary &amp; Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Al Mana-seer et al.,</td>
<td>2012</td>
<td>2007 – 2009</td>
<td>15 Jordanian banks</td>
<td>ROA, ROE, PM</td>
<td>Multiple Regression</td>
<td>Authors find a positive significant relationship between foreign ownership and performance</td>
</tr>
<tr>
<td>Chari et al.,</td>
<td>2012</td>
<td>1980 – 2006</td>
<td>US firms</td>
<td>ROA</td>
<td>Pobit Regression</td>
<td>Find a positive relationship between foreign firms and performance</td>
</tr>
<tr>
<td>Choi et al</td>
<td>2007</td>
<td>1999 – 2002</td>
<td>457 Korean companies</td>
<td>Tobin’s Q</td>
<td>Basic Regression</td>
<td>Find a positive relationship</td>
</tr>
<tr>
<td>Staikoura et al.,</td>
<td>2008</td>
<td>1996- 2002</td>
<td>Banks from South East European Countries</td>
<td>ROA, ROE</td>
<td>OLS Regression</td>
<td>Positive relationship between foreign owned banks and profitability</td>
</tr>
<tr>
<td>Authors</td>
<td>Year</td>
<td>Period</td>
<td>Sample Size</td>
<td>Variables</td>
<td>Method</td>
<td>Findings</td>
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</tr>
<tr>
<td>Ghabroudi</td>
<td>2011</td>
<td>2006</td>
<td>3500 Foreign firms in Japan</td>
<td>ROA, ROE, Net profit</td>
<td>OLS Regression</td>
<td>Positive relationship between foreign owned banks and performance</td>
</tr>
<tr>
<td>Sueyoshi et al.,</td>
<td>2010</td>
<td>1996-2006</td>
<td>270 Japanese companies</td>
<td>ROA, ROE</td>
<td>Panel data analysis</td>
<td>Positive relationship between foreign owned banks and performance</td>
</tr>
</tbody>
</table>
Table 3.14 Empirical studies showing a negative relationship between foreign ownership and firm performance in USA, UK and other countries

<table>
<thead>
<tr>
<th>Author</th>
<th>Year</th>
<th>Study Period</th>
<th>Sample Size</th>
<th>Performance Measurement</th>
<th>Methods</th>
<th>Summary &amp; Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bhattahytya et al.,</td>
<td>2007</td>
<td>1986 – 1991</td>
<td>70 Indian banks</td>
<td>ROA</td>
<td>Panel Data</td>
<td>Foreign ownership impact negatively on performance</td>
</tr>
<tr>
<td>Stancic et al.,</td>
<td>2014</td>
<td>2005 – 2010</td>
<td>74 commercial banks from 4 transition economies of South East Europe</td>
<td>ROA, ROE</td>
<td>Ordinary least Squares</td>
<td>Foreign ownership impact negatively on performance</td>
</tr>
<tr>
<td>Authors</td>
<td>Year</td>
<td>Period</td>
<td>Sample Description</td>
<td>Variables</td>
<td>Method</td>
<td>Findings</td>
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<tr>
<td>San, Then and Heng</td>
<td>2011</td>
<td>2002 – 2009</td>
<td>21 Malaysian banks</td>
<td>ROA &amp; ROE</td>
<td>DEA</td>
<td>Foreign ownership negatively impact on performance</td>
</tr>
<tr>
<td>Haneef</td>
<td>2012</td>
<td>2001 – 2010</td>
<td>45 Pakistani banks</td>
<td>ROA, ROE and Divi</td>
<td>Multivariate regression</td>
<td>Foreign ownership negatively impact on performance</td>
</tr>
</tbody>
</table>
Table 3.15 Empirical studies showing a no relationship between foreign ownership and firm performance in UK, USA and other countries

<table>
<thead>
<tr>
<th>Author</th>
<th>Year</th>
<th>Study Period</th>
<th>Sample Size</th>
<th>Performance &amp; Measurement</th>
<th>Methods</th>
<th>Summary &amp; Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shan &amp; McClver</td>
<td>2011</td>
<td>2001–2005</td>
<td>540 firms listed in Hong Kong Stock Exchange</td>
<td>Tobin's Q, ROA</td>
<td>OLS, Fixed Effect</td>
<td>Find that there is no relationship between foreign ownership and performance</td>
</tr>
<tr>
<td>Millet Reyes &amp; Zhao</td>
<td>2010</td>
<td>2000–2004</td>
<td>174 French Companies</td>
<td>Tobin's Q, ROA</td>
<td>Multiple Regression Analysis</td>
<td>Authors found that there is no relationship between foreign owned firms and performance</td>
</tr>
<tr>
<td>Tsegba &amp; Ezi-Herbert</td>
<td>2011</td>
<td>2005–2007</td>
<td>73 listed firms on Nige rian Stock Exchange</td>
<td>EPS, ROA</td>
<td>Panel Data analysis</td>
<td>No relationship found between foreign firms and performance</td>
</tr>
<tr>
<td>Gurbuz &amp; Aybars</td>
<td>2010</td>
<td>2005–2007</td>
<td>205 Turkish listed firms</td>
<td>ROA</td>
<td>Employ Quartile Regression</td>
<td>Authors found no relationship between foreign firms and performance</td>
</tr>
</tbody>
</table>

Source: Various Sources: Researcher's own compilation
3.10 An Overview of Existing literature

Even though there is a growing body of literature on corporate governance practices and company performance, there is a diversity of results due to the different theoretical perspectives applied, selection of methodologies, measurement of performance, conflicting views on board and ownership involvement in decision making and the contextual nature of individual firms (Kakabadse, Kakabadse & Kouzmin, 2001). They also argued that political opportunity, ownership structure, stakeholder interest, social infrastructure and mobilization have an influence on corporations and corporate stakeholders, demanding attention for good corporate governance practices. The past literature shows inconclusive findings and mixed arguments regarding the relationship between corporate governance and financial performance of universal banks in Ghana.

First, the focus of the existing literature is mainly on corporate governance characteristics and firm performance, but most of the reviewed studies are centered on non-banking firms and developed countries and very limited study has been done on banking institutions and developing countries such as Ghana. If banks and non-banks firms from different countries are included, differences in regulations, legal and governance systems could play a role in explaining differences between studies as there is substantial evidence that corporate governance of banks, financial regulation and national governance interaction (De Haan & Vlahu, 2013). Furthermore, institutional legal frameworks in emerging economies are not well developed compared to developed countries, which limits the benefits of their corporate governance efforts. These emerging economies show significant differences in terms of regulation, legal, investor protection, economic growth business environment and management practices.

Second, in addition, corporate governance in Ghana is still in the infantile stage compared to developed economies. Literature on corporate governance in Ghana is also limited. There are no previous studies conducted on corporate governance practices and universal banks’ performance in Ghana. The relationship between board structure, foreign ownership, and bank size is not well defined or analyzed in the existing literature.
3.11 Research Gaps

From the above studies reviewed, we observed that there are inconclusive findings and mixed arguments and hence, the researchers would want to ascertain (using the Ghanaian banking industry) whether there is a relationship between corporate governance structures and financial performance of the universal banks in Ghana. Thus, this study seeks to add to the debate by making it clear from a Ghanaian perspective whether corporate governance structures (e.g. board size, composition, committees, bank size, and foreign ownership) impact on universal banks’ performance. Secondly, little reference can be found or made from an African perspective on terms of the influence of corporate governance structure on the financial performance of universal banks. This study will make an original contribution to knowledge by examining the development of corporate governance practices in the social, political and economic environments of the Ghana as a particular case among the Sub-Saharan African countries.

The proposed study besides filling these research gaps will also contribute to the policy and development of bank governance structures in Ghana.

3.12 Summary

Corporate governance is the system by which firms are directed and controlled. It deals with the ways suppliers of finance can ensure that they will get a return on their investment (Cadbury report, 1992; Shleifer & Vishny, 1997). Because the literature includes several definitions to clarify the meaning of corporate governance from different perspectives and understandings, this chapter defined corporate governance also from two perspectives: shareholder and stakeholder. This chapter has focused on the extant theoretical and empirical on corporate governance and financial performance relationship literature. Its objective has been twofold. Firstly, it sought to review existing theories that attempt to link corporate governance structures with firm financial performance. Recognising the complex and multi-disciplinary nature of corporate governance, and in line with prior studies, multiple theoretical perspectives os adopted in explaining the
complex relationship between corporate governance structures and firm financial performance. The second objective of this chapter has been to review the extant empirical literature on the link between corporate governance structures and firm financial performance. The final objective of the chapter has been to review the empirical literature on Ghana and the empirical evidence on Ghana offer an interesting research context for corporate governance, as the dearth of empirical literature on Ghanaian market is very limited and scarce.

Arguably, this offers an opportunity to make substantial contributions to empirical literature. The literature also recognized that a structure that is appropriate to one organization may not be suitable for another, and if shareholder interests are to be promoted, greater flexibility in acceptable governance structures may be necessary (Weir et al., 2001). Prior research also reported that good corporate governance could help investors to have confidence in banks resulting in good banking performance. However, empirical studies of corporate governance and bank performance relationships reported mixed results. The literature review will be used to develop the relevant hypothesis in this study.
Chapter 4: Methodology

4.1 Introduction

The purpose of this chapter is to describe the research methodology of this study. Since the aim of this study was to test the effects of corporate governance practices on bank performance, the design of the methodology was based on prior research into these relationships. This chapter describes the research philosophy and methodology, method of data collection and the variables used to test the hypotheses and statistical techniques employed to report the results. The chapter is structured as follows. Section 4.2 discusses the research philosophy while Section 4.3 presents the research methodology. Section 4.4 discusses the descriptive statistics while Section 4.5 presents the panel data methodology adopted in this study. Section 4.6 presents the diagnostic tests for assumptions of multiple linear regression while Section 4.7 discusses the regression and panel methods. Section 4.8 discusses the choice between Pooled OLS and the two alternative estimations (FE and RE) while Section 4.9 presents the Hausman Test Specification. Section 4.10 discusses the Specification of Empirical Models while Section 4.11 presents the sample data criteria and selection. Section 4.12 reviews the data collection methods while Section 4.13 discusses the design of the variables: operationalization and measurement of variables. Section 4.14 presents the summary chapter.

4.2 Research Philosophy

Philosophical paradigm deals with the belief or worldview about the way data on a phenomenon should be gathered and analyzed (Levin, 1988). This study is based on the positivistic paradigm (also known as, experimentalist or traditionalist) which assumes that the world is external and independent of the researcher. Positivism is a philosophy of science based in the view that in the social as well as natural sciences data derived from sensory experience and logical and mathematical treatments of such data are together the exclusive source of all authoritative knowledge (Burrell and Morgan, 1988). Positivists are of the view that reality is stable and can actually be looked at and described from an objective and detached point without necessarily interfering with the phenomena being studied (Levin, 1988). This often involves manipulation of reality with
variations in only a single independent variable so as to identify regularities in, and to form relationships between, some of the constituent elements of the social world.

The approach of positivism to the social world in social research is basically about combining deductive logic with empirical and mainly quantitative methods in order to seek generally applying regularities. Positivism focuses on measurement and depends on facts to discover social phenomena and relationships. Hypotheses testing and measurements are elements of this methods research (Payne and Payne, 2004). This study takes the positivist paradigm in which the hypotheses are developed based on the notion of the impact of corporate governance on the bank’s financial performance that can be investigated and empirically examined using the researcher’s tools of analysis and the theoretical conjectures. Burrell and Morgan (1994) stated that positivists seek to explain and what happens in social world by searching world for regularities and causal relationships between its constituents. This study adopted a positivist approach, because a positivist approach seeks facts or causes of social phenomena. The reasoning is deductive because the hypotheses were derived first and the data were collected later to confirm or negate the propositions.

This study employs the use of the secondary data for gathering and analyzing the data to address its objectives. The philosophical approach adopted in this study was useful in dealing with the effects of board structure, foreign ownership and bank size on bank performance. In summary, the research philosophy of this study is informed by the fact that the study does not seek to produce a new theory but to test existing hypotheses based on analysis of quantitative data, thus the deductive approach is more appropriate for this research.
4.3 Research Methodology

Researchers around the world have employed two main research approaches, namely the quantitative and the qualitative research methods (Adams et al., 2007). The qualitative method presents a descriptive and non-numerical approach to collect the information in order to present understanding of the phenomenon (Berg 2004). Adams et al., (2007) argue that qualitative method employs methods of data collection and analysis that are non-quantitative, aims towards the exploration of social relations, and describes reality as experienced by the respondents. Babbie (2012) points out that qualitative method is an active and flexible method that can study subtle nuances in the attitudes and behaviours for investigating the social processes over time. On the other hand, Adams et al., (2007); Hussey and Hussey (2009) and Bryman (2012) point that the quantitative approach uses different types of statistical analysis and provides stronger forms of measurement, reliability and ability to generalize. Quantitative approaches refer to the research that is based on the methodology principles of positivism and neo-positivism and adheres to the standards of a stick research design developed prior to the actual research (Adam et al., 2007). Moreover, Berg (2004) argues that the quantitative method can deal with longer time periods with larger number of samples leading increasing the generalization capacity. However some researchers found that the qualitative approach suffers from a number of problems. First, it uses and selects a small sample which will not represent the entire population (Hakim, 1987). Second, transparency and reliability are still low in qualitative methods (Berg, 2004).

Finally qualitative methods are time consuming; it may result in inefficient tools to get adequate explanations (Bergs, 2004). Quantitative research design is used in this study. The quantitative method of data collection was adopted because of the availability of data, convenience as well as the nature of the research design which required past and documented facts as basis for performance evaluation.

The justification for adopting a quantitative method in this study stems from three plausible reasons – (i) the fact that existing theories make it easier to formulate hypotheses that can be tested using Statistical tools; (ii) provides a framework for addressing the relationship among variables in the study; and (iii) useful for dealing a cause and effect
Furthermore, this study applied deductive positivism approach whereby the pre-existing theoretical basis is identified and relied upon in developing the hypotheses, the empirical findings demonstrate whether the tested hypotheses are accepted or rejected. To achieve this objective, this study used the multiple regression as the main tool of analysis in which the researcher pursued the positivist understanding of the conduct of methodological processes that is “unaffected by the individual perceptual differences (Ardalan, 2012). Hair et al., (2009) stated that “the appropriate method of analysis when the research problem involves a single metric variable presumed to be related to two or more independent variables”. Therefore multiple regression analysis is chosen as the main tool of analysis in this study. Multiple regression model is one of the most common methods of analysis that have been used by previous researchers (Anderson and Leeh, 2003; Rant, 2011; Al-Sahafi, 2015; Dinga et al., 2009; Asm’a Al Amarneh, 2014) to investigate the relationship between corporate governance mechanisms and firm performance.

4.4 Descriptive Statistics

Descriptive statistics have been widely used in academic research on corporate governance (Abdullah 2004; Laing & Weir 1999; Lam & Lee 2008; Vafeas, 2000). Descriptive statistics measure central tendency and dispersion. The most commonly used measures of central tendency are mean, mode and median. The mean is the most important measure of central tendency (Veal, 2005). The descriptive statistics used were the mean, maximum and minimum. The mean was calculated to measure the central tendency of the variables in 2006 and 2014. Descriptive statistics are also useful to make general observations about data collected. They report on the trends and patterns of data and provide the basis for comparisons between variables. In this study descriptive statistics provided a comparison of changes in the data for 2006 and 2014. They show the extent to which banks have accepted the universal banking license concept on corporate governance and the trends of firm performance variables. The mean is the sum of all observations divided by the number of values. The equation is as follows:
Descriptive statistics show the mean, minimum and maximum values of the dependent variables (ROA, ROE), and independent variable (board size, board composition, board committees, bank size, and foreign ownership) and control variable (cost to income, bank age).

4.5 Panel Data Methodology

In analyzing the relationship between corporate governance and financial performance of universal banks in Ghana, the panel data methodology was adopted. The use of panel data regression methodology in this study is based on three fundamental justifications. (i) The data collected had time and cross sectional attributes and this will enable us to study bank financial performance over time (time series) as well as across the sampled universal banks (cross-section). (ii) Panel data regression provide better results since it increases sample size and reduces the problem of degree of freedom. (iii) The use of panel data would avoid the problem of multicollinearity, aggregation bias and endogeneity problems (Solomon et al, 2012). Panel data are said to be repeated observations on the same cross section, typically of individual variables that are observed for several time periods (Pesaran, Shin and Smith, 1999; Wooldridge, 2003; Bauma-et al,2003). Panel data analysis is an important method of longitudinal data analysis because it allows for a number of regression analyses in both spatial (units) and temporal (time) dimensions. It also provides a major means to longitudinally analyze the data es-
especially when the data are from various sources and the time series are rather short for separate time series analysis. Even in a situation when observations are long enough for separate analyses, panel data analysis gives a number of techniques that can help examine changes over time common to a particular type of cross-sectional unit.

According to Mills (1999), the spatial dimension in a panel data set is cross section dimension and in this case consists of Ghanaian universal banks in this thesis. The temporal dimension in this thesis relates to a number of observations of a set of variables representing these universal banks over a particular period of time. As indicated earlier data for 2006 to 2014 on corporate governance practices and bank performance measures was collected for this thesis and therefore covers a period of nine years. The nature of our panel data is in line with previous studies (Adusei, 2011; Kyerebo-Coleman & Biekpe (2006); Henry, 2008; Beiner et al., 2006) that ensured that requirements for balanced panel data analysis are met. In this thesis, panel data regression model in its form was estimated as below:

\[
Y_{it} = \beta_0 + \beta_1X_{it} + \ldots + \beta_kX_{kit} + u_{it} \quad (2)
\]

Where: □ Yit is dependent variable □ Xit represents explanatory variable □ i = 1, ..., N firms □ t = 1, ..., T time periods □ \( \beta_0 \) represents the constant term □ \( \beta_1 \) is the coefficient of the explanatory variables □ uit represents the error term

4.6 Test of Panel Regression Assumptions

Before analyzing the data, it was screened for econometric problems that might affect later analysis. Regression models are evaluated according to five tests prescribed by econometricians (Gujarati, 2003; Green, 1993). In order to predict the appropriateness of models, diagnostic tests such as normality, multicollinearity, autocorrelation, linearity and heteroskedasticity have to be conducted in order to confirm that the regression analyses meet the validity requirements. Ignoring the regression assumptions can con-
tribute to wrong validity estimates. When assumptions are not met, the findings may result in errors, over- or underestimation of significance. In addition, Breusch-Pagan Lagrange Multiplier (LM) test will be used to decide between a pooled OLS regression and alternative regression (Fixed Effects & Random Effects). Furthermore, the Hausman specification was conducted to choose between the Fixed Effects and Random Effects that are appropriate for the regression model.

