UNIVERSITY OF CAPE COAST



UNIVERSITY OF CAPE COAST

BOARD SIZE, INTERNAL CONTROL, AND BANKS PERFORMANCE IN

GHANA

BY

AWAAFO ZAKARI HALIDU

Dissertation submitted to the Department of Accounting of the School of

Business, College of Humanities and Legal Studies, University of Cape Coast,
in partial fulfilment of the requirements for the award of Master of Business

Administration degree in Accounting.

NOBIS

DECEMBER 2021

DECLARATION

Candidate's Declaration

I hereby declare that this dissertation is the result of my own original work and that no part of it has been presented for another degree in this university or elsewhere.

Candidate's Signature: Date:			
Name: Awaafo Zakari Halidu Supervisor's Declaration			
I hereby declare that the preparation and presentation of the dissertation were			
supervised in accordance with the guidelines on supervision of the dissertation			
laid down by the University of Cape Coast.			
Supervisor's Signature: Date:			
Name: Rev. George Tackie (PhD)			
Zo Division of the Control of the Co			
NOBIS			

ABSTRACT

The study examines the moderating role of board size in the relationship between internal control and bank performance. Secondary data was obtained from the annual audited report of all the 23 commercial banks in Ghana. Descriptive research design with census method was used thus all the 23 commercial banks were used for the analysis. Multiple linear regression was used to analyse the extent to which each of the objectives, concerning monitoring and control activities affects commercial banks' performance in Ghana. The study found that there is a positive and significant relationship between control activities and the financial performance of banks in Ghana. The findings also revealed that there is a significant positive relationship between monitoring and financial performance. Further, it was shown that there is a positive and significant moderating effect of board size on the relationship between internal control and financial performance of commercial banks in Ghana. One can therefore conclude that a larger number of board members have the tendency to increase the Return on Asset (ROA) of the commercial banks because given the wide variety of industrial knowledge and skills available to help in effective decision making and monitoring. The study, therefore, recommended that stakeholders and shareholders in the banking industry in Ghana should consider appointing a relatively larger board of directors. Future research can exploit all the five components of the COSO Framework in the area of Internal Control systems and bank performance, by using secondary data.

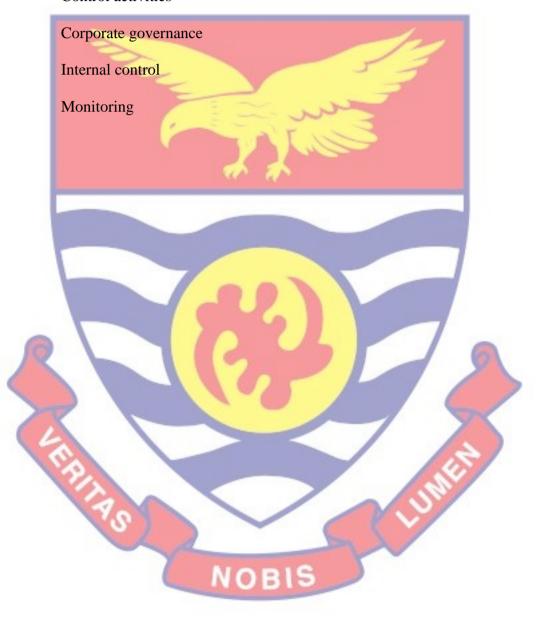
KEY WORDS

Bank performance

Board independence

Board size

Control activities



ACKNOWLEDGEMENTS

Let me use this opportunity to express my sincere gratitude to my supervisor, Rev. Dr. George Tackie for his patience and guidance towards the completion of this dissertation and for making invaluable suggestions that have made it possible for this work to be completed within the stipulated time.

Rev., as I prefer to call him, may Almighty God make life easy for you on this earth and hereafter.

My special appreciation goes to my friend, Divine Atinyo for your vast support and patience in making this dissertation possible. Again, my heartfelt gratitude goes to my family especially my mom, Jemilatu Zakari, my sister Zakari Zenabu, my Uncle Awaafo Issah, and my brother, Awafo Abdul-Razak.



DEDICATION

To my late grandfather: Atugba Awaafo



TABLE OF CONTENTS

	Page
DECLARATION	ii
ABSTRACT	iii
KEY WORDS	iv
ACKNOWLEDGEMENTS	v
DEDICATION	vi
TABLE OF CONTENTS	vii
LIST OF TABLES	X
LIST OF FIGURES	xi
LIST OF ACRONYMS	xii
CHAPTER ONE: INTRODUCTION	1
Background to the Study	1
Statement of the Problem	3
Research Objectives	5
Research Hypotheses	6
Significance of the Study	6
Delimitation	7
Limitation of the Study	7
Organization of the Study	8
CHAPTER TWO: LITERATURE REVIEW	9
Introduction	9
Theoretical Review	9
System theory	9
Internal control	10

© University of Cape Coast https://ir.ucc.edu.gh/xmlui

	Empirical Review	11
	Conceptual Framework	19
	Conceptual Review	20
	Control activities	20
	Monitoring	22
	Board Independence	23
	Audit Quality	24
	Performance	24
	Bank Performance	26
	Corporate governance	28
	Chapter Summary	31
	CHAPTER THREE: RESEARCH METHODS	32
	Introduction	32
	Research Design	32
9	Population	33
	Data Collection Instrument	34
	Data Processing and Analysis	34
	Empirical Model	35
	Ethical Consideration	36
	Chapter Summary	36
	CHAPTER FOUR: RESULTS AND DISCUSSION	38
	Introduction	38
	Descriptive Statistics	38
	Correlation Coefficients	40
	Regression Results	47