First, the multicollinearity assumption is tested by conducting a correlation matrix among the variables. Strictly speaking, multicollinearity refers to existence of perfect or exact linear relationship amongst some or all explanatory variables. Econometric references have indicated that collinearity increases estimates of parameter variance, yields high R-square in the face of low parameter significance, and results in parameters with incorrect signs and implausible magnitudes (Mela & Kopalle, 2002). Gujarati (2004) and Green et al., (1998) respectively suggest 0.8 and 0.9 as a threshold of bivariate correlations for the harmful effect of collinearity. The Pearson’s Product Moment Correlation Coefficient \( r \) is a measure of the degree of association between variables. It takes a value between -1 and 1. A value of \( r \) near to 1 indicates a strong positive association, whereas a value of \( r \) near to -1 indicates a strong negative linear association. The Pearson’s correlation coefficient between variables \( X \) and \( Y \) is computed as follows:

\[
\begin{align*}
    \text{Equation 3: Pearson Correlation Coefficient Formula (r) is as follow:}
    \\
    r &= \frac{\sum XY - \left( \frac{\sum X \sum Y}{n} \right)}{\sqrt{\left( \sum X^2 - \left( \frac{\sum X^2}{n} \right) \right) \left( \sum Y^2 - \left( \frac{\sum Y^2}{n} \right) \right)}}
\end{align*}
\]

Where, \( n \) = number of observations

\[\sum X = \text{sum of all the observations } X\]

\[\sum Y = \text{sum of all the observations } Y,\]
The Pearson’s correlation matrix between variables include in the analysis alongside with their corresponding significance level. However, Pearson’s correlation analysis shows only the direction and degree of association among variables and it does not permit the researcher to make causal inferences regarding the relationship between the identified variables. Pearson’s correlation matrix was used in previous studies by (Vafeas, 2000; Guest, 2009; Adams & Mehran, 2008; Belkhir, 2005; Sanda-et-al., 2005 and Bino and Tormar, 2010) to measure the extent and direction of the linear relationship among independent (corporate governance variables and dependent variables performance measures).

Second, the normality assumption is tested by using Jarque Bera Statistic Test. Hair et al, (1998) argue that one common violation in multiple linear regression modeling is that of normality. Normality failures can lead to misleading inferences and unreliable estimations. Assessment of normality of a data is a prerequisite for statistical test because normal data is an underlying assumption in parametric testing. In this study, we used Jarque –Bera Statistic Test to conduct this normality test (Bowman and Shenton (1975) Jarque and Bera (1987) and we look for p-value for JB statistic. In null hypothesis, the assumption will be error term is normally distributed and if, so the p-value is greater than (a) 0.05, we should not reject the null hypothesis. We found that, Ho: error terms are normally distributed. The decision rule is to reject H_o if the p-value of the F-statistics <=0.05, otherwise do not reject the H_o.

Third, to further strengthen the result of the absence of multicollinearity, the study intends to carry out a residual diagnostic test of Variance Inflation Factor. Gujarati (2004)
illustrated that the existence of multicollinearity makes the assessment and the hypothesis testing about regression coefficients indeterminate. This is because multicollinearity makes the regression coefficient unstable and difficult to interpret. Thus, the standard errors for the coefficients are magnified making the coefficient statistically insignificant. Furthermore, multicollinearity can cause the coefficients to change signs, and makes it more difficult to identify the correct model. The variance inflation factor (VIF) is commonly used to identify the presence of multicollinearity. VIF illustrates the degree for every independent variable that has been explained by other independent variables to eliminate collinear variables. In other words, the change in one variable will change the coefficient. If VIF is bigger than 10 this indicates there is a problem with multicollinearity, but if it is less than 10, then it indicate no collinearity problem (Gujarati, 2003).

Fourth, a serial correlation test was conducted by using Breusch-Godfrey LM test. Serial correlation occurs when error terms from different time periods (or cross-section observations) are correlated. Therefore, it can be said that the error term is serially correlated. Serial correlation occurs in time-series studies when the errors associated with a given time period carry over into future time periods. This usually happens because there is an economic relationship between the observations, such as in time series data when observations are measurements of the same variables at different points in time, or in cluster sampling when observations are measurements of the same variables on related subjects (e.g. more than one member of the same family, more than one firm operating in the same company).

Fifth, we conducted a heteroskedasticity test. It occurs if different observations’ errors have different variances, such as \( \text{Var}(\varepsilon_i) = \sigma_i^2 \). The assumption of heteroskedasticity refers to equal variance of errors across all levels of independent variables. This means that errors are spread out consistently between variables (Keith, 2006). Thus, heteroskedasticity occurs when the variance of a disturbance is not constant. If the squared residuals get larger or smaller as a particular independent variable gets larger or smaller, then probably we will suffer from heteroskedasticity. When heteroskedasticity is marked it can lead to distortion of the findings and weaken the overall analysis and statistical power of the analysis, which can result in an increased possibility of errors,
erratic and untrustworthy F-test results and erroneous conclusions. This study used the Breusch-Pagan test for heteroskedasticity.

Sixth, according to Keith (2006) linearity is the most important assumption as it directly relates to bias of the whole analysis. Linearity defines the dependent variable as a linear function of the predictor (independent variable) (Darlington, 1968). Keith (2006) opine that if linearity is violated all estimates of regression coefficients, standard errors, and tests of statistical significance may be biased. For the purpose of this study, the Breusch Pagan LM (Reset test) will be conducted. The detection of linearity is examined by F (statistic) and its associated significant levels. If the diagnostic tests indicate no serious violation of the linear regression assumptions of linearity, normality, autocorrelation, collinearity and heteroscedasticity, suggesting that it is appropriate to carry out multivariate regression analysis.

Seventh, the Lagrange Multiplier (LM) version of the BP test is a general principle for testing hypotheses about parameters in a likelihood framework. The Breusch-Pagan Lagrange Multiplier (LM) Test helps to decide between a pooled OLS regression and the alternative effects (Fixed Effects and Random Effects). The hypothesis under the test is expressed as one or more constraints on the values of the parameters. To perform an LM test only an estimation of the parameters subject to the restrictions is required. This is in contrast with Wald tests, which are based on unrestricted estimates, and likelihood ratio tests which require both restricted and unrestricted estimates. The name of the test is motivated by the fact that it can be regarded as testing whether the Lagrange multipliers involved in enforcing the restrictions are significantly different from zero.

Finally, the Hausman Test is used to differentiate between the two estimation methods (Fixed Effects and Random Effects).
4.7 Regression and Panel Methods (Econometric Modeling)

Equation 4: General Model for Regression

\[ \Pi_{it} = \alpha + \sum \beta_j X_{it} + \varepsilon_{it} \] (1)

Where \( \Pi_{it} \) is the dependent variable measuring profitability and estimated by ROA and ROE for bank \( i \) at time \( t \), with \( i = 1, \ldots, N \), \( j = 1, \ldots, J \) and \( t = 1, \ldots, T \), \( N \) denotes the number of cross-sectional observations and \( T \) the length of the sample period. There is a constant term measured by the scalar \( \alpha \). \( X_{it} \)'s are the explanatory variables and \( \varepsilon_{it} \) is the error term (disturbance).

As there are two dependent variables, there will be two linear models with each dependent variable as a function of the explanatory variables. Thus, the analysis has been conducted using a Fixed Effect models using the Gretl software. The following equations summarize our econometric model.

Equation 5: General Model with ROA as dependent Variable

\[ ROA_{it} = \alpha + \beta_1 BOSIZE + \beta_2 BOCOMP + \beta_3 BOCOMM + \beta_4 FOREIGN + \beta_5 BANKSIZE + \beta_6 AGE + \beta_7 CIR + \varepsilon_{it} \] (2)

Equation 6: General Model with ROE as dependent Variable

\[ ROE_{it} = \alpha + \beta_1 BOSIZE + \beta_2 BOCOMP + \beta_3 BOCOMM + \beta_4 FOREIGN + \beta_5 BANKSIZE + \beta_6 AGE + \beta_7 CIR + \varepsilon_{it} \] (3)

Multiple regression analysis was used to examine the proposed research hypotheses. This is a statistical method that is used for analyzing the relationship between a single dependent variable and several independent variables. In multiple regressions,
hypotheses are tested and the independent variables whose values are known are used to predict the value of dependent variables (Hair-et-al, 2010). In this study, we used multiple regressions since we attempted to predict an outcome from various predictors (Field, 2005). Usually, the investigator seeks to ascertain the causal effect of one variable upon another. The regression line is described algebraically by the regression equation that expresses the relationship between two variables or more. Therefore, multivariate regression analysis were employed to test the association and strength of association between the dependent variables (ROA; ROE) and the independent variables; ownership structure, board size, board composition, board committees and bank size, while the control variables were bank age and cost to income ratio.

In addition to the Ordinary Least Squares method of estimation, a panel data analytical framework will be used to investigate the relationship between the governance mechanisms and bank financial performance with a proposal to address the potential problems of endogeneity. Thus, random effects or fixed effects as described later in this section. According to Mills (1999), the spatial dimension in a panel data set is a composite of the cross section dimension and in this case consists of the Ghanaian universal banks in this thesis. In contrast, the temporal dimension in this thesis relates to a number of observations of a set of variables representing these firms over a particular period of time. As indicated earlier, data for 2006 to 2014 on corporate governance practices and bank financial performance measures was collected for this thesis and therefore covers a period of nine years.

Fundamentally, there are three standard panel data regression models that arose from the general model described in equation (1) above with specific assumptions in relation to the explanatory variables, the properties of the error term, and the association between the explanatory variables and the error term. In addition, further assumptions need to be made regarding the variability of the regression coefficient across firms. In this respect, and as has been indicated earlier, a panel data regression model in this thesis may be estimated by Pooled OLS, Random Effects or Fixed Effects and are discussed as follows:
The Pooled Ordinary Least Squares (OLS) assume constant coefficients, that is, referring to both intercepts and slopes. In the event that there is neither a significant firm-specific effect nor significant temporal effects, it could be possible to pool all of the data and run a Pooled OLS regression model. Thus, the typical assumptions of constant variance and uncorrelated observations must continue to hold. However, this model is not appropriate if \( t \), the time period is small (Gujarati, 1995). Basically, the estimated Pooled OLS regression will be biased because of unobserved heterogeneity (\( X_{it} \) and \( u_{it} \) are correlated). But the bias may be lower because the Pooled OLS regression relies on between firm comparisons as well as within variation compared to the cross-sectional OLS regression. In this thesis the Pooled OLS regression is estimated in the following general term:

Equation: 7

\[
Y_{it} = \beta_0 + \beta_1 X_{it} + u_{it} \quad \text{(7)}
\]

Basically, the estimated Pooled OLS regression will be biased because of unobserved heterogeneity (\( X_{it} \) and \( U_{it} \) are correlated). But the bias may be lower because the Pooled OLS regression relies on between firm comparisons as well as within variation compared to the cross-sectional OLS regression.

Also, Random Effects model assume that the unobserved differences are not correlated with any of the explanatory variables. That is, \( vi \) are treated as random constant terms (Greene, 2012) where the intercept is a random outcome variable. The specific benefit of using the Random Effects model is that, the regressors allowed time-invariant variables to be included. In this instance, the random error \( v_i \) is heterogeneity specific to a cross sectional unit and in this case, firms. This random error is assumed to be constant over time. The equation of the random effects regression becomes:
Equation: 8

\[ Y_{it} = \beta_0 + \beta_i X_{it} + v_i + U_{it} \] .......................... (8)

Where \( v_i \) is between-firm error and it is within-firm error. Thus, \( v_i \) are assumed to be random variables and that \( \text{Cov}(X_{it}, v_i) = 0 \). But if \( \text{Cov}(X_{it}, v_i) \neq 0 \) the random effects estimator will be biased. Lastly, the fixed effects model assumes constant slopes but different intercepts for cross sectional (group) units, and in this case individual banks. Thus, the intercept is the cross section (group) specific that differs from bank to bank. Further, the error term \( (\epsilon_{it}) \) is assumed to be correlated with the explanatory variables. Even though there are no significant temporal effects when using Fixed Effects model, there are significant differences among banks. Thus, the Fixed Effects model is employed whenever one is only interested in analyzing the impact of variables that may vary over time. In this respect, it may be used to explore the relationship between the explanatory variables (corporate governance variables) and performance within a bank. This means that each bank has its own individual characteristics that may or may not affect the explanatory or the dependent variables. If these individual characteristics within a bank may impact or bias the explanatory variables or the dependent variables, then one needs to control these individual firm characteristics. In this thesis, the fixed effects model is in the following general form:
Equation: 9

\[ Y_{it} = \beta_i X_{it} + v_i + \epsilon_{it} \] .......................... (9)

Where \( v_i \) is the unobservable firm-specific effects which differ between firms and are time-invariant. In this respect, this thesis made use of the Hausman specification test on whether the random effects estimator is appropriate or not.

4.8 Choosing between Pooled OLS, and (Random and Fixed Effects)

In a panel data analysis, the assumptions underlying pooled OLS model are not likely to be met, and in particular, when there is unobserved heterogeneity which differs across the sampled universal banks. Thus, ignoring the heterogeneity makes the pooled OLS estimator inconsistent because the likely firm specific-effect cannot be addressed by the pooled OLS regression model. In this thesis, LM test helped to decide between pooled OLS regression and the alternative random or fixed effects regression. The null hypothesis in the LM test is that there was no significant difference across firms (i.e. no panel effect). The results whether the pooled OLS regression model, random or fixed effects regression was appropriate.

4.9. The decision between Random and Fixed Effects Regression Model

Given the suitability of the random effects or fixed effects as a method of estimation in this thesis, and following McKnight and Weir (2009), the Hausman specification test was used to differentiate between the two estimation methods for the hypotheses testing in chapter six. In this respect, and as explained in subsection 5.5.2 of chapter five, the Hausman specification test null hypothesis is that there is no correlation between the unique errors and the independent variables used in the regression model, suggesting a test of strict exogeneity. The decision was as follows: if there is no correlation between the unique errors and the independent variables, random effects regression model is
suitable. Otherwise, use the fixed effects model if there is a correlation between the unique errors and the independent variables.

4.10 Specification of the empirical model

For the purpose of empirical model specification for data analysis, the assumptions of panel regression models discussed above need to be tested in order to determine the best fit empirical model specification for the unique data set used in this thesis. Unlike Kajola (2008) who failed to test these assumptions before choosing pooled OLS as a method of estimation, and as is explained in chapter five, this thesis is choose between pooled OLS regression and the alternatives of Random effects and Fixed effects. Breusch and Pagan (1980)’s used the Langrange Multiplier test to determine whether or not there is heterogeneity. If the pooled OLS estimator is found to be inconsistent and biased due to unobserved variables, then, the choice between random effects or fixed effects is decided by the Hausman specification test to help distinguish between the consistency and efficiency of the estimators.

Fundamentally, if this thesis had employed pooled OLS regression and the unobserved variables are uncorrelated with the error term ($u_{it}$) and the independent variables when the random effects regression is suitable, the OLS estimator would have been consistent but not efficient. However, if there are no unobserved variables which are unlikely to hold in this thesis, then OLS will be efficient. Otherwise, the random effects regression will be more consistent and efficient. In the same vein, if a pooled OLS regression is employed when a fixed effect regression is suitable, the OLS estimator will be inconsistent while the fixed effects model will be consistent. Also, if a random effect regression is used when fixed effects regression is suitable, then the random effect model will be inconsistent. In this respect, one needs to be very careful in choosing a suitable estimator in this thesis. The suitability of the empirical model specification in this thesis was determined after first applying Breusch and Pagan (1980)’s Langrange Multiplier test. This test statistics enables the researcher to make the choice between the suitability of pooled OLS regression and the alternative random and fixed effects regression.
Following that, the Hausman specification test was used to distinguish between random and fixed effects regressions for the empirical analysis in chapter six. The Hausman specification test (Hausman, 1978) compares Fixed Effect and Random Effects models. If the null hypothesis that the individual effects are uncorrelated with the other regressors in the model is not rejected, a Random Effect is better than its Fixed Effect counterpart.

4.11 Sample data criteria and Selection

This study covers the universal banking firms operated in Ghana that provided full information for the period from 2006 to 2014. The study used 21 out of 26 universal banks. In all, 189 bank year observations were obtained after editing the annual reports of the 21 universal banking companies, made up of 11 foreign banks and 10 local banks. The period under study was from 2006 to 2014. The period marks a significant period of reform within the Ghanaian banking industry and the full implementation of universal banking business license in 2006 that created a level-playing service platform for all commercial banks in the country. The universal banking business license (UBBL) replaced the traditional 3 pillar banking model in Ghana which were commercial, development and merchant banking (Bawumia, 2010). It gave freedom to all banks to engage in all permissible banking business and products without restrictions or compartmentalization. The data and information relate to the five questions of this research on board structure, foreign ownership and bank size. Furthermore, extra data was manually collected from the Ghanaian universal banks’ annual reports and Ghana Banker Association/ PricewaterCoopers annual banking survey reports. In addition, they report that information and data based on annual reports’ entries are doubly checked by the researcher.

Both database provided a summary of ownership structure, balance sheet, income statements, financial ratios, a number of directors including non-executive directors and the name of the audit firms. These were chosen based on the following criteria; any bank that could not provide nine years annual reports was excluded from the sample. As a result, five universal banks primarily local banks were excluded because of non-availability of their annual reports covering the study period. Following previous studies
(Yermack, 1996; Cheng et al., 2008) this study used the same criteria that have been used in selecting the sample. Cheng et al., (2008) argued that to criteria above assisted in meeting the needs for a panel data analysis for firms with several sequential years of data. Furthermore, the sample ends in 2014 because this is the most recent year for which data was collected.

4.12 Data Collection Methods and Data Types

The secondary data and information required for the study were collected from hard-copies of annual reports and audited bank financial statements of the 21 banks. Other information were also obtained from the website of PriceWater House Coopers/ Ghana Banker Association annual survey reports on banks in Ghana, as well as their websites over the period 2006-2014. Since the study required background information such as age, size and the ownership structure of the banks the websites were surfed to glean such data where they could not review.

4.13 Financial Performance Variables (Dependent Variables)

Historically, different measurements have been used in order to examine firm performance by different studies (Cochran &Wood, 1984; Ittner and Larcher, 2003). Most of the studies examine firm performance used a diversity of financial performance measures such as Tobin’s Q. (Managena et al., 2012; Trabelssi, 2010; Al-Hawary, 2011; Bino &Tomar,2007), ROA ( Heentigala, 2011; Ranti; 2011 Ntim, 2009; Staikouras et al., 2008), ROE (Baussaad and Karmani, 2015; Wiredu et al., 2014; Gordini, 2014). The above measures can be categorized into two main groups: market based on one hand, and accounting based on the other. Daily and Dalton (2003) suggested that the accounting based measures consider the current financial performance of a company, while on the other hand, market based measures consider the investor perception of the company. Haniffa and Huduiab (2006) argued that there is no consensus in the literature on which measure is the best indicator of financial performance. In addition, they reported that every measure has its own strengths and weaknesses. Thus, there is no specific measure to be the best proxy for financial performance.
Market based measures of firm performance are particularly problematic in the context of emerging markets, where most firms are characterized by debt-financing rather than equity financing. The market share price of firms reflects their market value with the proviso that the capital market is efficient according to the Efficient Market Hypothesis (Gomper et al., 2003). Ghana is one of the developing countries where the stock market is yet to be developed into a comparable manner with established ones in developed economies. For instance, the impacts of publicly disclosed /available information will influence the market after a lag time which will manifest in share prices. Financial performance is subject to a great degree of internal control; however, market valuation is subject to fluctuations beyond management control, such as changes in market valuation and stock declines (Grossman & Hoskisson, 1998). Furthermore, Black et al, (2006) argued that market based measures like Tobin’s Q represent the financial estimation of governance structure by outsiders. Tobin’s Q ratios used as proxies for market based measures is defined as the market value of equity divided by replacement cost (Yermach, 1996). Haniffa & Hudaib (2006) argued that Tobin’s Q ratio measure the effective value for the shareholders.