© University of Cape Coast https://ir.ucc.edu.gh/xmlui

Effect of Control Activities on the Financial Performance of	
Commercial Banks in Ghana	48
Effect of Monitoring on the Financial Performance of Commercial	
Banks in Ghana	51
Chapter Summary	61
CHAPTER FIVE: SUMMARY, CONCLUSION, AND	
RECOMMENDATIONS	62
Introduction	62
Summary of Key Findings	62
Conclusions	65
Recommendations	67
Suggestions for Future Research	68
REFERENCES	69
NODIC	

LIST OF TABLES

			Page	
	1	Operationalization and Measurement of Variables	36	
	2	Descriptive Statistics	38	
	3	Correlation Coefficients	40	
	4	Multicollinearity Test Using Variance Inflation Factor	42	
	5	Model Summary	43	
	6	Analysis of Variance and F-Test results (ANOVA)	45	
	7	Regression Coefficients	48	
	8	Regression Coefficients	51	
	9	Regression Coefficients	56	
TETALITY OF THE PARTY OF THE PA				

LIST OF FIGURES

	Page
Conceptual Framework	20



LIST OF ACRONYMS

ROA Return on Asset

ROE Return on Equity

ICS Internal Control System

COSO Committee of Sponsoring Organization

BoG Bank of Ghana

GDP Gross Domestic Product

GAB Ghana Association of Bankers

OECD Organization of Economic Corporation and Development

CHAPTER ONE

INTRODUCTION

This chapter gives the introductory part of this present study. It lays bare the background of the study, the statement of the problem, the purpose of the study, the objectives intended to achieve, and the research hypothesis. Also, it captures the significance of the study, the delimitation, limitation of the study as well as the organization of the rest of the study.

Background to the Study

Internal control systems are very vital to every business entity and more importantly to the banking industry whose environment is prone to risk which should be mitigated for performance and profitability. According to Basu (2015), internal control systems is an entire system of control i.e., financial, and non-financial established by management to enable a smooth running of the business of the firm in an effective and resourceful way, guarantee obedience to administrative strategies, protection resources and ensure the likely completeness and accurateness of accounts.

Every business or company aims at making a profit and achieving its mission and vision as well as reducing surprises or threats along the way and therefore put in place internal control mechanism to check that. Internal control structures also help duty bearers to be able to cope with the fast-evolving economic and competitive business environment due to the advent of new technologies, moving the demand of customers and priorities, and restructuring for long-term growth and expansion. Internal control encourages efficiency, reduces the risk of asset loss, and that the financial statement is consistent and is following law and regulation COSO (2011).

According to Wielstra (2014) describes internal control systems as a vital innate process that is adjusting incessantly to changes confronting the twenty-first century banking sector. Therefore, there is a need for management to put in place internal control systems to minimize or prevent fraud. Also, an internal control system can be viewed as procedures and policies that are integrated to form an organization's activities to ensure that they observed the objectives established by the board of directors and management (Rubino, Vitolla, & Garzoni, (2017).

However, internal control glitches are rampant in the banking sector and therefore pave way for rogue traders to take advantage of the situation causing huge financial losses to these financial institutions. The banking industry has experienced several catastrophes in recent times with the majority of them winding up due to incidents of losses resulting from, poor corporate governance, weak internal control systems, and fraud (Barra 2010). The folding up of banks as a result of financial distress is of great concern to the Central Banks and governments because of their economic impact on the country's GDP (Dowdell, Kim, et al., 2013).

Within the period of 2016 and 2018, seven indigenous banks collapsed, and many consolidated the by Central Bank of Ghana (Asiedu, & Deffor, 2017). The financial sector clean-up embarked on by the Bank of Ghana (BoG) cost the country between three and four billion dollars which is equal to GH¢21 billion based on the Bank of Ghana's dollar exchange rate for commercial banks (Ghanaian Times,2019). However, the unfortunate collapse of these banks was attributed to poor corporate governance, gross disregard for internal control structures, and greed on the part of management. Financial

institutions are considered to have most of the effective and efficient internal control systems, but the sector still faces numerous frauds, accounting, and financial impropriety leading to losses of investors' funds or even collapse (Callahan, & Soileau, 2017).

However, given the numerous condemnations labeled against the financial sector worldwide and in our case Ghana to be specific for internal control problems, have motivated this current study which seeks to assess the relationship between internal control and banks performance in Ghana: The moderating role of board size.

Statement of the Problem

Every business or company aims at making a profit and achieving its mission and vision as well as reducing surprises or threats along the way and therefore put in place internal control mechanism to check that. Internal control structures also help duty bearers to be able to cope with the fast-evolving economic and competitive business environment due to the advent of new technologies, moving the demand of customers and priorities, and restructuring for long-term growth and expansion. Internal control encourages efficiency, reduces the risk of asset loss, and that the financial statement is consistent and is following law and regulation COSO (2011).

Despite the guidelines set out by the Central Bank of Ghana following the Banking Act 2016 as Amended to Act 2002 (act 612), there have been several issues of bank collapse in performance due to fraud and lack of proper internal controls as well as compliance with internal and external regulations within the industry. Within the period of 2016 and 2018, seven indigenous banks collapsed, and many consolidated the by Central Bank of Ghana

(Asiedu & Deffor, 2017). The financial sector clean-up embarked on by the Bank of Ghana (BoG) cost the country between three and four billion dollars which is equal to GH¢21 billion based on the Bank of Ghana's dollar exchange rate for commercial banks (Ghanaian Times 1 August 2019). However, the unfortunate collapse of these banks was attributed to poor corporate governance, gross disregard for internal control structures, and greed on the part of management.