Different researchers have pointed out advantages of using accounting based measures (ROA and ROE) in examining the firm performance. Kyereboa-Coleman & Biekpe (2006) defined ROA as the total net income divided by the book value of total assets while Zemzem & Kacem defined ROE as the total net income divided by the book value of equity. Generally, higher ROA and ROE denote an effective use of firm assets and equities in increasing the value of shareholder wealth by management. However, the use of accounting based measures has been criticized from different perspectives. First, Ross et al., (2008) argued that ROA and ROE are historical measures. Krivogorsky (2006) pointed that accounting measures are grounded in historical cost accounting. Second, Alexander et al., (2007) and Mangena and Tauringana (2007) argued that accounting based measures are subject to changes and alterations in accounting methods, techniques and policies. Finally, Ross et al., (2008) point out that accounting based measures ignores risk. Despite the shortcomings of accounting measures, from a shareholder’s point of view, ROA and ROE are considered to be important ratios because they focus on the return of the shareholders and assets. The ac-
counting based measure such as ROA and ROE are directly related to management’s ability to efficiently utilize firm assets.

One major difficulty with Tobin’s Q measure is that a large proportion of shares of universal banks are not listed on the Ghana Stock Exchange and cannot be traded freely, and therefore do not have market prices during the sample periods. Given this constraint, we adopt for this study, ROA and ROE as proxies for bank financial performance from the accounting based measures. Return on Assets is an indicator of how profitable a company is or how efficient is the management at using its assets to generate earnings, and is sometimes referred to as return on investment. It is calculated by dividing a company net income by its total assets:

**Return on Assets (ROA) = (Net Income)/ (Total Assets)**

Kyereboa –Coleman & Biekpe (2006) defined as the total income divided by the book value of total assets and it is considered as a primary measure of firm performance. This ratio is the most used ratio to integrate accounting based performance as proxy for firm performance (e.g. Lam and Lee, 2008).

**Return on Equity (ROE) = (Net Income)/ (Total Equity)**

Zemzem & Kacem (2014) defined ROE as the net income divided by the book value of equity. Return on Equity measures the profit of a company by revealing how much profit is generated with regards to the amount of money invested by the investor. It is calculated by dividing a company net income by its total equity. It is known as Return on Net Worth. All of the financial information that is related to ROA and ROE variables is extracted from balance sheets that are provided from the bank annual reports.
Figure 3. Return on assets

Source: Researcher's Own Compilation (Various Literature)
4.14 Control Variables

In addition to the variables that are used to hypothesize the relationships, a number of variables that are important in determining the financial performance of banks in the literature are also considered in this study, such as bank age and cost to income ratio. From the previous variables, control variables have been introduced to explain the firm performance variation. Different studies (Morck et al., 1988; Yermack, 1996; Gomper et al., 2003; Black et al., 2006; Chenhall and Moers, 2007) used different control variables. List of control variables used in this study (e.g. bank age, cost to income ratio). The researcher acknowledges that, it could also be argued that other relevant factors may exist. However, by reviewing the previous literature there is no specific formula for the control variables. Therefore, by following different studies it is common practice to include the below control variables. Cost-to-income ratio was extracted from the Banks' annual reports.
4.14.1 Bank Age

Bank age has been used in a number of studies in terms of the number of years a firm has been incorporated (Boone et al., 2007; Berger and Udell, 1998). They pointed out that firm age is a valuable indicator of expected growth opportunities. For example, Claessen et al., (2003) confirmed that older and larger firms have more liquid trading, better disclosure, receive more attention from analysts and have more diversified activities, leading to lower risk of financial distress but less growth opportunities. Age has been used as a proxy for the time a bank has been in business. A bank that has been in business for long should perform better than a new bank because of a learning effect.

4.14.2 Cost-Income Ratio

Pasiouras et al., (2007) defined cost to income ratio as a cost of running a bank represented by occupancy expenses, staff costs and other related expenses. Cost to income ratio is used as a proxy for operating efficiency. It is calculated as total operating cost/total income. The ratio encompasses major elements of operating costs such as administrative costs, staff salaries and benefits, property costs, etc. It generally shows the cost of running the bank relative to the earnings of the bank. A negative relationship is expected out of cost-to-income ratio and profitability since the higher the costs and expenses, the more inefficient the bank would be, culminating in low profitability. The ratio was adopted by Liu and Wilson (2010), Dietrich and Wanzenried (2011), and Guillen et al., (2014). In Ghana, both Gyamerah and Amoah (2015) and Owusu-Antwi et al., (2015) employed cost to income ratio as measures of efficiency. A negative relationship is expected between cost-to-income variable and the dependent variables.
4.15 Independent (Corporate Governance) Variables

4.15.1 Board Size

The empirical findings in previous studies are mixed regarding the relationship between board size and firm performance. Some studies (e.g. Andres and Vallecado, 2008; Guest, 2009; Adusei, 2011; Pathan et al., 2007) found evidence consistent with the view of agency costs; that small boards are related with firm performance. The previous studies argued that as board size increases, the problems of coordination and communication increase, thus decreasing the ability of board members to monitor management behavior and thereby increasing the agency problem and resulting in lower firm performance. In the same vein, large boards will reduce the monitor and control function of the board by giving managers space to pursue their own interests rather than those of the principals. However, some studies (Adams & Mehran, 2012; Busta, 2008; Henry, 2008; Lehn et al., 2009) found that large boards affect firm performance positively, consistent with the resource dependency theory, due to improved linkages to external resources (Hillman & Dalziel, 2003).

In addition, large boards allow directors to exchange more highly qualified counsels and present extra scope for the possibility of correlation with different external linkages access to resources. Thus, from the mixed results there is no consensus as to whether larger or smaller boards are better. Therefore, this study will investigate the relationship between board size and firm performance. Following, Yermach (1996), Ahmed et al., (2006) and Bennedsen et al., (2008), Board size (labelled as (BOSIZE) is defined as the number of directors who are on the board, as shown in Table 9. The number of directors was extracted from the Ghanaian universal banks’ annual report.
A commonly used approach to operationalize board composition is the proportion of non-executive directors to total directors (Abdullah 2004; Leng 2004; Kiel and Nicholson, 2003). In this study, board composition is defined as the number of non-executive directors divided by the total number of directors on the board which will also be used in this study. The empirical findings in previous studies are mixed regard-
ing the relationship between board composition and bank performance. Some studies (e.g. Erkens et al., 2012; De Andres et al., 2005; Wier & Laing, 2001; Al-Sahafi et al., 2015; Bino & Tomar; 2007) found evidence that non-executive directors impact positively on bank performance. Their studies support the industry views that the appointment of non-executive directors to bank boards as a positive corporate governance practice. This is because the presence of non-executive directors can potentially improve the independence of a bank board and its decisions. Erkens et al., (2012) found a positive relationship between non-executive directors and bank performance. Their studies support the assertion that the representation of non-executive directors increases the effectiveness of monitoring; hence the performance of the bank should improve. However, some studies (Adams, & Mehran 2003; 2011; Romano et al., 2012; Kyereboa-Coleman & Biekpe, 2007; De Anders and Valletado, 2008; Sanda et al., 2005) reported that board composition is negatively correlated with bank performance. Thus, from the mixed results, there is no consensus as to whether non-executive or executive directors are better. Therefore, this study will investigate the relationship between the board composition and bank performance. In this study, board composition (NEDs) is considered as a percentage of the number of the total directors on the board as shown in Table 4.1. The number of non-executive director was extracted from Ghanaian banks’ annual reports.
4.15.3 Board Committees

The empirical findings in previous studies are mixed regarding the relationship between board committees and firm financial performance. Some studies (e.g. Bussolli, 2013; Puni, 2015; Heentigala, 2011) found a positive relationship between board committees and firm financial performance. They support the monitoring hypothesis that board committee are usually made up of independent directors, making them better placed to protect shareholders’ interest by effectively scrutinizing managerial actions (e.g. Klein, 1998; Vefeas, 1999). In the same vein, by their relative small size board committees are
able to meet frequently. This provides sufficient time for meaningful dialogue and in reaching consensus decisions quicker (Karamanous and Vefeas, 2005).

However, some studies (Shungu et al., 2015; Bozec, 2005; Zemzem & Kacem, 2015) found that the presence of board committees impact negatively on firm financial performance. They support their arguments that the establishment of board committees imposes extra costs in terms of managerial time, travel expenses and additional remuneration for the members of the committees (Vefeas, 1998). They further argued that board committees can result in excessive managerial supervision, which can inhibit executive initiative and vision (Goodstein et al., 1994; Conger et al., 1998). Thus, from the mixed results there is no consensus as to whether the presence of board committees impact negatively or positively on performance. Therefore, this study will investigate the relationship between board committees and firm financial performance. Following Shungu et al., 2015 and Heentigala (2011) is defined as the number of board committees in a firm.
Figure 7. Board committees (number of committees)

| Source: Researcher's Compilation (Various Literature) |

4.15.5 Foreign Owned Banks

Previous studies have found mixed results between foreign ownership and bank performance (Al-Manaseer et al., 2012; Bonin et al., 2005, Kim and Rasiah, 2010; Barako & Greg, 2007, Lawer –Tetteh, 2014; Majnoni et al., 2003). Authors such as Al Manaseer et al., (2012; Majnoni et al., 2003; Micco et al., 2007 and Kobeissi (2004) found a positive impact on foreign ownership on bank performance due to improved monitoring. They also argued that foreign banks in developing economies may have access to superior technologies especially information technologies for collecting and assessing ‘hard quantitative information as well as monitoring their customers (Buch & Delong, 2004). Kim and Rasiah (2010) found that bank performance is positively related to foreign ownership in emerging markets. They also argued that foreign banks may offer expertise in risk management and a more superior culture of corporate governance, resulting in more efficient banks (Bonin et al., 2004). The financial sector reforms in particular (since the 2000s) have also attracted more foreign capital and investments in the Ghanaian banking industry. Furthermore, the three laws, Ghana Investment Promotion Center Act 1994 Act 478; Banking Act 2004 Act 673 and Foreign Exchange Act 2006 Act
726 have provided for equal treatment for both domestic and foreign investors in Ghana. Previous studies (Barako & Greg, (2007); Lawer-Tetteh, (2014) Asma’a Al-Amarneh (2014), reported that foreign owned banks impact negatively on bank performance. They argued that poor performance of foreign banks in the emerging markets was due to lack of understanding about local markets, and local culture which this study investigates with regard to Ghanaian universal banks. Foreign ownership (labeled as foreign) is defined as 51% of the total percentage of shares owned by foreign investors, as shown in Table 4.1 below.

### Figure 8

**Foreign banks (number of foreign banks in countries)**

<table>
<thead>
<tr>
<th>Source</th>
<th>Number of Foreign Banks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Al Manaseer et al. (2012), Jordan</td>
<td>15</td>
</tr>
<tr>
<td>Uwuigbe &amp; Olusami (Nigeria, 2012)</td>
<td>31</td>
</tr>
<tr>
<td>Asma’a Al-Amarneh (2014), Jordan</td>
<td>13</td>
</tr>
<tr>
<td>Lawe Tetter (2014), Ghana</td>
<td>27</td>
</tr>
<tr>
<td>Majnoni et al. (2003), Hungary</td>
<td>26</td>
</tr>
<tr>
<td>Kim &amp; Rasiah (2010), Malaysia</td>
<td>23</td>
</tr>
<tr>
<td>Babak &amp; Greg (2007), Kenya</td>
<td>14</td>
</tr>
</tbody>
</table>

Source: Researcher’s Compilation (Various Literature)

### 4.15.6 Bank Size

Different researchers report an ambiguous relationship between the bank size and bank performance (Ranti, 2011; Al-Sahafi et al., 2015; Al-Manaseer et al., 2012; Babatunde and Olaniran, 2009; Ferde, 2012; Adusei, 2011; Rachdi, 2014; Taskin, 2012; Hoque et
Researchers such as Al-Sahafi et al. (2015), Adusei (2011); Trujillo-Ponce (2013) argued that larger banks have better opportunity than the smaller ones in creating and generating funds internally and accessing external resources. In addition, larger banks might benefit from economies of scale by creating entry barriers with a positive effect on bank performance. Serrasquereiro and Nunes (2008) recommended larger firm sizes to benefit performance. This is because, large firms have better opportunity to raise funds and more diversified strategies. In addition, it has a wide variety of expertise management. Black et al (2006) showed that firm size positively affects firm performance. Trujillo –Ponce (2013) pointed that large banks can enjoy economies of scope for the bank resulting from the joint provision of related services.

On the other hand, other researchers (Babatunde & Olanran, 2009; Al-Manaseer et al., 2012; Ranti, 2011; Ferede, 2012; Hoque et al., 2012; Rachdi, 2014) reported a negative relationship between bank size and performance. They argued that larger banks might not be as efficient as smaller banks due to reduced control by management over strategic and operational activities as bank size increases. As size increases, agency problems may increase, this may outweigh the efficiencies of large banks efficiency achieved through economies of scale and scope which in turn lead to bank inefficiencies. Garen (1994) argued that the cost of complying with corporate governance codes requirements will be comparatively low for the larger banks. However, this cost will increase if the banks are subject to public media scrutiny. This is because; larger banks will be subjected to high levels of media scrutiny.

Other authors such as Jensen & Meckling (1976) argued that as firm size increases agency costs are likely to increase. The increase in costs is due to the need for more control that results from managerial discretion and opportunism. Moreover, the growth of a firm will result in increasing the internal control tools for forecasting and designing. This will raise the need for aligning the interest of managers and shareholders (Jensen and Meckling, 1976). In line with previous studies (e.g. Al-Sahafi et al., 2015; Bennedsen et al., 2008; Lehn et al., 2009) who used total assets as a proxy for bank size, this study will measure bank size by using the natural logarithm of total assets.
Total assets were extracted directly from the balance sheets provided by various annual reports.

FIGURE 9 BANK SIZE

Bank Size (assets)

<table>
<thead>
<tr>
<th>Source</th>
<th>Bank Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ronti (Nigeria, 2011)</td>
<td>21</td>
</tr>
<tr>
<td>Al-Saha et al (Saudi Arabia, 2015)</td>
<td>11</td>
</tr>
<tr>
<td>Al-Manasee et al (Jordan, 2012)</td>
<td>15</td>
</tr>
<tr>
<td>Ferede (Ethiopia, 2012)</td>
<td>15</td>
</tr>
<tr>
<td>Aduasi (Ghana, 2011)</td>
<td>17</td>
</tr>
<tr>
<td>Rachid (Tunisia, 2014)</td>
<td>10</td>
</tr>
<tr>
<td>Taskin (Turkey, 2012)</td>
<td>43</td>
</tr>
<tr>
<td>Trujillo-Ponce (Gulf banks, 2014)</td>
<td>43</td>
</tr>
<tr>
<td>Hoque et al (Bangladesh, 2012)</td>
<td>25</td>
</tr>
<tr>
<td>Bino and Tomar (Jordan, 2007)</td>
<td>14</td>
</tr>
</tbody>
</table>

Sources: Researcher’s Compilation (Various literatures)
<table>
<thead>
<tr>
<th>Variable</th>
<th>Notation</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Return on Assets</td>
<td>ROA</td>
<td>Profit after tax / Total asset employed</td>
</tr>
<tr>
<td>Return on Equity</td>
<td>ROE</td>
<td>Profit after tax / Total Equity</td>
</tr>
<tr>
<td>Board Size</td>
<td>BOSIZE</td>
<td>total number of members of the board of directors</td>
</tr>
<tr>
<td>Board Composition</td>
<td>BOCOMP</td>
<td>The proportion of Non-executive directors to the total directors on the board</td>
</tr>
<tr>
<td>Board Committees</td>
<td>BOCOMM</td>
<td>The number of committees present in each bank.</td>
</tr>
<tr>
<td>Bank Ownership (Local Bank and Foreign Bank)</td>
<td>OWN (Dummy)</td>
<td>Local if ownership is 51% and over and Foreign if ownership is 51% and over.</td>
</tr>
<tr>
<td>Bank Size</td>
<td>BNKSIZE</td>
<td>natural logarithm of bank total assets</td>
</tr>
<tr>
<td>Bank Age</td>
<td>BANKAGE</td>
<td>years of incorporation</td>
</tr>
<tr>
<td>----------------</td>
<td>---------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>Cost to Income Ratio</td>
<td>CIR</td>
<td>(operating expenses + other costs) / Net income</td>
</tr>
<tr>
<td>E</td>
<td>Error Term</td>
<td>Error term</td>
</tr>
<tr>
<td>$\beta_i$</td>
<td>Beta</td>
<td>Regression coefficients in the ROA Model</td>
</tr>
<tr>
<td>$B_j$</td>
<td>Beta</td>
<td>Regression coefficients in the ROE Model</td>
</tr>
</tbody>
</table>

Source: Researcher's Own Compilation
4.16 Chapter Summary

This chapter presents the methodology used to conduct the research. This study applied the deductive positivism approach where the pre-existing theoretical basis is identified and relied upon in developing the hypotheses. Multiple regression analysis was chosen as the main tool of analysis in this study. Moreover, this chapter examined the diagnostic tests that might affect the corporate governance variables which may result in problems from understanding the significance of individual independent variables in the regression model. This chapter also described the data and variables of this study, explaining the sample, the criteria to select the data and the sources of the data. Three main types of data are used in this study: corporate governance variables, financial performance variables and control variables.

Out of 26 universal banks in Ghana as at 31-12-2006, the full data required was obtained for a sample of 21 banks with 189 bank year observations. The data used in this study was collected from two sources: Banks websites and the annual reports of the Ghanaian universal banking firms. Bank financial performance was measured by using the accounting based measures such as ROA and ROE. Corporate governance variables were examined by investigating the effect of board size, board composition (NEDs), board committees, bank size, and foreign ownership. Finally, the study used two control variables (bank age and cost to income ratio).
Chapter Five: Empirical Results and Discussion

5.0 Introduction

This chapter discusses the data and the test of panel regression assumptions, and empirical results. In particular, it seeks to achieve five main objectives. First, it presents the descriptive statistics for the dependent; independent and the control variables. Second, a correlation analysis was conducted to examine the relationship between variables used in this thesis. Third, we also tested linear regression assumptions of multicollinearity, autocorrelation, normality, homoscedasticity and linearity. From the results, there were no serious violations of panel data assumptions, and thus statistically appropriate to carry out multiple regression analysis. Fourth, it tests the panel regression assumptions to determine whether pooled OLS and the alternative random or fixed effects regression model should be used as the method of estimation. Finally, we conducted the Hausman test to choose the appropriate model between Fixed effects and Random effects and the Fixed Effects was found to be appropriate for the study.