In addition, Gitonga (2019) conducts research on the relationship between corporate governance and internal control in the context of bank financial performance in Kenya. This study, however, did not measure the moderating effect of corporate governance in Kenya. Akimana (2019) conducted a study that was focused on the internal controls and the financial performance of private health facilities in Kenya, Nairobi. The study, however, was focused on only private health facilities which are different industries altogether from financial institutions, and hence a research gap is created. Again, Ali (2013) conducted research that examines internal controls and non-financial performance of an organization, the study, therefore, did not include the financial performance of these organizations and hence a gap was created.

Ayagre (2014) investigated the effectiveness of a bank's internal control systems. The case of Ghanaian financial institutions. This study however did not measure the moderating role of board size. Therefore, the current study was prompted by the insufficient evidence of studies in the domain of internal control and financial performance of commercial banks in Ghana. This will enhance both the practices and the academic knowledge gap.

Further, this research is seeking to fill this knowledge gap by studying the relationship between internal control systems and bank performance in Ghana: The moderating role of board size.

The study will use the 1992 COSO framework revised in 2013 components but it is limited to Control Activities and Monitoring to measure its internal control and other related issues on good corporate governance. The researchers concluded that gaining an understanding of the control activities component and the monitoring activities component of the internal control system will indicate the general association between the entire internal control system and bank performance, which is why the two control components were chosen.

However, given the numerous condemnations labeled against the financial sector worldwide and in our case Ghana to be specific for internal control problems, have motivated this current study which seeks to assess the relationship between internal control and banks performance in Ghana: The moderating role of board size

Research Objectives

The study seeks to examine the moderating role of board size in the relationship between internal control and bank performance in Ghana. The specific objectives are to:

- 1. Examine the effect of monitoring on bank performance in Ghana.
- Examine the impact of control activities on banks' performance in Ghana.
- 3. Determine the moderating effect of board size on internal control systems and banks performance.

Research Hypotheses

- There is no statistically significant effect of control activities on bank performance in Ghana.
- 2. There is no statistically significant effect of monitoring on bank performance in Ghana.
- 3. There is no statistically significant moderating effect of board size on the relationship between the internal control system and bank performance in Ghana.

Significance of the Study

The findings of this study would contribute to practice and literature. In the area of practice, the findings would be useful to firm managers and directors as it would inform them about the state of the banking sector in the Ghana. The study would assist academicians and researchers to widen their studies in the area of internal control systems with regards to the baking sector performance in Ghana. The study would benefit regulatory authorities in the financial industry. For instance, findings would help the Ghana Association of Bankers (GAB) and the Central Bank of Ghana (BoG) by laying a foundation for formulating the appropriate regulatory framework and good policies to govern the industry.

Again, the findings would be of significant support to duty bearers of commercial banks in reporting to the Board concerning how internal controls were developed, how it was operated, and how the monitoring process was done. Employees would also benefit from the findings of the study in enhancing their financial performance by way of effective implementation of the internal control.

Delimitation

The delimitation in terms of scope is an integral part of any research endeavor as it helps identify and refine issues, establish analysis criteria, and explore feasible alternatives and their probable effects on the results of the study. The scope is suitable to establish if issues are specifically associated with the proposed study. The scope of a study narrates the length to which the study area will be surveyed in the work and specifies the boundaries within which the study will be operating.

The research is limited to commercial banks' internal control structures and the financial performance of banks together with the moderating effect of board size of banks. The study was limited to all the 23 commercial licensed banks which are the supervision of the central bank of Ghana. Again, geographically the study is limited to commercial banks operating in Ghana. The methodology is limited to descriptive research design and the positivism philosophy.

Limitation of the Study

The study used only secondary data obtained from the annual reports of the banks used for this study. Thus, it was possible the data might not be entirely reliable. With regards to this, the findings should be applied cautiously. It should also be noticed that the design used for this study sought to only determine whether board size and internal had effect on financial performance of banks and there were no qualitative data collected from the firms to contextualize or corroborate the quantitative results produced using this design. Nevertheless, the researcher ensured that elements that could

further influence the reliability of the findings were held at bay by sticking strictly to the scope defined, under delimitation, for the study.

Organization of the Study

The research is broken down into five chapters. The introduction, which includes the research's background, problem statement, study aims and research hypothesis, study importance, study limitations, and delimitation, is the first chapter. The review of the literature was the emphasis of Chapter Two. The definition and evolution of the concept and definitions of the internal control system and issues relating to internal control were reviewed. Chapter Three is the research methods that would be used for the study. It would discuss the research design, approach, and methods as well as the population of the study. The results and discussion of the study are presented in Chapter Four, which is organized into key concepts derived from the analysis based on the study objectives. The summary of the findings, the study's conclusions, and suggestions, as well as recommended areas for future research, are presented in Chapter Five.

NOBIS

CHAPTER TWO

LITERATURE REVIEW

Introduction

This chapter gives a comprehensive assessment of the research in terms of past academic works and what other researchers have said about internal controls systems and bank performance. This chapter reviewed the relationship between internal control systems as predictor variables and commercial banks' performance as an outcome variable together with the moderating role of corporate governance being the moderating variable. The review also analyzed the common systems of internal controls used by firms, a theory explaining internal control, the conceptual structure or framework, and the review empirical literature.