Sections 5.1 and 5.2 present the results of the descriptive statistics for the data that was used in the analysis of this study. Section 5.3 discusses diagnostic test results while Section 5.4.1 reports on the regression results of control variables while Section 5.4.2 reports on results and discussion of board size on bank performance. Section 5.4.3 discusses the results of board composition on financial performance while Section 5.4.4 reports on results and discussion of board committees on bank performance. Section 5.4.5 discusses the results of bank size and financial performance while Section 5.4.6 discusses the results of foreign ownership on financial performance. Section 5.4.7 discusses the post financial crisis on financial performance while Section 5.4.8 discusses the conclusions.
Table 5.1 Variables used to study the corporate governance practices in Ghana

<table>
<thead>
<tr>
<th>Variable</th>
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<th>Definition</th>
</tr>
</thead>
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<tr>
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<td>ROE</td>
<td>Profit after tax / Total Equity</td>
</tr>
<tr>
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<td>BOSIZE</td>
<td>total number of members of the board of directors</td>
</tr>
<tr>
<td>Board Composition</td>
<td>BOCOMP</td>
<td>proportion of outside directors on the board</td>
</tr>
<tr>
<td>Board Committees</td>
<td>BOCOMM</td>
<td>Number of committees in a bank</td>
</tr>
<tr>
<td>Foreign Ownership</td>
<td>Foreign</td>
<td>Foreign ownership of over 51%</td>
</tr>
<tr>
<td>Bank Size</td>
<td>BNKSIZE</td>
<td>natural logarithm of bank total assets</td>
</tr>
<tr>
<td>Bank Age</td>
<td>BANKAGE</td>
<td>years of incorporation</td>
</tr>
<tr>
<td>Cost to Income Ratio</td>
<td>CIR</td>
<td>(operating expenses + other costs) / Net income</td>
</tr>
<tr>
<td>---------------------</td>
<td>-----</td>
<td>-----------------------------------------------</td>
</tr>
<tr>
<td>E</td>
<td>Error Term</td>
<td>Error term</td>
</tr>
<tr>
<td>( \beta_i )</td>
<td>Beta</td>
<td>Regression coefficients in ROA and ROE Models</td>
</tr>
</tbody>
</table>

Source: Researcher's own compilation

### 5.1 Descriptive Statistics

This section deals with the descriptive statistics for the data that was used in the analysis of this study. Some of the main features of the data were described quantitatively (e.g. central tendency of the statistics such as mean, max and min, data dispersion such as standard deviation). The descriptive statistics of this study is presented in Table 5.2.

**Financial performance**

Table 5.2 reports the descriptive statistics of the dependent variables. The table shows that the ROA ranges from a minimum of -3.9% to a maximum of 7.9% with an average of 2.5% for the sampled universal bank. This result is better compared to the average reported by Zemzem & Kacem, 2014 (Tunisian banks, 2.00%) and Ranti, 2011 (Nigerian listed banks, 1.78%). The ROE ranges from a minimum of -27.9.38% and maximum of 52.1% with average of 17.7% for the sampled universal banks in Ghana. This is comparable to the mean reported by Dabor, Isiavwe, Ajagbe & Oke, (2015) Nigerian listed companies (17.9%) and Ranti, (2011) Nigerian listed banks (17.7%).
<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROA</td>
<td>189</td>
<td>0.0252804</td>
<td>0.0235824</td>
<td>-0.039</td>
<td>0.079</td>
</tr>
<tr>
<td>ROE</td>
<td>189</td>
<td>0.176963</td>
<td>0.151365</td>
<td>-0.279</td>
<td>0.521</td>
</tr>
<tr>
<td>BOSIZE</td>
<td>189</td>
<td>8.91005</td>
<td>1.79756</td>
<td>7.000</td>
<td>13.000</td>
</tr>
<tr>
<td>BOCOMP</td>
<td>189</td>
<td>6.42328</td>
<td>1.66653</td>
<td>3.000</td>
<td>11.000</td>
</tr>
<tr>
<td>BOCOMM</td>
<td>189</td>
<td>3.21693</td>
<td>0.473252</td>
<td>2.000</td>
<td>4.000</td>
</tr>
<tr>
<td>Foreign Ownership</td>
<td>189</td>
<td>0.523810</td>
<td>0.500759</td>
<td>0.000</td>
<td>1.000</td>
</tr>
<tr>
<td>Bank Age</td>
<td>189</td>
<td>27.2910</td>
<td>28.9626</td>
<td>1.000</td>
<td>118.000</td>
</tr>
<tr>
<td>CIR</td>
<td>189</td>
<td>0.698153</td>
<td>0.954825</td>
<td>-1.429</td>
<td>12.298</td>
</tr>
</tbody>
</table>

Source: Researcher's own compilation
5.2 Corporate Governance Variables

As per Table 5.2, the board size ranges from a minimum of 7 to a maximum of 13 with the overall mean of 8.9 of the sampled universal banks studied. With a maximum of 13 and standard deviation 1.79, this result implies that on the average universal banks had relatively large board size. This finding is consistent with previous studies by Kyereboa-Coleman and Biekpe (2006) who posited that Ghanaian listed companies had a minimum of 5 directors and a maximum of 13 directors with an average of 8 members. However, this result is inconsistent with Ghana’s Company Act 1963 Act 179 which prescribes the minimum number of 8 members and a maximum number of 16 for public companies, while the Bank of Ghana (2013) draft corporate governance regulation recommend a minimum of three directors without capping the maximum directors. Arguably, the mean board size of 8.9 is also consistent with the prior studies in Ghana (Adusei, 2011).

This result confirms that universal banks in Ghana, on average, have met the requirements of the Bank of Ghana’s draft corporate governance regulation (2013) but inconsistent with the recommendations of Jensen (1993) and Lipton and Lorsch (1992), based on their investigation of firm performance in relation to board size. They recommended eight or nine directors, and specified that ten should be the maximum number. This relatively small size is due to the effect of more people inhibiting the process of making decisions (i.e. causing indecisiveness or incoherent decisions due to the fissiparous decision making process among many parties). The Ghanaian bank average board size is bigger than those in Egypt and Malaysia is eight directors (Elsayed, 2007; Haniffa and Hudaib, 2006), but smaller than those in UK (Tanna et al., 2008); US (Belhkir, 2009) and Nigeria (Ranti, 2011).

As shown in Table 5.2, the mean board composition is 6.4, indicating that outside board members representing 64% of the total board membership. Previous studies have shown that the more NEDs are present on a board, the more independent the board is, with correspondingly reduced information asymmetry between shareholders and managers (Black et al., 2006a). Brickley et al., (1997) found that boards tend to per-
form better with the monitoring and advisory function of NEDs on behalf of shareholders. The proportion of the NEDs in Ghanaian boards is bigger (e.g. compared to other countries: the US mean = 54%, Yermack, 1996; Malaysia mean = 50%, Haniffa and Hudaib, 2006). Thus, the average composition of boards having 64% of non-executive directors is above the recommendation by the Bank of Ghana’s draft on corporate governance regulation (2013), which stipulates that there should be at least 60% of NEDs, which is in line with international practices (BCBS, 2006, 2010 and 2015). In the overall sample, bank boards are relatively independent as they are mostly dominated by non-executive directors. This finding is also consistent with the Ghana’s SEC code which prescribes that at least 50% of board members must be non-executive directors for listed companies.

Table 5.2 reports that the board committees ranges from a minimum of two committees to a maximum of four committees, with an average committee of 3.2. This figure indicates that about 82.5% of the sampled universal banks have complied with the Bank of Ghana regulation on the establishment of a minimum of three specialized committees made up of risk, audit, compensation and nomination (Bank of Ghana’s draft regulation on bank governance, 2013). All other things being equal, the higher the number of board committees, the better the increase in efficiency. That is, deeper focus on specific areas such as audit, risk, management, ethics, compliance, remuneration and nomination (BCBS, 2010). This study is consistent with studies by Heenetigala (2011); Jiraporn et al (2009); Selvam et al (2006) who reported that board committees improve the financial performance of firms and that the formation of board committees is a means of improving board effectiveness and performance.

However, the findings is inconsistent with both Ghana’s Company Act 1963 Act 179 and SEC code which require that public companies and listed firms should establish only audit committees of the board. The theoretical literature provides that board committees act in order to obtain the most effective operation of the board and are also important corporate governance tools to monitor corporate activities and can play a valuable part in the protection of shareholder value (Van Den Berghe & Levrau, 2004; Kesner, 1988).
Bank size as proxied by a natural logarithm of a banks’ total assets increased from 22.10 (GH ¢ 4.02 bn) in 2006 to 24.66 (GH ¢ 51.40 bn) in 2014 with an average size of 23.72 (GH ¢ 20.34 bn). The result is also consistent with previous Ghanaian studies by Adusei (2011) and Kyereboa-Coleman & Biekpe (2007). The size of a bank affects its financial performance in many ways. Large banks can exploit economies of scale and scope and thus being more efficient compared to small banks. In addition, small banks may have less power than large banks; hence they find it difficult to compete with large banks particularly in highly competitive banking markets. On the other hand, as banks become larger, they might suffer from inefficiencies, leading to inferior financial performance.

The mean foreign ownership is 52.4% which gives the feel of a concentrated ownership pattern in the banking sector of Ghana. The mean value also suggests that foreign owners will be able to exert better corporate governance practices on bank managers because of their voting power and influence. There is a relatively high proportion of foreign owned banks in Ghana, this could be largely due to the easing of entry into the banking industry after the liberalization of the financial sector in 1988.

5.3 Diagnostic Test Results

The models specified were subjected to the necessary statistical tests such as collinearity, normality, homoscedasticity, autocorrelation and linearity. From the test results, there were no serious violations of multiple regression assumptions, and thus statistically appropriate to carry out multiple regression analysis. First, as shown in Table 5.3 the Pearson’s Correlation Matrix Result was used to measure the degree of association between variables. The correlation between ROA and BOSIZE is negative (-0.0112). The correlation coefficients are relatively small, with the exception of that between BOSIZE and BOCOMP being highest value of (0.829) which could be attributed to the fact that, board composition represents the number of non-executive directors who are normally more than 50% of the directors on the board. The highest inter-correlation between board composition and board size (0.829), but it appeared that there is a bi-variate cor-
relation problem but not multicollinearity (Miles & Shevlin, 2008, p. 129). This indicates the absence of multicollinearity.

Second, to further strengthen the result of the absence of multicollinearity, the study carried out a residual diagnostic test of Variance Inflation Factor. The results of the VIF test as shown in Table 5.4 ranged between 1.027 and 3.810, which are all less than 10 thereby; our model does not suffer from multicollinearity problem.
Table 5. 3 Pearson correlation matrix

<table>
<thead>
<tr>
<th></th>
<th>ROA</th>
<th>ROE</th>
<th>BOSIZE</th>
<th>BOCOMP</th>
<th>BOCOMM</th>
<th>OWN</th>
<th>BNKSIZE</th>
<th>AGE</th>
<th>CIR</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROA</td>
<td>1</td>
<td>0.6418</td>
<td>-0.0112</td>
<td>0.0121</td>
<td>0.0092</td>
<td>0.0223</td>
<td>-0.0025</td>
<td>0.2984</td>
<td>-0.5864</td>
</tr>
<tr>
<td>ROE</td>
<td>1</td>
<td>-0.0486</td>
<td>-0.0259</td>
<td>0.0632</td>
<td>0.0689</td>
<td>0.1205</td>
<td>0.2281</td>
<td>-0.5424</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>0.829</td>
<td>-0.1118</td>
<td>0.0146</td>
<td>-0.0156</td>
<td>-0.2118</td>
<td>0.0505</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1</td>
<td>-0.0529</td>
<td>0.0576</td>
<td>-0.1014</td>
<td>-0.3571</td>
<td>0.0453</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>-0.0105</td>
<td>0.0766</td>
<td>-0.0371</td>
<td>-0.0177</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>-0.0888</td>
<td>0.0466</td>
<td>-0.1752</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>-0.1009</td>
<td>-0.0684</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>-0.1473</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

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

* Correlation is significant at the 0.1 level (2-tailed).

Source: Researcher's own compilation: Gretl correlation results based on the data obtained from sample universal banks.
Table 5.4 Variance inflation factors minimum possible VALUE = 1.0, Values >10.0 may indicate a multicollinearity problem

<table>
<thead>
<tr>
<th>Variable</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOSIZE</td>
<td>3.433</td>
</tr>
<tr>
<td>BOCOMP</td>
<td>3.810</td>
</tr>
<tr>
<td>BOCOMM</td>
<td>1.027</td>
</tr>
<tr>
<td>FOROWN</td>
<td>1.050</td>
</tr>
<tr>
<td>BNKSIZE</td>
<td>1.080</td>
</tr>
<tr>
<td>AGE</td>
<td>1.247</td>
</tr>
<tr>
<td>CIR</td>
<td>1.067</td>
</tr>
</tbody>
</table>

Source: Researcher’s own compilation

Third, as depicted in Table 5.5, the results of the p-value for Jarque-Bera statistics test were 0.2717 and 0.7154 respectively and found to be greater than 0.05. The review conducted for numerical test on normality showed that Ho: error terms are normally distributed. The decision rule is that reject Ho if the p-value of F-statistics <=0.05. Otherwise do not reject Ho. From this, we do not reject Ho which is significant at 1% and 5% levels for models 1 & 2 respectively. The implication of the results showed that the regression variables are all normally distributed. Fourth, we conducted the linearity test using the LM statistics. Detection of linearity is examined by the LM-statistic and its associated significant level. Where, Ho: relationship is linear. The decision rule is that reject Ho if the p-value of F-statistics <=0.05. Otherwise do not reject Ho. From Table 5.5 the LM-statistic for model 1 and model 2 are 19.5689 and 10.0133, with their respective p-values of 0.0574 and 0.1368. The results were found to be significant at 0.05 levels. Hence, there are no linearity issues.
Fifth, the phenomenon of heteroskedasticity occurs when the residuals in a regression specification have unequal variance. Heteroscedasticity occurs when the variance of the error terms differ across observations. Thus, any increase or decrease of the variance is described as heteroscedasticity, which causes problems for statistical inference in regression models. Several tests for detecting heteroscedasticity have been proposed by scholars (e.g. Glejser, 1996; Breusch and Pagan, 1979; Evans & Kings 1988). According to White (1980), the presence of heteroskedasticity can lead to inefficient parameter estimates and faulty inferences. To circumvent the problems of inefficient parameter estimates and faulty inferences, we tested for heteroskedasticity using the Breusch - Pagan test and the results revealed an absence of heteroskedasticity. Where, H0: errors have a constant variance. The decision rule is that reject Ho if the p-value of F-statistics <=0.05. Otherwise do not reject Ho. it is clear from Table 5.5 below the probabilities of (0.23) and (0.28) exceed the 5% level of significance. Hence we do not reject the null hypothesis that the model has constant variance, at 1%, 5% and 10% significance levels.

Sixth, we conducted a serial correlation test because a serial correlation in panel data models biases and causes the results to be inefficient. From table 5.5 below, the Breusch-Godfrey Serial correlation LM test with probability values of (0.091) and (0.179) for models I and II respectively indicate the absence of autocorrelation in the regression models since the probabilities of the F-statistic and obs*Rsquared are greater than the 5% level of significance. Finally, we chose between a pooled OLS and the alternative methods (Fixed Effects and Random Effects), by using Breusch and Pagan Langrange Multiplier Test, the result of test is highly significant as shown in Table 5.5. From the result, we concluded that Fixed Effect and Random Effect Models seem to be more appropriate than pooled OLS model
<table>
<thead>
<tr>
<th>Test</th>
<th>ROA (Model I)</th>
<th>ROE (Model II)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jarque –Bera Normality Test- (Chi-square) (p-value)</td>
<td>2.60623 (0.2717)</td>
<td>0.669868 (0.7154)</td>
</tr>
<tr>
<td>Heteroscedasticity –(chi-square)</td>
<td>9.29311 (0.1232)</td>
<td>8.63447 (0.2800)</td>
</tr>
<tr>
<td>Linearity – (LM) (p-value)</td>
<td>19.5689 (0.0574)</td>
<td>10.0133 (0.1360)</td>
</tr>
<tr>
<td>Autocorrelation – (LMF)</td>
<td>11.3869 (0.1000)</td>
<td>10.4227 (0.1790)</td>
</tr>
<tr>
<td>Hausman Test –(chi-square)</td>
<td>16.9832 (0.0175)</td>
<td>15.6983 (0.0280)</td>
</tr>
<tr>
<td>Breusch and Pagan LM Test chi value</td>
<td>(2)1 P-value</td>
<td>17.42 (0.00)</td>
</tr>
</tbody>
</table>

Source: Researcher’s Own compilation (Gretl)
Panel data models can be specified as a Fixed Effects or a Random Effect that helps to capture the effects of firm and time specific heterogeneities. In order to decide between Random Effects against Fixed Effects as an additional to the Ordinary Least Squares results, the researcher performed the Hausman test. The Test statistic result is statistically significant as shown above in Table 5.5. From the Table above, is the Hausman specification test to choose between Random Effects and Fixed Effects in respect of the specific governance mechanisms, and using ROA, and ROE as firm performance measures. The Hausman test gave $X^2$ of 16.9832 (p-value=0.0175047and $X^2$ of 15.6983 (p-value=0.0280207) as shown in Table 6.5 suggesting that the hypothesis of no correlation between the unique errors and the specific governance mechanisms (i.e. BODSIZE, BOCOMP, BOCOMM, BANKSIZE, FOREIGN) as independent variables. Hence, at 5% significant level the Random Effects regression model is rejected in favour of the Fixed Effects regression model as a method of estimation in chapter five. Consequently the investigator estimated Fixed Effects Regression models.

5.4 Estimation Results and Discussions

\[
ROA_{it} = \alpha + \beta_1BOSIZE + \beta_2BOCOMP + \beta_3BOCOMM + \beta_4FOREIGN + \beta_5BANKSIZE + \beta_6AGE + \beta_7CIR + \epsilon_{it}, (4)
\]

\[
ROE_{it} = \alpha + \beta_1BOSIZE + \beta_2BOCOMP + \beta_3BOCOMM + \beta_4FOREIGN + \beta_5BANKSIZE + \beta_6AGE + \beta_7CIR + \epsilon_{it}, (5)
\]

This section deals with the main inferences which were drawn from the model regression. We present our results separately according to his research questions into five sections (i.e. control variable results, board of director variables results, Bank size variable results and foreign ownership results). This does not mean that each section was run in the model separately; it is simply to facilitate the presentation of results and
to make the findings more understandable by focusing on each type of effect. The investigator considers that the results are highly significant at 0.01, significant at 0.05 and marginally significant at 0.1, which applies to all of the following tables and results. The coefficient value and p-value in brackets are presented. The Table in appendix 1 contains all the results of this study. However, the researcher presents the results section with the appropriate table extracted from the original table, reporting the Fixed Effect results of the corporate governance mechanisms based on the accounting based performance measures of ROA and ROE.
5.4.1 RESULTS: BANK AGE AND COST TO INCOME RATIO AS CONTROL VARIABLE ON ROA.