Theoretical Review

To well situate this study in literature, a theory has been employed to underpin the study. The theory has been comprehensively tuned to accommodate the main study concepts, and help explain the relationships hypothesised between the concepts. The theory employed is the System Theory. This theory employed due to their close links to the study hypotheses. The theory is discussed in detail below;

System theory

A system is a set of connected and interdependent components that communicate in a way to obtain a set objective. The components are interdependent and the dereliction of one sub-system could result in the dereliction of the entire system. A company is a supra system that is separated into various sub-systems and therefore needs some controls over the various

components i.e., department, divisions, colleges, faculties, units, etc., for its survival and effectiveness. An integrated system with interrelated components, supportive principles, and attributes is known as an effective internal control structure. Lueg and Radlach (2016) came out with three key components measuring internal controls which are control procedures, accounting system, and control environment. According to Alhmeidiyeen, (2019) an internal control system available to an organization includes control of activities, assessment and risk recognition, management oversight and separation of responsibilities and the control culture, monitoring activities, information and communication, and deficiencies corrections.

The researcher adopts the Committee of Sponsoring Organizations (COSO) 1992 internal control framework which was commissioned in the 1980s to find out the reasons that instigated the fraudulent corporate scandals concerning the financial report and make recommendations that have become a standard measure concerning internal control and fraud deterrence (Umar, & Dikko, 2018). In 1992 a committee known as COSO was set up in the US to investigate into the causes of corporate failures, the committee came out with five components for measuring internal controls of organization and recommend that the components should be integrated into organization and function effectively could lead to a good performance of the firm.

Internal control

International Standard on Auditing (ISA 400) Defined internal control, like all the policies and strategies adopted by an organization's management to help achieve the objective of management to ensure well-organized and effective management of its business, together with conformity to

management policies, safeguarding of asset, fraud and error prevention and detection, accuracy and completeness of accounting records, and information.

Stone (2016) defines organizational internal controls as a system of checks and balances established with the goal of ensuring the accuracy of financial reporting, the quality and efficiency of the organization's operations, the protection of the firm 's assets from stealing and misapplication, and compliance with applicable laws and regulations. The COSO explains internal control comprises all objectives of an entity ie financial reporting quality, the effectiveness of operations, and compliance with applicable laws and regulations (COSO, 2013).

The COSO framework came out with five components of internal control in organizations. They include risk assessment monitoring, control activities, information and communication, and control environment. The banking institution or industry in Ghana performs a very significant role in the economy. According to Asiedu and Deffor (2017), the banking sector crisis that occasioned in Ghana between the period of 2016 and 2018 has resulted in the unfortunate demised of seven indigenous banks and many were and are the protection of the Bank of Ghana. The unfortunate collapse of these banks was attributed to flagrant disregard for proper internal control processes, management greediness, as well as bad corporate practices.

Empirical Review

The empirical review gives a vivid report of what has been published on a topic by recognized scholars and researchers. It brings out the ideas and expertise that have been established on a topic, and what their pros and cons are. Empirical literature review employs secondary sources and does not report new or original experimental work.

The influence of risk management and internal control on financial institutions, banking institutions in Palestine, was researched by (Bayyoud & Sayyad,2015). Their studies also helped to define the impact of new banking reforms and legislation on bank risk evaluation, detection, and mitigation. The findings indicated that generally, risk management mechanisms and internal in Palestine have certainly affected the banks concerning qualitative including quantitative performance.

Again, Bett and Memba (2017) carried out a study on the significance of internal control structures in the financial industry: Confirmation from Kenya. In their studies, the significance of the internal control system was stated, also its effects on the financial industry were analyzed. Research has shown that banks' internal control practices are tailored to international standards in Kenya and that there are effective control procedures in the banking sector. Again, efficient internal control structures have an appreciable impact on the vigorous and solid outlook of the Kenya banking industry. Furthermore, Asiligwa and Rennox (2017) researched to determine the contribution of internal control elements in government universities in Kenya. The investigation establishes that there were internal control structures in public universities in Kenya, but they were not effective. The study suggested that training and instruction should be intensified i.e., the internal control systems to make sure that the member of staff is not only cognizant of controls but also actively engaged in their efficiency.

A study carried by Njiru (2016) seeks to examine the impact of internal controls on the financial performance of Credit Cooperatives Societies and deposit-taking Savings in Kenya. The dependent variable was financial performance whilst the predictor variables comprise monitoring, control activities, monitoring, and risk assessment. The results of this research carried out on 122 deposit-taking in Kenya used both secondary and primary data, where the primary data were gathered through the administering of questionnaires whiles the secondary data was sourced from the annual audited reports from the various Savings and Credit Cooperative Societies (SACCOs)in Kenya. The study examines the relationship between the predictor variables and the outcome variable by applying multiple linear regression. The regression analysis carried out confirmed that the predictor variables have a positive and robust relationship with the outcome variable. The control environment, risk evaluation, control activities, and monitoring mechanisms are all independent variables that contributed significantly to the financial results of SACCOs in Kenya. Furthermore, it was quite clear from the research that if robust internal controls are not presents in the firms, the Savings and Credit Cooperative Societies would perform poorly which could eventually lead to the collapse of these institutions.

Again, a study by Kirasi (2018) conducted a study that examines the internal control structures operating in the Revenue Authority of Kenya to establish whether those internal controls have resulted in a positive outcome concerning the increase in revenue collected. The study applied the five internal control components of COSO variables. The study was carried out using a descriptive case study, using the design of causal analysis. The data

was evaluated using both statistical and narrative approaches, while the correlation was used to determine the effect of internal controls and collection of revenue. The results indicate that the five elements of COSO internal control components should be present to enable an internal control to work effectively and efficiently. The study confirmed that lack of adequate internal controls and particularly inadequate moral standards in the firms have invigorated complicity to fraud, revenue losses, and pilfering of the revenues received. Therefore, the research confirmed that internal controls function even with glitches and that in the Kenya Revenue Authority there is a significant impact between internal controls and collection of revenue.

Also, Okello, Kirori, and Ndiao, (2019) carried out a study on the impact of internal audits on the financial performance of commercial banks. The outcome variable was financial performance while the predictor variables examined were monitoring structures, risk assessment, and control environment. The results of the research indicated that internal controls could have structures built into them to guarantee that criminal conduct is identified or prevented from carrying out such transactions. Internal control checks give a guarantee concerning how control structures are working, however, the controls automatically do not identify fraudulent activities. The aims of internal controls check to relate to administrative strategies, techniques, and procedures applied to aid the firm to achieve its vision and objectives.

Furthermore, a study was conducted to investigate the relationship between internal controls corporate governance of financial institutions in Kenya was carried out by (Gitonga, 2019). A descriptive research design was used in the study and all the 43 commercial banks in Kenya were examined. A

standardized questionnaire and an unstructured interview guide were used to gather the primary data. A regression analysis based on descriptive statistics and a comparison of performance over time between 2009-2011 was used to scrutinize the data. The study recognized that majority of the banks had fused various criterion which is used for determining corporate governance and internal control as was showed that there is a positive correlation between corporate governance and internal control.

Bett, and Memba, (2017). carried a study to examine the effect of internal control design on the capacity of the bank to look into workers misconduct and the identification of employee lifestyles and fraud detection in Nigeria. The findings of the study indicate that internal control design controls workers' attitudes concerning fraud. Robust internal control structures are a discouragement to staff who try to commit fraud since the mechanism is so tight and hence restraining workers from achieving any intended fraudulent exercise. The study, therefore, stressed the need to put in place robust internal control structures to control fraud.

Akimana (2019) conducted a study regarding the effectiveness of internal control structures on private hospitals' in Kenya concerning financial performance. The study adopted the five internal control system components of the COSO Framework i.e., control environment, control activities, information and communication, monitoring, and risk assessment as to its variables for the study. The study used a descriptive research design as well as the census method for all the private hospitals accredited in Kenya. To examine the correlation between the financial performance of private health facilities and the five internal controls in Kenya, linear regression analysis was

used. The results of the research showed that for an internal control mechanism to be effective, the components of the COSO Framework should be present. The findings of the study also went further to show that monitoring had impacted greatly on the financial performance of the private health facilities in Kenya as compared to the other remaining four components of the COSO Framework concerning internal control system.

Ngungi (2013) researched to determine the process of developing and implementing internal control mechanisms in the public and private sectors and to assess whether there was a disparity in quality and effectiveness as a result. The variables for the study were the five internal control components of the COSO Framework i.e., monitoring, risk assessment, control environment, control activities, and information and communication. To find out their similarities and differences, the study explored the designs of the respective sectors. Questionnaires and focused group discussions were used to gather data from this study. Using descriptive and inferential statistics, the collected data was analyzed. The results showed that, in all internal control components, the private sector has a robust internal control juxtaposed with the government sector. Notwithstanding, there are no major gaps in control activities and monitoring in both the public and private sectors, and the government sector also has stronger preventive control elements.

Nandugga, (2019). carried out a study on the internal control role of all Polytechnic Colleges in Kenya. Control environment, risk assessment, control processes, Information and communication, and monitoring were the variables for the analysis. The study revealed that management would have depended on internal control strategies to enforce its decisions and to govern the activities

for which they would eventually be responsible as a replacement for its involvement on the scene of actions. Based on this, that the application of efficient Internal Control structures is considered vital in the management of company assets. Therefore, the duty bearers of any firm must establish internal control measures to allocate, control and guarantee effective use of assets, to accomplish the general company objectives. It was discovered that Internal Control Systems (ICS's) perform a crucial role in averting and discovering fraud and safeguarding the company's assets. This can be attained via documentation and appropriate authorization controls.

Donati (2019) seeks to assess the effectiveness of the internal control mechanism in the financial industry. The study categories control into three groups i.e., detection, correction, and prevention controls. Data on which the findings were based, was obtained from fifty branches of Wema Bank Plc. Secondary and primary source data were obtained and used which includes well-defined questionnaires, newspapers, textbooks, journal publications, internet facilities, and interviews. The secondary data were used purposely to supplement the primary data. The study employed inferential and descriptive statistical methods to analyze the data, where the results of the descriptive statistics were presented in graphical and tabulation form, and also with respect to the inferential statistics, the study used chi-square. Based on the results of his work, the absence of an efficient internal control structure is a significant reason for fraud in Nigerian banks. It is then determined that executive directors of every bank ought to establish and determine a standard of internal control mechanism, resilient sufficient to stand against the wiles of

fraud to encourage continuity of functions and to guarantee the liquidity and the continuity of the banks.

Again, a study by Umar, et al (2018) conducted a study which sought to examine the Internal Control Systems of the African Development Bank Group (AfDB) with regards to Regional Member Countries focusing on East Africa, Uganda to be precise. The variables for study include control environment, risk assessment, control activities, and monitoring, and information and communication. The results indicate that the project does not have some of the internal controls and therefore have made the existing control mechanism to be weak. The study proposed that the existing internal control system of the projects should be improved.