Table 5.6 Results: bank age and cost to income ratio as control variables on performance (ROA)

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Pooled OLS</th>
<th>P-Value</th>
<th>Fixed Effects</th>
<th>P-Value</th>
<th>Random Effects</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROA</td>
<td>0.00017245***</td>
<td>0.0055</td>
<td>0.0274548***</td>
<td>0.00749</td>
<td>0.000187919*</td>
<td>0.07435</td>
</tr>
<tr>
<td></td>
<td>(-2.8257)</td>
<td></td>
<td>(-2.7087)</td>
<td></td>
<td>(-1.7949)</td>
<td></td>
</tr>
<tr>
<td>Bank Age</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIR</td>
<td>-0.00547441***</td>
<td>0.00079</td>
<td>-0.0054319***</td>
<td>0.0003</td>
<td>-0.0056687***</td>
<td>0.00018</td>
</tr>
<tr>
<td></td>
<td>(-3.4137)</td>
<td></td>
<td>(-3.6951)</td>
<td></td>
<td>(-3.8289)</td>
<td></td>
</tr>
</tbody>
</table>

Figures reported in brackets are robust standard errors; *** 1% significant level, **5% significant level and *10% significant level.

(Source: Gretl: Researcher’s Own Compilation)
Table 5: Results: Bank age and cost to income ratio as control variables on performance (ROE)

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>ROE</th>
<th>Pooled OLS</th>
<th>P-Value</th>
<th>Fixed Effects</th>
<th>P-Value</th>
<th>Random Effects</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>BankAge</td>
<td>0.00114312***</td>
<td>0.00457</td>
<td>0.0192493***</td>
<td>0.00804</td>
<td>0.00117047**</td>
<td>0.0296</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-2.8717</td>
<td></td>
<td>-2.6839</td>
<td></td>
<td>-2.1929</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIR</td>
<td>-0.0279128***</td>
<td>0.00832</td>
<td>-0.0251096**</td>
<td>0.0169</td>
<td>-0.0273168***</td>
<td>0.00872</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(-2.6685)</td>
<td></td>
<td>(-2.4139)</td>
<td></td>
<td>(-2.6518)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figures reported in brackets are robust standard errors; *** 1% significant level, ** 5% significant level and * 10% significant level.
From Tables 5.6 to 5.19 present the Fixed Effects regression results of the governance mechanisms and the accounting-based performance measures of ROA and ROE. The effects of the control variables on bank performance have different results across the performance variables (ROE and ROA).

Bank Age in the ROA and ROE models is shown to have positive and significant results for the sample. However, this result is treated with care given that the variable became significant in the restricted regression as a controlled variable. Bank age was taken as the number of years banks had been incorporated. It was expected that the smaller a firm's age, the higher its business risk and the less mature the company, therefore higher firm age was expected to correlate with improved financial performance. The results show a positive and significant relationship between bank age and bank performance. The positive relationship shows that older firms outperform younger firms to a limited extent.

Cost-to-income ratio

Also, the variable cost-to-income shows a highly significant effect throughout the tests. It has been significant at 1% with a negative coefficient. The negative influence of cost to income ratio on profitability of banks in our sample may be due to the lack of scale economies owing to the small system and average bank size (IMF, 2011, 11/131). This goes to affirm that it being a bank-specific variable affects profitability and for that matter the performance of banks in Ghana. Given that all these exogenous variables are held constant (controlled); governance variables are expected to influence the performance of Ghanaian banks in a manner shown in the results discussed below.
5.4.2 Results and Discussion of Board Size on Financial Performance.

Table 5.8 Results and discussion of board size on financial performance (ROA)

<table>
<thead>
<tr>
<th>Dependent Variable (ROA)</th>
<th>Pooled OLS</th>
<th>P-Value</th>
<th>Fixed Effects</th>
<th>P-Value</th>
<th>Random Effects</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOSIZE</td>
<td>0.0001197</td>
<td>0.02667</td>
<td></td>
<td></td>
<td>0.000153522</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(-0.6207)</td>
<td>0.5356</td>
<td>(-0.4077)</td>
<td>0.684</td>
<td>(-0.0601)</td>
<td>0.9522</td>
</tr>
</tbody>
</table>

Figures reported in brackets are robust standard errors; *** 1% significant level, ** 5% significant level and * 10% significant level.

Source: Gretl. Researcher’s Own Compilation

Table 5.9 Results and discussion of board size on financial performance (ROE)

<table>
<thead>
<tr>
<th>Dependent Variable (ROE)</th>
<th>Pooled OLS</th>
<th>P-Value</th>
<th>Fixed Effects</th>
<th>P-Value</th>
<th>Random Effects</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOSIZE</td>
<td>0.0167539</td>
<td>0.1845</td>
<td>0.045276</td>
<td>0.32361</td>
<td>0.016384</td>
<td>0.27562</td>
</tr>
<tr>
<td></td>
<td>(-1.3323)</td>
<td></td>
<td>(-0.9901)</td>
<td></td>
<td>(-1.0935)</td>
<td></td>
</tr>
</tbody>
</table>

Figures reported in brackets are robust standard errors; *** 1% significant level, ** 5% significant level and * 10% significant level

(Source: Gretl; Researcher’s Own Compilation)
Given ROA and ROE as the performance variables, it can be seen from Tables 5.8 & 5.9 that board size was found to have a weak positive and statistically insignificant relationship with profitability, which means that larger boards will help marginally to improve the level of profitability of Ghanaian banks, hence, the null hypothesis is not rejected. This finding although insignificant lends empirical support to prior studies in Ghana (Kyereboa-Coleman & Biekpe, 2006a, 2006b) and Kyereboa-Coleman and Osei (2008) and other international studies (Adams & Mehran, 2005; Henry, 2008; Kiel & Nicholson, 2003, Jackling & Johl 2009 and Mangena & Tauringana, 2008). For example, Kyereboa-Coleman & Biekpe, 2006a) reported a positive and insignificant relationship between board size and ROA among Ghanaian listed firms. This finding supports the view that larger boards are better for bank performance because board members have a range of expertise to help make better decisions, and are harder for a powerful CEO to dominate and that the larger the board size, the better the performance.

However, the findings differ from other prior Ghanaian studies (Kyereboa-Coleman & Amidu, 2008) as well as other international studies (Cheng, 2008; Coles et al., 2008; Cheng, 2008 and Guest, 2009) who reported statistically significant and negative relationship between board size and ROA. Arguably, larger board size is effective in the Ghanaian banking context, and therefore the optimum board size should be encouraged for effective bank performance.

Theoretically, the statistically insignificant and positive association between the ROA and ROE and board size indicates that the banking industry appear to perceive larger boards as effective. This may stem from the fact that larger boards tend to offer greater access to their banks’ external environment. This can reduce uncertainties and facilitates the securing of critical resources such as funding and external credit lines from their corresponding banks. It also implies that the banking industry seems to value the ability of Ghanaian bank boards to secure more resources, which is often associated larger boards higher than their ability to effectively advice and monitor managers that is usually associated with smaller boards.
The possible explanation for the weak positive and insignificant relationship between board size and ROA and ROE may be that the Ghanaian banks’ boards are relatively larger as a result of the local banks that are overloaded with more directors given the socio-political and cultural influence on board appointments without due regard for skills, expertise and competencies required for bank boards. Another explanation for this weak positive but statistically insignificant relationship may also be due to concentrated ownership structure of the Ghanaian banks. According to the World Bank ROSC report (2005; 2010), most businesses in Ghana are characterized by highly concentrated ownership (e.g. family, multinationals, and the government). Shleifer and Vishny (1997) and La Porta et al (1999) asserted that developing countries suffer from high ownership concentration and weak protection of shareholders’ rights.

Boards in Ghanaian banks are generally heavily dominated by majority or controlling shareholders, typically members of single family or a clique of families and government. This might result in the appointment of management and board members on the board based on the basis of political connections, friendship, cronyism and nepotism rather than experience, competencies and skills. Such cliques can use their power to influence management decisions and undermine the monitoring and coordination of the board, rendering the board impotent with regard to its impact on management and bank performance. In Ghana, the so called Ghanaian culture and its associated social norms, the politicization of board positions, the lack of enforcement of Bank of Ghana guidelines on board appointment and poor recruitment of board members have all contributed to lower performance of banks. The findings indicated that the Ghanaian banking industry appears to perceive that the larger boards are effective. This may stem from the fact that larger boards tend to offer less access to banks’ external environment. This can only minimize uncertainties and facilitates in securing of little resources such as finance and deposits. In the Ghanaian banking context, the weak results could be attributed to the fact that larger bank board plays more of a symbolic role than fulfill their intended function of monitoring.

The result of this study is not consistent with previous studies by Stepanova and Ivantsova (2012) who argued that more directors may add skills, experience and
knowledge which in tend leads to better bank performance. This result also however deviates from the positive and statistically significant established by Babatunde & Olaniran (2009) and Adams & Mehran (2012). Empirically, the positive and statistically significant relationship between board size and ROA and ROE offers empirical support the results of Adams & Mehran (2005), Beiner et al., (2006) Henry (2008), and Mangena & Tauringana (2008). This finding is also consistent with previous international studies of Kajola (2008); Adams & Mehran (2012); Sanda et al., (2010); Shiekh et al., (2012); Lehn et al., (2009) argued that larger boards are better than smaller ones in improving firm performance. They argued that in small boards the powerful position of the CEO enable him to override the decisions made by the board members in accordance with their own interests leading to increase the agency and correspondingly undermining the performance of the firm (Miller, 2003). Large bank board size also plays an important role in improving and enhancing outcomes of decisions because of ideas-sharing and contributions, which might increase the likelihood of better firm performance (Lehn et al 2009). Therefore, banks with larger and more diverse boards are more likely to decrease the conflicts between management and shareholders, leading to increased shareholder returns and thus improved bank performance.

The results of this study also support the agency and resource dependence theories that larger boards may possibly be better for corporate financial performance (e.g. John and Senbet, 1998; Yawson, 2006). Firstly, larger boards are associated with diversity in skills, business contacts, and experience that smaller boards may not have, which offers greater opportunity to secure critical resources (Haniffa and Hudaib, 2006). Similarly, larger boards offer greater access to their firm’s external environment, which reduces uncertainties and also facilitates securing critical resources, such as finance, raw materials, and contracts (e.g. Pearce and Zahra, 1992; Goodstein et al., 1994). Secondly, larger boards enhance the knowledge base on which business advice can be sought, which increases managerial ability to make important and better business decisions (Yawson, 2006). Finally, a bank board’s monitoring capacity is demonstrated to be positively related with board size (John and Senbet, 1998). This is because a larger number of people with varied expertise will be better placed to subject managerial decisions to greater scrutiny and monitoring (Kiel and Nicholson, 2003). This will help balance the
power of an otherwise dominant CEO. The positive influence of board size on profitability of banks in our sample may be due to the fact that the large majority of banks in our sample do have nominating committees, or a predefined succession policy, so that they may appoint directors that do have necessary experience, skills and expertise.

This finding is in contrast with several studies that indicated a negative relationship between board size and bank performance. For example, Stancic et al., (2012); Bektas & Kaymak (2009) and Pathan et al., (2007) argued that excessive boards lead to problems of coordination, control and flexibility in decision making. Furthermore, the results mean that smaller boards are effective in monitoring bank managers and can contribute to bank profitability more than larger boards. They also support the view that banks with larger boards tend to be ineffective as they may not be able to make good and informed decisions due to the fact that too many directors may be unproductive as communication may pose a serious challenge among members. Romano et al, (2012) argued that when boards grow, they become less likely to function effectively because it may create a diminished sense of individual responsibility and might be more involved in bureaucratic problems.
5.4.3 Results and Discussion of Board Composition on Financial Performance

Table 5. 10 Results and discussion of board composition on financial performance (ROA)

<table>
<thead>
<tr>
<th>Dependent Variable (ROA)</th>
<th>Pooled OLS</th>
<th>P-Value</th>
<th>Fixed Effects</th>
<th>P-Value</th>
<th>Random Effects</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOCOMP</td>
<td>0.03387</td>
<td>0.04446</td>
<td>(-0.1713)</td>
<td>0.8642</td>
<td>0.0142965</td>
<td>0.8692</td>
</tr>
</tbody>
</table>

Figures reported in brackets are robust standard errors; *** 1% significant level, **5% significant level and *10% significant level

(Source: Gretl: Researcher’s Own Compilation)

Table 5. 11 Results and discussion of board composition on financial performance (ROE)

<table>
<thead>
<tr>
<th>Dependent Variable (ROE)</th>
<th>Pooled OLS</th>
<th>P-Value</th>
<th>Fixed Effects</th>
<th>P-Value</th>
<th>Random Effects</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOCOMP</td>
<td>-0.0104319</td>
<td>0.4197</td>
<td>0.016847</td>
<td>0.37273</td>
<td>-0.00940985</td>
<td>0.52116</td>
</tr>
</tbody>
</table>

Figures reported in brackets are robust standard errors; *** 1% significant level, **5% significant level and *10% significant level

Source: (Gretl: Researcher’s Own Compilation)
Tables 5.10 & 5.11 show that board composition was found to have a weak positive and statistically insignificant relationship with both ROA and ROE, hence, the null hypothesis is not rejected. This finding lends empirical support to the findings of prior Ghanaian studies of Abor & Biekpe (2007); Abor and Adjasi (2007); Adusei (2011), Tornyeve & Wereko, (2012), Kyereboa-Coleman (2006a) and Kyereboa-Coleman & Amidu (2008) and other international studies (Gordini, 2012) Bino & Tomar, (2007) and Erkens et al (2012). For example, Kyereboa-Coleman and Amidu (2008) reported statistically insignificant and positive relationship between NEDs and ROA among SMEs in Ghana. However, this finding is not consistent with prior Ghanaian studies (Kyereboa-Coleman & Biekpe, 2006b) who reported statistically significant and negative relationship between NEDs and ROA and other international studies (Bozec, 2005; Guest, 2009). This finding means that the appointment of more non-executive directors to the board would marginally help to improve the level of profitability. The positive effect can be explained because the presence of NEDs on the Ghanaian bank boards' enhance corporate competitiveness and provided new strategic outlooks for the firms (Abor & Adjasi, 2007).

The findings seem to indicate that the BCBS (2006; 2010) style recommendation of Bank of Ghana's regulation and the GSE's Listing Rules (2006) that Ghanaian boards should be comprised of a majority of non-executive directors are applicable in Ghanaian banking context, but this findings is not consistent with the provisions made by the Ghana's Companies Act 1963 Act 179 and SEC regulation (2003; 2010) where only the minimum number of 3 is provided to constitute the board. It suggests that non-executive directors can potentially improve on the independence of corporate board and its decision. The positive coefficients, however, show that the Ghanaian banking industry views the appointment of more NEDs to bank boards as a positive corporate governance practice. Theoretically, the statistically insignificant and positive association between the NEDs and the ROA and ROE supports the agency and resource dependency theories. It suggests that NEDs bring independent judgment to board decisions (Chhaochhria and
Grienstein, 2009) and also offer the firm resources in the form of experiences, expertise, business contacts and reputation (Haniffa & Hudaib, 2006).

This will help to improve the level of profitability of the bank but at very slow rate. The position is premised on the assumption that non-executive directors are independent of management, but the subject of director independence in relation to the controlling or majority shareholders continue to be a major corporate governance challenge in the Ghanaian banking industry. The prevailing condition where controlling or majority shareholders are given the right to select, nominate or appoint outside directors present a conundrum to director independence. This observable fact is in line with the extant body of knowledge in that, controlling or majority shareholders in general jeopardize director independence since large shareholders tend to have an authoritative command in relation to outside director appointment (Berglof and Claessen, 2004).

The weak positive relationship between non-executive directors and bank performance may be attributed to the lack of independence, objectivity and experience on the part of outside directors. Again, board independence is often compromised because of the manner in which board appointments are made and the way they operate. There are those appointed because of their political party affiliations, family connections, and close association with CEO and board chairperson, and are not in position to challenge decisions and as a result, most of outside directors become “captured” which may contribute to lower performance of Ghanaian banks. In addition, the NEDs might not be sufficiently independent to perform their monitoring role effectively, or they may be compromised by close relationship with managers and thus unable to interfere in management decisions. Another possible explanation for the weak positive and statistically insignificant relationship between board composition and bank performance may be that as a developing country, non-executive directors, especially those from diverse backgrounds, may lack the necessary qualifications, knowledge and experience in banking business to subject managerial decisions to proper scrutiny.

However, the result is also consistent with the recommendations of Ghana’s SEC code (2003; 2010) which encourages a higher percentage of non-executive directors on the
Ghanaian listed companies’ boards. The positive coefficient shows that the market views the appointment of NEDs to bank boards as a positive corporate governance practice. This is because the presence of higher NEDs can potentially improve the independence of board and its decisions. This position is supported by previous studies (Al-Sahafi et al., 2015; Bino & Tomar, 2007; Staikouras et al., 2008). The presence of majority non-executive directors on the board strengthens the independence of the board that enables them to play their monitoring role effectively. The results indicate that independence of the board is an important indicator of bank performance in relation to efficiency of management in generating of bank profit in Ghana. The independence of the board is necessary in implementing effective internal control systems, which ultimately improves efficiency and performance. This finding is also consistent with previous international studies of Bino and Tomar (2007); Alonso and Gonzalez (2008); Staikouras et al., (2007) and Busta (2008). They argued that monitoring the actions of managers is a crucial component for management effectiveness, thus the greater the number of non-executive directors the more likely they are to increase board vigilance which minimizes the agency problem and increases firm performance. This finding is also consistent with agency, and resource dependence theories that support the majority of non-executive directors on boards. Given the agency theory proposition that boards dominated by executive directors are accountable to shareholders (Fama, 1980: Sonnenfeld 2002), the presence of non-executive directors on the board is suggested to be an effective internal governance mechanism used to partially reduce the agency problems in modern firms (Fama,1983; Jensen,1993). Accordingly, non-executive directors bring to the board three important features. First, the non-executive directors bring independent judgment to board decisions (Cadbury report, 1992; Chhaochharia, 2009). Second, they offer a firm resources in the form of experience, expertise, business contacts and reputation (Hanniffa and Hudiab, 2006; Baranchuk and Dybvig, 2009). Third, the existence of competitive and efficient managerial labour markets both within and outside the firm ensures that non-executive directors perform their monitoring function effectively (Fama, 1980; Fama and Jensen, 1983). Finally, it has been argued that the appointment of non-executive directors help in reducing information asymmetry by credibly signaling insiders’ intent (Black et al., 2006).
The results concerning NEDs are quite interesting; implying that Ghanaian banks have complied with the recommendations of the Bank of Ghana’s draft corporate governance regulation (2013), SEC Code (2003) and BCBS (2015,2010, 2006) which requires that bank boards’ must be composed of a majority of non-executive directors. This result also supports the agency theory which suggests that, boards composed of majority non-executive directors are able to monitor the self-interest actions of managers, thereby minimizing agency costs (Fama, 1980; Fama & Jensen, 1983; Jensen, 1993), and maximizing shareholder wealth. This result also supports the Bank of Ghana’s view that independence is a desirable characteristic of non-executive directors. This positive influence on profitability of universal banks in our sample may be due to the fact that non-executive directors bring independent judgment to board decisions.