Wamukota, Munir, and Alala, (2018) conducted a study that examines the influence of internal controls, responsibility, and corporate governance in outmoded and modern UK. The research used the five components of internal control propounded by COSO as its variables for the study. The contemporary referential framework was used as a lens to examine outmoded internal controls used in the twelfth-century imperial exchequer and other outmoded organizations. The findings indicate that in medieval England there were large numbers of internal controls found today. The basic elements of medieval internal regulation were found to be stewardship and personal responsibility. The latest acknowledgment of the need for improved personal accountability of individuals is reminiscent of outmoded reasoning.

Katushabe, (2016). conducted a study on internal control and its impact on a firm's effectiveness and effectiveness: Ecobank Ghana Limited was used as a case study. The findings were in line with the findings of the Treadway

Commission of the COSO Framework which established that, management of the organization must establish internal controls and that the role of the internal auditors is to evaluate the effectiveness or otherwise of those internal controls put in place. The study revealed that the efficiency and value of internal controls rely on the internal audit unit and that every company and its branches should be institutionalized.

Ayagre, (2014) conducted a study that seeks to find out the internal control systems effectiveness of banks in Ghana. The study examined two components of the COSO Framework i.e., monitoring and control environment with aim of assessing the internal control systems effectiveness of banks in Ghana. The findings of the study indicate that the internal control systems are effective and robust in banks in Ghana. The study indicated that bank boards of directors of the various banks in Ghana must not be contented about the results but should rather work hard to guarantee continuous ongoing and independent monitoring of internal controls to assess that controls actually exist and are working correctly.

Conceptual Framework

A conceptual framework is defined as the conceptualization of the relationship between variables in the study and showing the graphical or diagrammatical relationship between the variable by the researcher (Mwathi, & Karanja, 2017). It enables the quantitative analysis, operation, collection of data, and measurement of the various variables identified by the researcher (Antwi, & Hamza, 2015). According to Cooper and Schindler (2014), a conceptual framework affords the researcher the opportunity to also bring up the various variables in the study. Based on the above insight regarding

conceptual framework, this study was guided by the conceptual framework shown in the figure below. The conceptual framework of the study was consisting of the independent variables; Control Activities and Monitoring while the outcome variable was the financial performance as well as the moderating variable being board size.

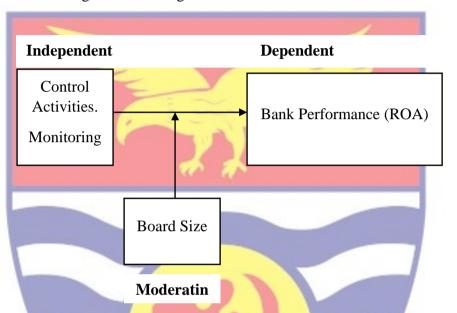


Figure 1: Conceptual Framework

Source: Author's construct (2021)

The figure above i.e., conceptual framework offers a direct association between the predictor variables (control activities and monitoring) with the financial performance of banks being the dependent variable. According to the conceptual framework, corporate governance is playing a moderating role in the relationship.

Conceptual Review

Control activities

They are strategies and techniques that are established to resolve risks that have been recognized in an entity. They come along with policies like approval, physical control access to business documents, separation of duties,

etc. a clear example of control activities is the Reconciliation of the bank balance and the cash account (Arslanalp & Liao 2014). These actions could be instituted to solve any form of improprieties in financial processes as well as scams including mistakes and probable dangers to the precision of accounting information (Barton & Bruder 2014). According to Hayes and Wallage (2014), Control activities are policies such as proper separation of duties that is, the related function should not be performed by a single individual, and also processes that are jointly carried out cannot be assigned to close employees for example deposits, withdrawal, and billing of customers. In a computerized accounting environment, access codes are required before gaining access to master files. All the same, impartial assessments must be conducted and objectively authenticated. In many instances, particularly with the bank workers in charge of resources are different from those responsible for approval of transaction (Lawson, Muriel 2017).

COSO (2004) explains control activities as measures and processes kept in place to solve threats and also to realize the goal of an organization. For control activities to be effective, it must be appropriate, operate constantly based on plan throughout the period, and also must be economical, all-inclusive, realistic, and correlate to the control objectives. Control activities happen in the whole firm, at every stage. The control activities established in the firm are prevention activities and detection activities, for instance, approval and authorization measures, controls over access to resources and records, reviews of operations and activities. In the same way, that executive directors are responsible for detecting financial and compliance threats from

their actions, they also have a responsibility to design, implement, and monitor internal control in the organization.

Loan to Deposit Ratio and Loan to Asset Ratio

The financial institutions are the most closely regulated sector because of the exposed nature of that industry (Moșteanu, 2019). The financial institutions are required by law not to give out all the deposits received as loans, hence reserves requirement should be kept by way of preventing liquidity challenges. The rationale for this practice is to make sure that banks are managed prudently and also to safeguard the assets of the banks (Arrawatia, Misra, & Dawar, 2015).

Monitoring

Monitoring must examine the performance of control structures put in place internally to brings to light any possible differences and inefficiencies linked with the system of controls (Benaroch, & Chernobai, 2017). Preferably, internal control should not be left without monitoring in order to check for its usefulness, Monitoring also confirms and guarantees whether or not employees are applying the internal control structures and whether the controls structures are tackling specific threats that it's intended to tackle (Dowdell & Kim 2013). Nevertheless, the controls support duty-bearers to detect any hitches with the operating environment. Improper responses may perhaps mean that the control systems are feeble and futile. Monitoring requires that persons occupying strategic management positions must well-informed themselves, particularly the board of directors with the idea of internal control that is appropriate for the company and also evaluates how the said controls can solve all stakeholders' interest (Otley, 2016).). The Board of directors is

required to acquire the necessary knowledge to be able to appreciate the level of threats the organization is vulnerable to and come up with a program that would enable the company to tackle them.

The board of directors is also expected to be involved in monitoring because without their participation it would be difficult for management to single-handedly solve any unexpected situations with regards to internal control (Haelterman, 2019). The Automation of accounting systems has made it much simpler for banks to put surveillance on their workers and accounting systems, however, it will be problematic if the board does equip themselves with new technological know-how that will help their supervisory role (Tontiset, & Kaiwinit, 2018).

According to Oche, Ogbe, and Igbabee, (2018), the reasoning behind monitoring is to establish whether internal control is appropriately designed, well-executed, and are effective. Internal control is effectively designed and well-executed if all the five control components (control environment, control activities, risk assessment, information and communication, and monitoring) are existing and functioning as required. However, unlike the other elements of controls, monitoring is a continuous process and therefore must be consistent.

Board Independence

Among other internal control, elements are monitoring activities that are expected to be carried out by the non-executives directors of an organization. This, therefore, suggest that there must be non-executive directors to perform an oversight function with respect to monitoring. The ability for non-executives directors to be more effective in monitoring

management is supported by scholarly work (Eling & Marek, 2018). Eling and Marek in their studies observed that monitoring ensured a significant impact on risk-taking behavior relating to firms engaged in the insurance business in the UK and Germany. According to Hanafi, Setiyono, and Sanjaya, (2018) in their studies recommended that monitoring must be actively conducted because there can be large and independent board members which are not active.

Audit Quality

The effectiveness and efficiency with regard to internal controls lie within the area of auditing. It is the duty of the audit committee in the various banks to perform their monitoring function to guarantee thorough and adequate financial reporting and accountability. According to Guo, Huang, Zhang, and Zhou, (2016) internal corporate governance is the sole responsibility of the audit committee to protect the organization from potential risk. It is required that banks with proper audit quality would have ameliorated productive internal control structures and hence decrease banks failure as we have witnessed in recent times between 2017 and 2018.

Performance

Organizations are established for specific objectives, this, therefore, means that for an organization to achieve its objectives, it should be able to conduct its activities efficiently and effectively. Organizations are required to adopt effective business practices to help them achieve their objectives as well as maintain their organizational performance. The performance of organizations is measured with respect to their abilities to achieve their specific organizational objectives. Performance means that the capacity to

function efficiently, survive, profitably, expand and respond to the prospects as well as threats within the business environment (Mawanza, 2014). Performance is considered a key measure that explains the level of development of any society.

Lately, the challenges that engulf the business environment specifically the banking industry in Ghana have now amplified the need for business organizations to be extra concerned about the growth of firms. According to Al-Weshah, Al-Manasrah, and Al-Qatawneh, (2019). the most critical variable that researchers pay much attention to concerning management and finance literature is firm performance. Firm performance is a concept that describes the extent to which a firm achieves objectives. Firm performance is a benchmark that helps to assess and measure how an organization thrives in realizing companies' objectives for the benefit of its stakeholders (Al-Dhaafri, Al-Swidi, & Yusoff, 2016).

Firm performance refers to a firms' potentials to achieve its objective through the use of available resources efficiently and effectively (Asat, Maruhun, Haron & Jaafar 2015). The study by (Galbraith & Schendel, 2016) specifically found that financial indicators such as return on sales, return on assets, and return on equity are the common measures of the financial performance of organizations. However, in the case of commercial banks, researchers and practitioners accept that these banks need to embrace different measures of organizational performance. As a social business, commercial banks have both financial and social objectives. Given this, the performance of commercial banks is not measured based on only financial but should also include social measures too (Thomasa & Kumara, 2016).

Bank Performance

To measure bank performance, the present literature uses both accounting and market measures (De Silva, Chinna, & Azam, 2020). Market performance manifests expectations of a firm's prospects and its ability to adapt to likely changes (Belkhaoui, Lakhal, Lakhal, & Slaheddine Hellara, 2014). Nonetheless, the market measure suits only listed firms and are material if the market is efficient. Some studies have sort to use different kinds of performance indicators to measure firm performance. To measure the financial and non-finance performance of commercial banks, seventy-one performance indicators were designed and used by many scholars in the field of accounting and finance (Eniola, & Entebang, 2015). In most cases, researchers use financial measures to explain firm performance. For example, measures such as return on investment, return on sale, and return on equity are some of the frequently used parameters to measure financial performance (Saeidi 2015).

Therefore, for a more comprehensive assessment, organizations have resorted to the utilization of both financial and non-financial performance measures. Furthermore, Zattoni et al (2017) measure both the financial and non-financial performance of commercial banks using indicators such as capacity utilization, process improvement, product service quality, and customer satisfaction. Return on Equity (ROE) and Return on Assets (ROA) is regularly used as proxy variables for the measurement of Bank Performance i.e., Financial Performance. Based on prior literature, suitable performance measures are those that enable institutions to direct their actions towards realizing their strategic aims. Financial performance measures have mostly

been carried out using indicators such as return on assets (ROA) and return on equity (ROE). Hence, this study currently adopted financial performance i.e., ROA to measure the performance of commercial banks in Ghana.