However, this result is in contrast with previous international studies (Al-Manaseer et al., 2012; De Andres & Vallelado, 2008) who found a negative relationship between board composition and bank performance. They argue that non-executive directors may not have total commitment to the cause of the bank because of outside commitments. As a result, they may not be on top of issues affecting the bank and this would limit their contribution to performance of the bank. These studies support the stewardship theory that non-executive directors are part-time workers, this will undermine their ability to monitor and advise the board because of the lack of the information that they have, and the lack of information concerning daily activities inhibit NEDs’ ability to apply their function to improve bank performance.
5.4.4 Results and Discussion of Board committees on Financial Performance

Table 5. 12 Results and discussion of board committees on financial performance (ROA)

<table>
<thead>
<tr>
<th>Dependent Variable (ROA)</th>
<th>Pooled OLS</th>
<th>P-Value</th>
<th>Fixed Effects</th>
<th>P-Value</th>
<th>Random Effects</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOCOMM</td>
<td>0.0047666</td>
<td>0.27117***</td>
<td>0.011145**</td>
<td>0.011145**</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(-1.3928)</td>
<td>0.1654</td>
<td>(-3.5264)</td>
<td>0.0006</td>
<td>(-2.2092)</td>
<td>0.0284</td>
</tr>
</tbody>
</table>

Figures reported in brackets are robust standard errors; *** 1% significant level, **5% significant level and *10% significant level

Table 5. 13 Results and discussion of board committees on financial performance (ROE)

<table>
<thead>
<tr>
<th>Dependent Variable (ROE)</th>
<th>Pooled OLS</th>
<th>P-Value</th>
<th>Fixed Effects</th>
<th>P-Value</th>
<th>Random Effects</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOCOMM</td>
<td>0.0406862*</td>
<td>0.07</td>
<td>0.166312***</td>
<td>0.00262</td>
<td>0.0563198**</td>
<td>0.04853</td>
</tr>
<tr>
<td></td>
<td>(-1.8227)</td>
<td></td>
<td>(-3.0564)</td>
<td></td>
<td>(-1.9862)</td>
<td></td>
</tr>
</tbody>
</table>

Figures reported in brackets are robust standard errors; *** 1% significant level, **5% significant level and *10% significant level

Source: Gretl: Researcher’s Own Compilation)
From Tables 5.12 & 5.13 show that board committees are statistically significant and positively related to ROA and ROE, which means that board committees will help to improve the level of profitability. Hence, the null hypothesis is not rejected. This finding lends empirical support to the previous Ghanaian studies (Kyereboa-Coleman & Amidu (2008) and Abor and Biekpe (2007) who reported that audit and nomination committees are found to be statistically significant and positively related to ROA and ROE and other international studies (Vefas and Theodorou, 1998; Jirapon et al., (2009) Sun & Chan, 2009; and Young & Buchlotz (2010). However, this finding is not consistent with previous Ghanaian studies (Puni (2015) who reported that board committees impact negatively on both ROA and ROE as well as international studies (Adams & Mehran, 2005; Zemzem & Kacem, 2014 and Shungu et al., (2014). This finding indicates that board committees help to improve the level of profit of the bank at faster pace. The findings also indicate that Ghanaian banks that have established board committees tend to be associated with higher accounting returns. The findings suggest that banks with board committees (audit, risk, remuneration, and nomination committees) have positive effect on accounting return.

The statistical significance of these board committees in explaining ROA and ROE supports the Bank of Ghana’s draft governance regulation(2013) for the establishment of board committees as well as the BCBS (2006; 2010 and 2015) principles for corporate governance for banks. Theoretically, the establishment of board committees can improve the board discussions and processes, as well as the independence of the board and its decision. Arguably, this can potentially impact positively on bank financial performance by enhancing the effectiveness with which the board carries out its monitoring and advisory functions. Theoretically, the statistically significant and positive association between board committees and financial performance supports the agency theory. It suggests that board committees enhance corporate accountability, legitimacy and credibility by performing specialist functions (Weir et al., 2002)

Furthermore, the Ghanaian banking industry seems to put a significant value on banks that have established board committees: audit, risk, remuneration and nomination committees. This generally implies that the BCBS style of Bank of Ghana’s regulation
and the SEC code (2003; 2010) that listed companies should establish audit, risk, nomination and remuneration committees may be applicable. Arguably, board committees can potentially impact positively on bank financial performance by enhancing the effectiveness with which the board carries out its monitoring and advisory functions. The monitoring function of board committees resulted in increased banks’ profitability as measured by ROA and ROE, implying that investors and other shareholders consider board committees in their investment decisions for banks in Ghana. The positive and statistically significant relationship between board committees and profitability has revealed that the role of board committees in driving board control is relatively high in universal banks in Ghana. The findings suggest that the establishment of board committees leads to board effectiveness in relationship to board control function in banks, in that controlling or majority shareholders perform extensive internal controls in the banks.

This is in line with extant literature that the concentrated ownership structure has influence on internal mechanisms of corporate governance such as board committees (Berglof and Claessen, 2004). The result of this study also indicates that the effectiveness of board committees of those banks is due to the presence of majority or controlling shareholder which makes the principle recommendation with respect to board committees. This finding offers empirical support to the recommendations of many corporate governance codes and principles, including BCBS (2006; 2010; 2015; Ghana’s SEC, Code, 2003; Nigeria CBN Code, 2014) that call for the establishment of board committees. The results support the agency theory because the monitoring functions of the board committees lead to higher performance. The empirical results also support the argument that the presence of board committees leads to more responsible behavior by corporate boards and protect the interest of shareholders (Harrison, 1987). By contrast, other studies found that board committees impact negatively on bank performance (Adams & Mehran (2005); Zemzem & Kacem (2014) and Shungu et al (2014). These studies suggest that the establishment of board committees imposes extra costs in terms of managerial time, travel expenses, and additional remuneration for the members of the committees (Vefaes, 1999). In addition, board committees can result in excessive managerial supervision, which can inhibit executive initiative (Goodstein et al, 1994). These
studies highlighted that board committees may cause encroachment on the functions of the executive and the dilution of executive authority, or may pre-empt management responsibility (Rainsbury et al., 2008; Barker, 2002) and sometimes the committees are used as rubber stamp to confirm management decisions. The positive influence of board committees on profitability of universal banks may be due to the fact that the large majority of universal banks in our sample do have board committees which act as independent monitors to alleviate agency problems, and maximize company value to shareholders through profitability and also increase the performance of share prices (Rezaee, 2009). This finding is also consistent with previous Ghanaian studies by Owusu (2012); Kyereboa – Coleman (2008) and other international studies by Pomeroy and Thorton (2008); Jirapon et.-al., (2009), Sun & Cahan (2009), that showed a positive and insignificant relationship between board committees and financial performance.

Board committees, whose responsibility is to be accountable to shareholders, typically perform the oversight function of the board. The primary role of audit, risk, remuneration and nomination committees is to act as independent monitors to alleviate agency problems (Klein, 1998; Rezaee, 2009), to maximize the value of a company to shareholders through profitability and to increase the performance of share prices. Agency theory was supported by the BCBS (2010,2015), which recommended separate committees for overseeing the remuneration of executive directors, reviewing risk activities, auditing financial statements and appointing executive and non-executive directors to boards, because shareholders have greater confidence when there are named committees to address the key responsibilities who disclose their existence to their investors (Davis,2002). The significant relationship between board committees and financial performance reported in Ghana can be interpreted to support agency theory.

This finding is also consistent with prior international studies of Anderson et al, (2004); Vefeas & Karamonous,(2005); Jirapon et-al, (2009) Sun & Chan,(2009) and Young & Buchloltz, (2010) who argued that board committees are important corporate governance tools to monitor corporate activities and also play a valuable role in the protection of shareholder value. In contrast, Adams & Mehran (2005) Shungu et al., (2015), in their studies on board structure with board committees was negatively associated with
bank performance. These studies support the argument that board committees impose extra costs on managerial time, travel expenses and additional remuneration for members of various committees (Vafeas, 1999). Board committees can result in excessive managerial supervision, which inhibit executive initiative and vision (Goodstein et al., 2004).

Sun and Cahan, (2009) suggested that the establishment of these committees can impact positively on performance due to four main reasons. Firstly, unlike the main board or operating committees (e.g. finance/executive), monitoring board committees are usually entirely composed of independent NEDs, making them better placed to protect shareholders’ interests by effectively scrutinizing managerial actions (Klein, 1998; Vafeas, 1999b). Secondly, by their relative small size, board committees are able to meet more frequently. This provides sufficient time for meaningful dialogue and in reaching consensus decisions quicker (Karamanou and Vafeas, 2005, p.458). Thirdly, by their composition, board committees help in bringing individual director specialist knowledge and expertise to bear on the board decision-making process (Harrison, 1987). This also allows the main board to devote attention to specific areas of strategic interests and responsibility. Finally, board committees enhance corporate accountability, legitimacy and credibility by performing specialist functions (Weir et al., 2002). The principal function of an audit committee, for example, is to meet regularly with the firm’s external and internal auditors to review company financial statements, audit process and establish internal accounting controls.

This helps reduce agency costs and information asymmetry by facilitating timely release of unbiased accounting information by managers to shareholders (Klein, 1998). Also, effective monitoring by the audit committee may help minimize financial fraud and increase firm value. As a result, universal banks in Ghana have considered the importance of implementing board committees as a mechanism for board structure, because effective monitoring has a positive influence on bank performance. Even though in prior research, the impact of board committees on bank performance is limited, the results of this study report that ROA and ROE are significantly related to board committees in Ghana, which supports agency theory and accountability to shareholders. The
results imply that in the Ghanaian banking environment, board committees are an important mechanism of corporate governance in Ghana which impact on bank performance.
5.4.5 Results and Discussion of Bank Size on Financial Performance

Table 5. 14 Results and discussion of bank size on financial performance (ROA)

<table>
<thead>
<tr>
<th>Dependent Variable (ROA)</th>
<th>Pooled OLS</th>
<th>P-Value</th>
<th>Fixed Effects</th>
<th>P-Value</th>
<th>Random Effects</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bank Size</td>
<td>-0.000962791*</td>
<td>0.0181107</td>
<td>-0.000305949</td>
<td>0.7886</td>
<td>0.5133</td>
<td>0.6084</td>
</tr>
<tr>
<td></td>
<td>(-1.8455)</td>
<td>0.10666</td>
<td>(-0.2686)</td>
<td>0.7886</td>
<td>(-0.5133)</td>
<td>0.6084</td>
</tr>
</tbody>
</table>

Figures reported in brackets are robust standard errors; *** 1% significant level, ** 5% significant level and * 10% significant level.

(Source: Gretl: Researcher’s Own compilation).

Table 5. 15 Results and discussion of bank size on financial performance (ROE)

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>ROE</th>
<th>Pooled OLS</th>
<th>P-Value</th>
<th>Fixed Effects</th>
<th>P-Value</th>
<th>Random Effects</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bank Size</td>
<td>-0.00571489*</td>
<td>0.0948</td>
<td>0.0143926</td>
<td>0.7633</td>
<td>-0.00384983</td>
<td>0.3145</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(-1.6794)</td>
<td>(-0.3016)</td>
<td>(-1.0086)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figures reported in brackets are robust standard errors; *** 1% significant level, ** 5% significant level and * 10% significant level.

(Source: Gretl: Researcher’s Own Compilation)
From Tables 5.14 and 5.15 reported a weak positive but statistically insignificant effect of the bank size on ROA and ROE; hence the null hypothesis is not rejected. This finding lends empirical support to the findings of prior Ghanaian studies (Tornyeva & Werekow, 2012; Gyemerah & Amoah, 2015 and Adusei, 2011) who reported statistically insignificant and positive relationship between bank size and ROA and ROE and other international studies (Al-Sahafi et al., 2015; Naceur & Omran, 2010 and Al-Khoury, 2010). However, the findings differ from other prior Ghanaian studies by Kyereboa-Coleman & Biekpe (2006a) and Abor & Biekpe (2007) who reported a negative and statistically insignificant relationship between bank size and ROA and as well as international studies (Hoque et al., 2012, Ferede, 2012). The weak positive but statistically insignificant relationship between bank size and profitability may be attributed to the fact, as universal banks in Ghana become larger they are not able fully capable to realize economies of scale and also reduce the cost of gathering and processing information which impacts on performance moderately. This finding is in line with those of Dietrich and Wanzenried (2011) that bank size should be positively associated with performance given that banks with larger size are able to diversify and move away from traditional deposit taking and market based activities that lead to improved performance.

Furthermore, in Ghana, the weak positive result may also arise from the presence of bureaucratic processes and other costs related to managing large banks. This finding is in line with findings of Stirok Rumble, 2006; Pasiouras and Kosmidou, 2007). Larger banks are associated with having more diversification, capabilities, ability to exploit economies of scale and scope, and also being highly formalized in terms of procedures, but however, in the Ghanaian banking context, due to organizational rigidity brought about by bigger bank size and a lot of unnecessary bureaucracies, profitable opportunities that may require urgent attention will easily pass the bank and thus making them less profitable in relative terms and thus lowering the bank performance (Goddard et al 2005; Bachuenvijit 2012). This positive result indicates that large banks may benefit from economies of scale and scope (Joh, 2003). The size of a bank reflects its ability to achieve economies of scale as well as a market power. This finding is consistent with previous studies that show the same relationship (Al-Sahafi et al, 2015; Fallatah & Dickens, 2012; Pervan & Visic, 2012; Zeitun & Tian, 2007). This result can be attributed
to the fact that large banks have enough capital which allows them to expand their business operations to new activities, and thus improves bank performance and lowers the concentration of risk. In addition, large universal banks in Ghana are better equipped to use new technologies and exploit the resulting cost savings and efficiency gains. This also suggests that the larger the bank, the better the performance of the bank, because of the economies of scale arguments (Sufian, 2009). Besides, large banks receive an important bargaining power allowing them to reduce their input costs (Hauner, 2004). The implication is that an increase in the scale of operations of a universal bank results in an increase in its profits.

The size of universal banks in Ghana does allow them to exploit the economics of scale and have no difficulty also in accessing international financial markets. This finding is consistent with the argument that market structure affects financial performance (Haron, 1996), and that if an industry is subject to economies of scale, larger banking institutions would be more efficient and could provide services at lower cost (Rasiah, 2010). Furthermore, large banks have more resources more qualified staff and sophisticated information systems that result in superior performance. The positive relationship between bank size and financial performance reported in the Ghanaian banking context can be interpreted to support industrial economic theory which postulates that if an industry is subjected to economies of scale, large institutions can be more efficient, thus are able to offer services at a lower cost (Rasiah, 2010). In general, large banks in terms of assets and liabilities have the advantage of providing a larger menu of financial services to their customers which can be associated with more competitive fees, rates and charges.

On the other hand, other researchers (Ferde, 2012; Al-Manaseer et al, 2012; Hoque et al, 2012; Rachdi, 2014) report that large banks are subject to more inspections and scrutiny. Thus, it might be costly for the controlling shareholders to extract private profits. They argued that larger banks might not be as efficient as smaller banks due to reduced control by management over strategic and operational activities as bank size increases.
5.4.6. Results and Discussion of Foreign Ownership on Financial Performance

TABLE 5. 16 Results and discussion of foreign ownership on financial performance (ROA)

<table>
<thead>
<tr>
<th>Dependent Variable (ROA)</th>
<th>Pooled OLS</th>
<th>P-Value</th>
<th>Fixed Effects</th>
<th>P-Value</th>
<th>Random Effects</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreign</td>
<td>0.47747</td>
<td>0.481163</td>
<td>0.286636</td>
<td></td>
<td>0.286636</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(-13690)</td>
<td>0.1727</td>
<td>(-0.5854)</td>
<td>0.2654</td>
<td>(-0.4639)</td>
<td>0.6433</td>
</tr>
</tbody>
</table>

Figures reported in brackets are robust standard errors; *** 1% significant level, **5% significant level and *10% significant level

(Source: Gretl: Researcher’s own compilation).

TABLE 5. 17 Results and discussion of foreign ownership on financial performance (ROE)

<table>
<thead>
<tr>
<th>Dependent Variable ROE</th>
<th>Pooled OLS</th>
<th>P-Value</th>
<th>Fixed Effects</th>
<th>P-Value</th>
<th>Random Effects</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreign</td>
<td>0.0137133</td>
<td>0.5474</td>
<td>0.18276</td>
<td>0.548</td>
<td>0.010938</td>
<td>0.7243</td>
</tr>
<tr>
<td></td>
<td>(-0.6028)</td>
<td></td>
<td>(-0.0549)</td>
<td></td>
<td>(-0.3532)</td>
<td></td>
</tr>
</tbody>
</table>

Figures reported in brackets are robust standard errors; *** 1% significant level, **5% significant level and *10% significant level

Source: (Gretl: Researcher’s Own Compilation)
Also, from the Fixed Effect results of tables 5.16 & 5.17 show a positive but statistically insignificant relationship between foreign ownership and the performance of the universal bank in Ghana in terms of ROA and ROE, hence the null hypothesis is not rejected. This finding lends empirical support to the findings of prior Ghanaian studies (Adams & Agbemade, 2012; Opoku Agyeman, 2015) who reported that foreign ownership of banks impacted positively and significantly on ROE as well as other international studies (Claessens & Van Horen, 2012; Al-Manaseer et al., 2012; Micco et al., 2007). However, the findings differ from other prior Ghanaian studies (Ntow & Laryea-Afoley, 2012) as well as other international studies (Lensink & Naaborg, 2007; Barako & Greg, 2007) who reported a negative and statistically significant association between foreign ownership and both ROA and ROE.

The possible explanation for the positive relationship between foreign ownership and bank performance in Ghana may attributed to the fact that, foreign owners able to monitor management more closely due to the intrinsically greater risk they bear by investing in foreign markets; as part of this concern, foreign investors often favour the use of performance based incentives, which induce managers to act in the interest of principals. Additionally, foreign investors can bring access to new banking practices and technology, enabling reduced cost and operational efficiency which might contribute to improved bank performance. Finally, the legislative reforms in particular since the 2000s have attracted more foreign capital investment in Ghanaian banking sector. Furthermore, the banking law (Banking Act 2004 Act 673 as amended by Banking Act 2007 Act738) has provided for equal treatment for both local and foreign investors, a unique feature that distinguishes the Ghanaian banking market among Ecowas region.

This finding supports that the presence of foreign banks has created a more competitive environment and impacted on the overall performance of universal banks in Ghana. This affirms that foreign investors have the ability and the incentive to intervene (i.e. monitor and control) corporate governance to effect monitoring or complement existing poor monitoring by domestic investors (Gillan and Starks, 2003). Similarly, Hanousek et al. (2004) found that the greater incentive for monitoring among foreign investors leads to a positive impact on corporate performance. Mitton (2002) and Lins (2003) also found
that foreign investment has positive impacts on firm performance in emerging markets. This contrasts with the view of Doidge et al (2007) and Leuz et al (2010), who reported that foreign investors might not improve firm performance due to information asymmetry, differing national economic environments and differences in corporate governance application and culture.

This is consistent with previous research (Ghazali, 2010; Kirkpatrick et al., (2006); Oxelheim and Randoy, 2003; Sulong and Nor, (2010); Taufil et al. 2013; Taylor, 1990), which found that foreign ownership influences firm performance positively due to improved access to financial resources and managerial talent. In addition, they reported that foreign investors increase firm value by controlling managerial behaviour. Furthermore, Djankov and Hoekman (2000) asserted that technology transfer results in better firm performance, and this is enhanced by foreign investment. Moreover, Aggarwal et al., (2011) found that the presence of foreign institutional investors is associated with improved corporate governance, by eliminating poorly performing CEOs from the management. This may imply that foreign investors could force and influence the management to improve corporate governance and transparency in firm operations. In other words, foreign investors have superior monitoring ability to decrease agency costs and thereby improve firm performance.

The positive influence on foreign banks’ profitability may be explained by the following reasons. The plausible explanation for this may be that foreign owners can be expected to monitor management more closely due to the intrinsically greater risk they bear by investing in foreign markets; as part of this concern, foreign investors often favour the use of performance-based incentives, which induce managers to act in the interests of principals (i.e. remuneration to mitigate the agency problem). Additionally, foreign investors can bring access to new practices and technology, enabling reduced cost and operational efficiency, which might contribute to improved firm performance. Foreign banks may also have better access to capital markets, superior ability to diversify risks and the ability to offer some services to multinational and transnational companies not easily provided local banks. Similarly, Kim and Rasiah (2010) found that foreign owned banks in developing countries have better corporate governance and risk management
practices that lead to positive impact on financial performance, as proxied by ROA and ROE.
5.4.7 Results and Discussion of Post Crisis on Financial Performance

**TABLE 5. 18 Results and discussion of post-crisis on financial performance (ROA)**

<table>
<thead>
<tr>
<th>Dependent Variable (ROA)</th>
<th>Pooled OLS</th>
<th>P-Value</th>
<th>Fixed Effects</th>
<th>P-Value</th>
<th>Random Effects</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Postcrisis</td>
<td>0.0132346***</td>
<td>0.00325879</td>
<td>0.00325879</td>
<td>0.0137218*</td>
<td>0.0137218*</td>
<td>0.0008</td>
</tr>
</tbody>
</table>

Figures reported in brackets are robust standard errors; *** 1% significant level, **5% significant level and *10% significant level

(Source: Gretl: Researcher’s own compilation).

**TABLE 5. 19 Results and discussion of post-crisis on financial performance (ROE)**

<table>
<thead>
<tr>
<th>Dependent Variable ROE</th>
<th>Pooled OLS</th>
<th>P-Value</th>
<th>Fixed Effects</th>
<th>P-Value</th>
<th>Random Effects</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post Crisis</td>
<td>0.0734674***</td>
<td>0.00038</td>
<td>-0.00452359</td>
<td>0.90369</td>
<td>0.0744299***</td>
<td>0.00021</td>
</tr>
<tr>
<td></td>
<td>(-3.6221)</td>
<td>0.00038</td>
<td>(-0.1212)</td>
<td>0.90369</td>
<td>(-3.7829)</td>
<td>0.00021</td>
</tr>
</tbody>
</table>

Figures reported in brackets are robust standard errors; *** 1% significant level, **5% significant level and *10% significant level

Source:(Gretl.Researcher’sOwnCompilation)
Table 5.18 shows that the variable post-crisis had a positive but insignificant impact on the ROA of banks in Ghana. This implies that Ghanaian universal banks were not affected negatively by the international macroeconomic challenges created by the downturn in the developed economies, were not also exposed to huge non-performing loans and securitization issues. This finding lends empirical support to Kocisova’s (2014) study who found that banks from Poland, Czech, Slovakia, and Hungary had a positive impact on their performance in terms of ROA, suggesting that banks from those countries were not integrated in the global financial systems. From the above, we can also conclude that Ghana’s limited participation and lack of integration with the global financial market appeared to have shielded the banking industry from the direct impact of the crisis. This notwithstanding, the global financial meltdown had a marginal impact on the Ghanaian underdeveloped market, according to the Bank of Ghana’s Financial Stability Report (vol., 5 no, 1/2009). The possible linkages with the global crisis by the industry were the banks’ exposures to counterparties abroad which were mainly in the form of nostro balances and placement.

On the other hand, Table 5.19, shows that the Variable Post-Crisis is insignificant in the ROE models for the total sample banks. The sign of the co-efficient is negative for only ROE which is in line with the hypothesis expected. The effect of the crisis on the banks especially foreign owned banks is well understood from the angle that these foreign banks are subsidiaries of their parent companies in developed countries. Since the financial crises mostly affected the financial industry of the developed countries, it had direct bearing on their subsidiaries in developing countries such as Ghana. This result is in contradiction with Bentum (2012) who reported that Ghanaian banks were experiencing profitability during the financial crisis.
5.4.8 Summary

This chapter presented and discussed the empirical results regarding the impact of the corporate governance mechanisms on bank financial performance. Specifically, the chapter presented the findings and a discussion of the descriptive analysis undertaken in this study, and dealt with the main inferences drawn from the multiple regressions (namely control variables, board of directors, board composition, board committees, bank size and foreign ownership). The empirical results, and decisions are summarized in the Table 5.20 below. In addition, tables are presented separately according to the research objectives. All of the tables that contain all the results together of this study are presented in the above tables.
TABLE 5. 20 Empirical results summary of ROA and ROE

<table>
<thead>
<tr>
<th>Variables and Hypothesis</th>
<th>Return on assets (ROA)</th>
<th>Return on Equity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independent Variable</td>
<td>Hypothesis Number</td>
<td>Hypothesis Sign</td>
</tr>
<tr>
<td></td>
<td>Actual Sign</td>
<td>p-values</td>
</tr>
<tr>
<td>Board Size</td>
<td>1</td>
<td>+</td>
</tr>
<tr>
<td>Board Composition</td>
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<td>+</td>
</tr>
<tr>
<td>Board Committees</td>
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<td>+</td>
</tr>
<tr>
<td>Foreign Ownership</td>
<td>4</td>
<td>+</td>
</tr>
<tr>
<td>Bank Size</td>
<td>5</td>
<td>+</td>
</tr>
<tr>
<td>Post –crisis</td>
<td>6</td>
<td>-</td>
</tr>
</tbody>
</table>

Source: (Grelt:Researcher’s Own compilation)
Chapter 6: Conclusions and Recommendations

6.1 Introduction

This chapter discusses the conclusions of the thesis. It seeks to achieve five main objectives. First, it summarizes the research findings. Second, it highlights the limitations of the study. Third, discusses the policy implications of the research findings, and where applicable, makes appropriate recommendations. Fourth, the chapter summarizes the research contributions of the study. Finally, the chapter identifies potential avenues for future research. The rest of the chapter is organized as follows. Section 6.2 presents a summary of the research findings while Section 6.3 highlights the limitations of the study. Section 6.4 discusses policy implications of the research findings, and where applicable, makes appropriate recommendations while Section 6.5 briefly summarizes the research contributions of the study. Section 6.6 identifies potential research avenues for future research while Section 6.7 summarizes the chapter.

6.2 Summary of Research Findings

The thesis sought to investigate the impact of corporate governance on financial performance with respect to 21 Ghanaian universal banks over the period 2006 to 2014, using a Fixed Effect regression models. Based on a literature review of empirical works on the Ghanaian banking industry, the study examined the impact of corporate governance mechanisms via board of directors structure (e.g., board size, board composition - the presence of NEDs and board committees), bank size (log of a bank’s total asset) on financial performance. In addition, the study has also investigated the impact of foreign ownership structure on bank performance in Ghana. Performance as used in the study was measured by Return on Assets (ROA) and Return on Equity (ROE). The data set used in this study to examine these internal governance mechanisms was extracted from Ghanaian banks’ annual reports and their websites.

The study ended up with a sample of 21 universal banks during the period 2006 to 2014. Multiple regression panel data analysis was chosen as the main tool of analysis in
the study. The statistical method used to test these impacts was Fixed Effects models. The results show that board size, board composition, foreign owned banks and bank size were found to be statistically insignificant but positively related to profitability, while board committees were found to be positively and statistically significant related to profitability. The study sheds new light on performance (profitability) determinants within the Ghanaian banking industry. However, most of the findings are in line with other empirical studies in Ghana and the world at large.

6.2.1 Board of directors (Size, Composition and Committees)

The findings show that board size was found to have a weak positive, but statistically insignificant related to bank profitability. This result implies that board size impact marginally on the profitability of universal banks operating in Ghana. This means that the larger board size will help to improve the level of the bank but at very slow pace or rate. However, this finding is consistent with the argument that larger boards are associated with diversity in skills, business contacts and experience which could lead to better corporate financial performance (John and Senbet, 1998). The positive influence of board size on bank profitability in our sample may be due to the fact that a large majority of banks in our sample do have nominating committee or a pre-defined succession policy, so they appoint directors with some experience in the banking business. This might result in the appointment of management and members for the board on the basis of experience and skills. Finally, this result supports the position of John and Senbet (1998) that corporate board monitoring capacity is positively related to large board size. This is because a larger number of people with varied expertise will be better placed to subject managerial decisions to greater scrutiny and monitoring (Kiel and Nicholson, 2003). This will also help balance the power of an otherwise a dominant CEO.

Board composition was found to have a weak positive relationship with profitability, which means that non-executive directors or independent directors will help to improve the level of bank profitability in Ghana. However, the board independence will help to improve the level of the bank but at very slow rate.
The findings show a positive relationship between board composition (NEDs) and bank performance, thus the result is consistent with agency theory which suggests that boards composed of a majority of outside directors are able to monitor the self-interested actions of managers, thereby minimizing agency costs (Fama, 1980; Fama and Jensen, 1983) and maximizing shareholder wealth. The positive relationship between a majority of non-executive director representation and firm performance is based on agency theory, resulting in accountability to shareholders in this study. The results show that boards' accountability to shareholders has resulted in increased profitability through ROA and ROE. Therefore in Ghana, board composition is considered an important component of board structure in increasing bank performance.

In addition, this result also implies that universal banks have complied with the recommendations of BCBS (2006; 2010 and 2015) principles of enhanced corporate governance practices. The Cadbury Report (1992), Hampel Report (1998) and OECD (2004; 2014; Ghana’s SEC code, 2003) principles recommended that boards should comprise of a majority of non-executive directors, because they bring independence of mind and judgment on issues of strategy and governance in the running the business, and also see themselves as assisting in enhancing the prosperity of the business and play an important part in improving the performance of the business (Cadbury, 2002).

The results showed that board committee regressed positively on financial performance indicators (ROA and ROE) and was statistically significant at the 1 % level. The outcome is consistent with Laing and Weir (1999) who reported that the monitoring function of board committee impacts positively on firm performance. The positive influence of board committees on profitability of universal banks in our sample may be due to the fact that the large majority of banks have board committees which act as independent monitors to alleviate agency problems (Klein, 1998; Rezaee, 2009), to maximize the value of the company to shareholders through profitability and to increase the performance of share price. Agency theory was supported by the Basle Committee for Bank Supervision corporate principles (2010, 2015) and the Cadbury report (1992), which recommended separate committees for overseeing the risk management, auditing the financial statements, remuneration of executive directors and the appointment of execu-
tive and non-executive directors to the board, because shareholders have greater confidence when there are named committees to address the key responsibilities who disclose their existence to the investor (Davis, 2002). The establishment of board committees leads to more responsible behaviour by corporate boards and protection of the interests of the shareholders (Harrison, 1987). The results of this study report that ROA and ROE are significantly related to board committees in Ghana, which supports agency theory and accountability to shareholders. The results imply that board committees are an important mechanism of corporate governance in Ghana which impacts positively on bank financial performance.

6.2.2 Bank Size

The findings related to bank size and bank performance show a positive relationship which is consistent with the industrial economic theory which postulates that if an industry is subjected to economies of scale, large institutions can be more efficient, thus are able to offer services at a lower cost (Rasiah, 2010) and with the argument that market structure affects financial performance (Haron, 1996). Furthermore, large banks have more resources, more qualified staff and sophisticated information systems that result in superior performance. In general, large banks in terms of assets and liabilities have the advantage of providing a larger menu of financial services to their customers which can be associated with more competitive fees, rates and charges. This result is consistent with previous Ghanaian studies by Adusei (2011); Kyereboa-Coleman & Biekpe (2007) who found that there is a positive relationship between the size of a bank and its profitability.
6.2.3 Foreign Ownership

Finally, the results showed that foreign ownership had a positive relationship on bank’s financial performance. This finding confirms that foreign investors have the ability and the incentive to intervene (i.e. monitor and control) corporate governance to affect monitoring or complement the existing poor monitoring by domestic investors (Gillan and Starks, 2003). This finding was consistent with those of Taylor (1990), Oxelheim and Randoy (2003), Kirkpatrick et al. (2006); Ghazali (2010); Sulong and Nor (2010) and Taufil et al., (2013) who found that foreign ownership influences firm performance positively. They argued that foreign investors give companies access to financial resources and managerial talent. Also, they reported that foreign investors increase firm value by controlling managerial behaviour.

6.3 The Limitations of the Study

Although the findings of any research are important, they invariably suffer from several limitations. From the studies, for example, the size of the sample is a limitation, it was realized that sample sizes were somehow small when the data was limited to only banking firms. The sample size of 21 universal banks is relatively small. The period of nine years is comparatively too short. Financial companies have been excluded because firms in this sector are administered by a different set of instructions and rules (Abed et al., 2011). Additional periods of data could have drawn more significant variables than the ones provided. While this was the quest of the researcher, it was impossible to get significant accounting data on the Ghanaian banking industry before the year 2000. As a result, the period started with year 2006, three years after the full implementation of Universal Banking License in Ghana. Therefore, the size of the whole sample was 26 banking firms. Similarly, the accumulated data sourced from Banks’ annual reports did not provide all the necessary information as an individual financial statement will provide. Since it was very impossible to accumulate all the individual annual financial statements of the banks because of their unavailability, the Banks’ annual reports data were the best alternative.
Furthermore, even though the annual report authenticates the data as fully audited, there were instances that the investigator traced and cross-checked some individual bank statements and realized certain transposition errors. Since not all financial statements are available for cross-checking and corrections, it could be possible that there are some errors which could not be traced and corrected. The researcher would like to state here that he is aware of the (PricewaterHouse Coopers/ Banking Survey) database but this contains more missing data on Ghanaian Banks than that available for the period of the study. Using all efforts, the Banks annual reports were the best option available. In addition, the method is purely quantitative in nature, other researchers may adopt a broader approach by triangulation of data through the use of both quantitative and qualitative method of data collection. This will help to adequately justify research findings and enhance applicability.

Another limitation is the inclusion of only five variables of board structure; ownership structure and bank size i.e. the board size, board composition (NEDs), board committees, foreign ownership and bank size. Broader understanding of the characteristics of a board could be gleaned from an appreciation of board meetings, board diversity, CEO duality, directorship ownership, education level, gender and nationality of its members, for example. Objectively quantifiable variables were selected, however, to avoid bias within the results, and the five variables chosen have been shown as key ones within previous studies. It is, therefore, considered that the corporate board is an important mechanism affecting firm performance; however, the study recommends that future research should work out, the effect of various, further board characteristics upon bank performance.

Finally, this study investigated the impact of corporate governance on bank performance is limited as a result of historical accounting concept. Historical accounting reports suffer from the following flaws: non-performing assets may be over-valued, create distortions due to the nature of depreciation policies adopted, inventory valuation and lack standardization in the handling of international accounting conventions (IFRS, IAS).
6.4 Policy Implications and Recommendations for the Ghanaian banking sector.

The concluding chapter has discussed corporate governance and financial performance in the Ghanaian banking context which leads to the central argument that banks with effective governance mechanisms impact positively on financial performance because they usher in improvements in board independence, board committees, board size, bank size and foreign ownership. Clearly, the results of this study have provided some useful insights into the importance of bank governance, ownership structure and bank size in influencing the performance of banks. The findings of this study show that implementing good governance practices increases bank performance. As a result, this has significant implications for the banking sector, investors, policy makers and other stakeholders, due to the importance of the banking success to the economy of Ghana. Also, and where applicable, recommendations expected to about improvements will be made.

6.4.1 Policy implications for the Bank of Ghana

First, the finding is positive when it comes to board committees. The findings indicate that banks that have established board committees (risk, audit, nomination and remuneration) tend to be associated with higher accounting returns. These results support the view that the banking industry seems to put significant value on banks that have established board committees. This generally implies that the BCBS (2010; 2015) style suggestion of the Bank of Ghana’s draft corporate governance regulation in 2013 that Ghanaian universal banks should establish risk; audit, assets and liabilities, nomination, remuneration, ethics and compliance committees may be applicable.

Second, one implication of this findings is that universal banks in Ghana are cross-regulated by the UK, France, South Africa, Nigeria, and Morocco banking regulators which tend to have better bank governance standards and codes than the banks only regulated by Bank of Ghana. This is consistent with theory because reputable UK, France and South Africa banking regulators often maintain more rigorous bank govern-
ance standards. This implies that the Bank of Ghana may need to further upgrade or enhance its governance regulations to bring them up-to-date with international banking governance standards, especially to match those of the UK, France and South Africa banking markets as an important part of the general efforts at improving banking governance standards in Ghanaian universal banks. Third, Bank of Ghana should encourage universal banks to implement good corporate governance practices through enacting rules and regulations. For example, keeping the number of directors in a bank board to a minimum is recommended so long as the minimum size enables the board its supervision and monitoring activities. Universal banks should be also encouraged to increase their size in order to improve profitability due to economies of scale.

Fourth, another implication of this study is that governance among sampled banks appears to differ on the basis of ownership (foreign and local banks) and bank size. This seems to suggest that there may be a need for level of judgment and flexibility in the applicability of the governance provisions in the Bank of Ghana’s draft corporate governance regulation (2013), especially for local and newer banks. Arguably, this may help local and newer banks to meet their governance needs and also avoid incurring excessive costs. Based on the evidence that the observed variability in compliance with governance provisions or governance standards can largely be explained by size, it may arguably not be relevant for a smaller bank with a board size of seven directors, for example, to establish a separate nomination committee or to have a majority of non-executive directors, to mention but a few.

Finally, as an emerging market, good corporate governance practices are particularly important as this may not only help reduce bank failures, but may also help companies attract significant local funds or foreign direct investments (FDI). This may facilitate faster economic growth and development in Ghana. In this respect, efforts by the Bank of Ghana, the Securities and Exchange Commission, the Institute of Directors of Ghana, and the Private Enterprise Foundation, amongst other stakeholders, at improving governance standards in Ghanaian companies may be seen as a step in the right direction.
6.4.2 Policy Recommendations

First, one key policy recommendation is that the Bank of Ghana should formalize the 2013 draft corporate governance regulation into a national bank governance policy or code, which will lead to governance equality among universal banks in the country just like what SEC has done for the listed companies in Ghana. This could also be in line with the Central Bank of Nigeria bank governance code (CBN, 2006; 2014) for all banks operating in Nigeria. Furthermore, Bank of Ghana’s governance code or regulations could be made mandatory for all universal banks operating in Ghana. Since without such a policy framework, monitoring and assessment of universal banks’ corporate governance will be limited to only in-house organizational appraisals. In addition, this would help regulators enforce bank regulation and supervision on an equal platform to all universal banks.

Second, based on the findings, more non-executive directors and board committees have a positive impact on universal banks’ performance in Ghana, but it is recommended that the Bank of Ghana and SEC develop capacity building for all banks’ directors to improve bank-level corporate governance, which in turn helps to avoid potential vulnerability in the financial system, and in enhancing the banking market and sector development. The continuous capacity building is important as a majority of non-executive and independent directors coming from diverse backgrounds, lacked the relevant qualification in banking, finance, risk, legal and accounting, and experience to subject managerial decisions to proper scrutiny. Organizing regular training workshops and development conferences for existing and new non-executive directors to educate them about bank governance will be a step in the right direction.

Third, the findings of this study is helpful in a sense that it suggests stimulating foreign banks entry into the Ghanaian banking sector due to the positive link between foreign bank presence and financial performance. The Government and Bank of Ghana should create conditions for attracting more foreign banks to Ghana, in particular through effective regulation, and stable legislation. Moreover, the established positive link between
foreign banks and performance contributes to the debate surrounding the issue of foreign direct investments to Ghana.

Finally, the findings of this study indicate that the economy of scale derived from bank size plays a crucial role in bank profitability. The benefit of size would reflect on the ability to reach wider markets. Universal banks should therefore be encouraged to look beyond local markets and strategically expand their operations to other geographical markets in the West African Sub-region and sectors of the economy. Furthermore, the location of bank branches should be strategically paramount if the banks are to maximize return on investment. The agricultural and agro-processing sectors and small medium enterprises (SMEs) are still the potential and untapped markets for banks. In conjunction with branch expansion, banks should consider diversification their product portfolio. In this way universal banks can leverage on their assets to other ancillary services and maximize returns.

6.4.3 Policy implications for Board and Management.

The empirical findings provide another implication for the on-going policy debate in Ghanaian banking industry. Boards and senior managers should know that in order to implement good corporate governance, they should be concerned about inter-relationships among the five constructs; these are bored size, board composition, board committees, foreign ownership, bank size and financial performance. The findings robustly confirm that banks that implement good corporate governance have a higher advantage of increasing their financial performance. For this reason, both boards and senior managers should be concerned about the inter-relationships between corporate governance and bank financial performance. This study recommends that the banking entities should promote good corporate governance to send positive signals to potential investors and depositors.

6.4.4 Policy Recommendation for Board and Management

First, one key policy recommendation is that universal banks need to have a board made up of a majority of non-executive directors. Having a board of directors with a majority of outsiders has been shown to be important for improving the performance of
universal banks. It is established in this study that outside directors are often in the position to guide bank management on how to be cost efficient. From the empirical findings, it has been revealed that outside directors bring independence of mind and judgment on issues of strategy and governance in the running of a banking business and that they also see themselves as assisting in enhancing the prosperity of the business, and plays an important role in improving the performance of the business (Cadbury, 2002). Second, the establishment of board committees leads to more responsible behavior of bank boards and also protects the interest of shareholders. Another policy recommendation is the need for universal banks to have board committees (risk, audit, nomination, and remuneration). The results show that the presence of board committees impacts positively on bank profitability.

6.4.5 Policy implications for academics and researchers

First, this study would also make a useful curriculum in the areas of bank governance and academic programs on corporate governance abound. However, the researcher is yet to find one on bank governance especially in the West African Sub-region. Such an academic program would be useful in providing the necessary training in improving skills and expertise of bank board members, management to participate in board room discussions and decision making. Second, a strong point of the research relates to the fact that it brings empirical evidence from a relatively new cultural context taking into account that most of the studies have taken place in the UK, USA, Canada, India and Nigeria. This is the first study that reported on ownership types, board structure, bank size and financial performance on Ghanaian universal banks in the post-financial sector reform period. This is significant in permitting a test of wider validity of findings derived from research conducted in a developing country context. It also provides further insights into cultural settings where corporate governance practices are in their infancy.
6.5 Summary of Research Contributions

This study makes several new contributions, as well as extensions to the extant corporate governance literature. First, this study contributes to theory development of corporate governance literature in Ghana. As discussed in chapter 3, the competing theoretical perspectives on corporate governance (agency theory, stewardship theory, resource dependence theory, and stakeholder theory) offer different specifications on how boards should be structured or organized in terms of attributes such as board size, composition, leadership structure, committee structures, and multiple directorships. Not only that, but also the inconclusive findings in board research evident in the literature suggest that there is no clear relationship between the decisions related to the structural design of boards based on these theoretical perspectives and performance outcomes like board composition and performance. In a way, this implies that there is no standard and perfect structure for boards of directors.

Instead, as argued in prior studies, the different theoretical perspectives on how boards of directors should be structured will depend on situational factors peculiar to the individual firm (Davis et al., 1997; Donaldson, 1998). It may also be argued that the organization of boards in terms of size, composition, committee structures and multiple directorships must be tailored to fit the firm’s legal environment, its size and possibly its current development stage. Consistent with the argument by Donaldson (1998), each of the theories may hold valid with their respective domains. For instance, according to Donaldson (1998) and Donaldson & Davis (1991) the stewardship theory perspective may be proved correct as long as the working relationship or coalition between the managers and the owners of the business is cordially persisting and is perceived by managers mutually beneficial.

Conversely, in the event where there is conflict between owners and managers or the interest of the two parties diverges, thus the assumptions of agency theory come into play. This means that the different perspectives of stewardship theory and agency theory may hold under different circumstances, in this sense, the different perspective offered by each of the theories mentioned above are not necessary non-complementary
as we attempt to understand the potential organization of board of directors and performance.

Second, one of the distinctive contributions is the development of a multi-theoretical approach to corporate governance, which attempted to depict and explain the effect of corporate governance mechanisms and their influence on bank performance. In this current study, the review of different perspectives clarified that there is the need to adopt an integrated approach rather than a single perspective to understand and explain the effect of corporate governance on bank performance. This study is the first to the best of my knowledge that adopted a multi-theoretical approach on corporate governance which provided a stronger basis in explaining the effect of corporate governance on financial performance of universal banks in the Ghanaian context.

Third, this study established that board committees are related to enhanced bank performance. The reasoning here is that board committees are an important component of the board structure of universal banks in Ghana, providing independent professional oversight of bank activities to protect shareholders’ interests (Harrison, 1987). The primary role of audit, risk, nomination and remuneration committees is to act as independent monitors to alleviate agency problems (Klein, 1998; Rezaee, 2009), to maximize the value of a company to shareholders through profitability and to increase the performance of share prices. The establishment of board committees leads to more responsible behaviour by bank boards and protects the interests of the shareholder (Harrison, 1987). This finding with respect to board committees is also in tandem with prior empirical studies by Puni (2015; Sun & Cahan (2009) who found that board committees bring about enhanced bank performance.

Fourth, the findings of this study make a case for having larger boards. Larger boards tend to be associated with diversity of skills, business contacts and experience that smaller boards may not have, which offers greater opportunity to secure critical resources (Haniffa & Hudaib, 2006). Similarly, larger boards offer greater access to their firm’s external environment, which reduces uncertainties and also facilitates securing critical resources, such as finance, raw materials, and contracts (Goodstein et al, 1994;
Pearce and Zahra, 1992). This finding with respect to larger board size is in tandem with prior empirical studies by Yawson (2006) who found that larger boards enhance the knowledge base on which business advice can be sought, which increases managerial ability to make better business decisions to improve performance. It is also supported by the position of Kiel and Nicholson (2003) that, a larger number of people with varied expertise would be better placed to subject managerial decisions to greater scrutiny and monitoring.

Fifth, the study established that board composition is related to enhanced bank performance. The reasoning here is that having greater number of non-executive directors increases the independence of the board. The independence of the board is necessary in implementing effective internal control systems, which ultimately improves efficiency and performance. The finding supports the agency theory which suggests that outside directors are valued for their ability to provide advice, solidify business and personal relationships, their ability to signal when the company is doing well, and for their title and prestige (Mace, 1971). Outside directors also play an important role as shareholder advocate when they control the boards in tender offers for bidders (Byrd & Hickman, 1992), and in hostile takeover threats (Gibbs, 1993) and in helping to reduce the likelihood of financial statement frauds (Beasley, 1996). Also, in the opinion of Dalton et al., (1999), the independence of directors is an essential requirement for board effectiveness. Clearly and board composition enhances board monitoring and effectiveness, which could lead to improved performance.

Finally, the study points to the fact that foreign banks exhibit better performance than domestic/local banks. Foreign banks have had long time experience in legal enforcement and banking supervision that lead their attitudes and behavior to implementing better practices in good corporate governance. The findings of this study make a case for having foreign banks operating in emerging a country such as Ghana. Foreign banks tend to perform effective monitoring such as frequent internal auditing and reporting actions than local banks which tend to reduce agency costs and thus contribute to superior performance. The finding is supported by the argument that foreign banks operating in Ghana have access to tried and tested management systems, superior technical and
managerial talents, and financial resources thus leading to a positive influence on bank performance. This finding with respect to foreign ownership of banks contributes to previous empirical studies from developing countries which also found that banks with foreign owners lead to better performance (Bonin-et al., (2004); Kobeissi (2004); Staikouras et al., (2008).

6.6 Further Studies

There are several potential avenues for future research and improvement. First, the study has mainly examined the association between internal corporate governance structures (bank ownership types, bank size and board structures). Future studies should investigate how external corporate governance mechanisms, such as bank supervisors or regulators, external auditors, credit ratings agencies, market for corporate control and the managerial labour market, amongst others that can affect the financial performance of banks in Ghana. Future research can also analyze interactions and interdependences between internal and external corporate governance mechanisms and their impact on financial performance.

Second, also there are some pressing corporate governance issues that may be better addressed by future research or via a qualitative methodology. For instance, the importance of corporate governance in corporate decision making and performance can be explored by future research by observing boardroom interactions or by conducting interviews (i.e. structured, semi-structured and unstructured) with key company stakeholders such as executive and non-executive directors, company secretaries, senior management teams, customers, depositors and investors. Furthermore, future research can focus on the motivation and central drivers of corporate governance practices in the Ghanaian banking context. This could be done by conducting face to face interviews with major players in the Ghanaian banking industry including the Governor of the Bank of Ghana, President of the Ghana Bankers Association, Ghana Institute of Bankers, Ghana Institute of Chartered Accountants, Securities and Exchange Commission, Ghana Stock Exchange, President of Institute of Directors and the major external audit firms in Ghana. This may help to enhance the current understanding of how corporate governance structure impacts on financial performance in a developing country.
Finally, future research can also investigate the relationship between private domestic ownership, listed banks, board ownership, board diversity, board meetings, board remuneration and financial performance that can also include other control variables to the study such as, debt financing, capital intensity, bank risks, bank age to ensure the robustness of the results. Other performance measures also can be used as a proxy for financial performance such as economic value added (EVA), Tobin’s Q, non-performing loans (NPL), Profit margin (PM), earnings per share (EPS), and return on investment (ROI). Then, the results can be compared to this study. The chapter has focused on providing conclusion on the thesis. Specifically, it sought to achieve five main objectives.

First, it attempted to summarize the research findings of the study. The second objective of this chapter has been to highlight the limitations of the study, for example the sample size of 21 universal banks is relatively smaller and the nine year period examined is also comparatively short. Third, the chapter has discussed the policy implication of the research findings for Bank of Ghana, board and management, academics and researchers. Fourth, this chapter summarizes the contribution of the study. For example, the study makes several contributions as well as extensions to the extent of corporate governance literature. For example it offers for the first time direct evidence on the relationship between corporate governance structure and Ghanaian universal bank’s financial performance in post sector reform period.

The fifth objective, the chapter has been to point out potential avenues for future research. For example the study has examined the association between internal corporate governance structure and bank performance. Future studies can investigate how external governance mechanisms as the regulator, corporate controls and law amongst bothers affect bank financial performance. In conclusion, this study has discussed corporate governance and financial performance of universal banks in Ghana, which leads to the central argument of the research and the importance of good corporate governance practices to the success of banking business. Board structure, foreign ownership and bank size in universal banks were considered important for effective corporate go-
ernance practices as well as for enhancing performance of banks in emerging market such as Ghana.
APPENDIXES

APPENDIX 1 Regression results with ROA as dependent variable.

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<th>OA</th>
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<td>(0.2686)</td>
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*Significant at the 10% level
**Significant at the 5% level
***Significant at the 1% level
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**APPENDIX 2 Regression results with ROE as dependent variable.**

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<th>Dependent Variable</th>
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<th>Pooled OLS</th>
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<td>** 0.00114312** **</td>
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Figures reported in brackets are robust standard errors; *** 1% significant level, **5% significant level and *10% significant level.
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*the Merchant Bank did not publish its accounts for the years 2012, 2013, and 2014.

** The Intercontinental Bank was taken over in 2011.

*** TTB was taken over by Ecobank, in 2012.

****the BSIC Bank was licensed in 2006 and could supply the 9 years data.

****the Bank of Baroda was licensed in 2006 and could not supply the 9 years data.
References


Akowuah, G. (2011) Interest Rates and Demand For Credit in Ghana. A Thesis Submitted to Kwame Nkrumah University of SCIENCE AND Technology in requirement of MBA (Finance ) degree


Amamoo, E.; Acquah, K. and Asamah, E. (2003) The Impact of Interest Rates on demand for Credit and Loan Repayment by Poor and SME’s in Ghana IFLIP Research pp3-10


Arun, T. G. and Turner, J. (2004) Financial Sector Reforms and Corporate Governance of Banks in Developing Countries, the Indian Experience South Asian Economic Journal 5 (15) 163-248


Bangor University (2011) Business School on Financial Crisis and Bank Regulation Unit 2Chartered Banker MBA


Bank of Ghana (2013) Annual Reports


Bank of Ghana (various years), Annual Reports and Accounts, Accra


Basel Committee for banking Supervision (BCBS, 1999; 2006; 2010) Enhancing Corporate governance for Banking Institutions (BIS Switzerland).


Baum, C.F; Schaffer, M.E, ; and Stillman, S (2003) Instrumental Variables and GMM; Estimation and Testing Stata Journal 3; pp 1-31


Bobirca, A. & Miclaus, P.(2007), Corporate Governance. A South-Eastern perspective (paper no 3272) MPRA,


Centre for Policy Analysis (1996) Macroeconomic review and Outlook, Accra.

Chaganti, R.S.; Mahajan, V. and Sharma, S. (1985), Corporate size, composition, and corporate failures in Retailing industry; Journal of Management Studies, 22, 400-417


Claessens, S. (2003), Corporate Governance and Development, Global Corporate Governance Forum, World Bank, Wasington, D.C.


Dale, R. (1996), Risk and Regulation in Global Securities Market, John Willey & Sons


Dionne, G. and Triki, T. (2005) Risk Management and Corporate Governance; The Importance of Independence and Financial Knowledge for the Board and the Committee, Working paper,05-03, Canada Research Chair in Risk Management , HEC, Montreal, Canada..


Ellsrand, A.E.; Daily, C.M.; and Dalton, D.R. (1999), Governance by Committee; The influence of Board of Directors’ Committee Composition on Corporate Performance. Journal of Business Strategies, 16 (1) pp.67.


Friedman, B. M. (1962) Capitalism and freedom , Chiago University Press, Chicago..


FSAC Financial Sector Adjustment Credit


Ghana Banking Survey/PricewaterhouseCoopers(2012,2013;2014) banking surveys


280


International Monetary Fund (1989), Monetary Management in Ghana, Central Banking Department. IMF Washington D.C


Keong, L.C. (2002) Corporate Governance 2ND; An Asian –Pacific Critique, Sweet and Maxwell, Asia , Hong Kong..


Klomp, J. And De Haan, J. (2001) Banking Risk and Regulation; Does One Size Fit All? Journal of Banking and Finance


sional Paper 1 April.

wan's Shipping Industry: An Application of Data Envelopment Analysis. In Proceedings
of the Eastern Asia Society for Transportation Studies, 5; pp467-476.


Financial Economics, pp308-328.

Lipton, M. and Lorsch, J.W.(1992), A Modest Proposal for improved Corporate Gover-

European Financial Mang e ment 8, pp165-192.

Loderer, C.,and Waelchli, U (2006), Protecting minority investors: listed versus unlisted
companies, ECGI Finance WP n. 133

Lorsch, J.W., & Maclver, E. (1989).Pawns or potentates: The Reality of America’s cor-

Low, KLT (2003), Perspectives on Corporate Governance and Management, 2 Kuala
Lumpur, Percetaken Cergas (m) Sdn BHD.

firm performance; The Moderating Role of Environment, Firm age and Industry life cy-
cle. Journal of Business Venturing; Forthcoming.

and Construct. JOURNAL OF International Management, 8 (3)pp 217-221

M. T. Hannan and J. Freeman, "Organizations and Social Structure" in Organizational

Control of the Corporation by the Board of Directors; An Economic Analysis , in State-
ment of the Business Roundtable on American Law Institutes Proposed, “ Principle of
Corporate Gvernance and Structure; Restatement and Recommendations at C-1.


Moody's(2008) Corporate Governance in the Credit Crisis ; Key considerations for investors.


Challenges Facing Low Income Countries ;; New Perspectives .IMF, UK DFID Washington US.


Nam, S.W. and Nam, C. (2004), Corporate Governance in Asia Recent Evidence from Indonesia, ADB Institute, vol.2, pp.147-175.


Non Performing Assets Recovery Trust (various years) Annual Reports and Accounts, Accra.


Pfeffer, J (1972); Size, Composition, and Function of Hospital Boards of Directors, Administrative Science Quarterly, Vol. 18, pp. 349-364.


Roche, J (2005), Corporate Governance in Asia, Routledge, Oxon.


santos, J. (2001), Bank Capital Regulation in Contemporary Banking Theory; Financial Markets, Institutions & Instruments, 10, pp41-44.


Sgheri and Zoli (2009), Euro Area and Sovereign Risk During the 2007-2008 Global Financial Crises, IMF Working Paper No 09-222


Smith, B. C. 2007, Good Governance and Development; Palgrave Macmillan; 2007


Soludo, C.C (2007) “Macroeconomic, Monetary and Financial Sector Developments in Nigeria CBN Website


Sturm, J.E. and Williams, B. (2009), Foreign bank efficiency in Australia; What makes a difference? Managerial Finance, 35, (2) 180-201.


Suljkanovic, M. (2007), Corporate governance in post privatization, Bosnia, and Herzegovina, Influence of Ownership structure on Performance,


Topak, M (2011), The Effect of Board Size and Firm Performance; Evidence From Turkey; Middle Eastern Finance and Economics 14, pp119-127.


Van Den Berghe, L. (2009). To What Extent is the Financial Crisis a Governance Crisis? From Diagnosis to Possible Remedies, Working paper 2009/27


Yawson, A. (2006), Evaluating the Characteristics of Corporate Boards Associated with Layoff Decisions; Corporate Governance; An International Review, 14 (2)pp. 75-84.


Zechouser, R. And Pounds, J.(1990); Are Large shareholders Effective Monitors? An Investigation of Share Ownership and Corporate Performance, In Hubbard ,R.g. (ed),
Asymmetric Information, Corporate Finance and Investment, University of Chicago Press, Chicago, USA.