Return on Assets (ROA)

Banks' financial performance can be measured using Return on the asset. Banks with a greater return on asset (ROA) are a clear indication of better performance with respect to profit (Rasiah, 2010). The current studies examined banks' performance based on Return on Asset. Even though there are different methods of examining the financial performance of banks. Financial performance could be evaluated in different methods such as Profit margin, Return on Equity, Return on Asset, etc (Githaiga, Yegon, & Kimosop, 2019). However, ROA enables banks to recognize how effective, efficient, and able they to turn their assets into net income. In essence, Return on Asset shows the capability of the management of financial institutions to be able to create profit using the bank's assets even though it may be partial as a result of off-balance-sheet tasks (Dei Ofosu-Hene, & Amoh, 2016). In viewing the financial performance of banks with regards to profit, one can use Return on Asset. Moreover, in assessing how efficient and effective a bank performs, it's usually important to consider using ROA and ROE (Rasiah, 2010). The researcher has opted for ROA as the crucial proxy to examine bank performance rather than the other option which is a return on equity (ROE) for the reason that an analysis of ROE does not consider financial leverage and the threats linked with it (Ndoka, Islami, & Shima, 2017). Bank's performance is normally assessed based on profit, which may in itself be proxy by using the ROA ratio (Daouia, Simar, & Wilson, 2017).

Rasiah, (2010) proposed that it is beneficial to apply profitability ratios in measuring firm performance in the sense that it is not being influenced by price level changes. Aside from that, the ROA is a practical measurement when juxtaposing the profit of one firm to another, either for those within the same business or those from a different industry. Therefore, the ROA is a very important variable to use when juxtaposing the profit level of banks in the banking industry as a whole (Rasiah).

Corporate governance

Corporate governance is a process by which companies are managed and controlled. The definition when further to throw more light by adding that, directors of companies must be accountable for good leadership and proper management of those companies. The mandate of owners of the business in governance is to select the right caliber of people to the board and to ensure that the governance composition which has been established is adequate and appropriate (Cardbury, 1992).

According to Sobel (2007), corporate governance comprises both public and private institutions. He went further to explain that corporate governance refers to the procedure in which corporate institutions are managed, govern, and controlled i.e. the rules and regulations, laws, and traditions that affect the vision and mission of the institution. Corporate governance refers to the continuous process conducted by the audit committees and the board of directors for the benefit of shareholders of a firm by providing directions, guidance, and oversight to the management of a company (Anderson & Baker, 2010). Also, OECD principles state that corporate governance performs the oversight role with regards to the

relationship between people task with the responsibility to manage a company and the shareholders or those who put their resources in the company.

The principle further explains that corporate governance should also be interested in the relationship among external and internal interested parties or stakeholders (OECD, 1999). The primary objectives of corporate governance are to increase the performance of companies by establishing and maintaining incentives that encourage corporate internal stakeholders to ensure a firm maximizes its operational efficiency, long term growth, and ROA, i.e. reduce the abuse of authority by management over the resources of the company by making sure that resources of the firm should not be used by management for personal gain and also put measures to check management conduct to ensure corporate accountability and also to ensure that investors and society interest are protected (Nabi, 2016).

According to Coombes and Wong (2004) countries, companies, and economies across the globe without strong corporate governance mechanisms are subjected to serious consequences which may even be above and beyond crisis or corporate financial scandals. This will result in the company not being able to expand beyond its national boundaries or to attract new capital. Therefore, the failure to attract enough capital could have a negative effect on the existence of the firm which intends to affect the entire economy, where companies may not be able to compete.

Board Size

According to Langton and Robbins (2016), the board of directors of every organization should be considered as a joint force assembled for the purpose of working to attain the objectives of the organization. The board of

directors performs a very strategic role in the organization decision-making process because decision-making is pivotal concerning the firm performance. However, the formation of the board and the expertise that members of the board need to possess are significant resources for the firm. Because the organization needs a competent human resource that serves as a competitive advantage over its rivals in the industry. The board is also tasked with the responsibility of establishing tactical direction, performing the oversight role of the firm strategy, monitoring, and examining the firm performance. (Ljungquist, 2017)

Deliberations and control over the management of an entity are affected by the size of the board of directors (Aliyu, Jamil & Mohamed, 2014). Some scholars have argued that larger board size has favorable ramifications on the performance of an entity whilst others also argued that smaller board size has a positive impact on the performance of an entity. Large board size increases the cost of agency as compared to the relatively small size of the board of directors (Eldenburg, Hermalin, Weisbach & Wosinska, 2004). Uwuigbe and Fakile (2012) argued against firms with huge board size juxtaposing that with firms that have small board size, those with larger board size will lead to the board not being effective and coordination becomes a major challenge. Conversely (Chen & Al- Najjar, 2012) established that firms with large board sizes have a favorable impact on the performance of businesses. However, this current study has introduced board size as a proxy to measure corporate governance and will confirm or reject the findings of the above studies.

Chapter Summary

The various highlights of the literature review conducted do not directly address the relationship between internal control and bank performance, the moderating role of board size in commercial banks in Ghana. Therefore, the scantiness of literature in this area of study does exist, more importantly in a developing country like Ghana. Even the few that have been studied in developing countries have met with criticism in the criteria, scope and methods used and therefore create a research gap in the literature. The literature review also points out some theories relating to the variables i.e., independent, dependent, and the moderating variable, and also the conceptual framework of the variables by indicating graphically the relationship between them.

However, some of the studies from the literature review accept that the relationship between internal control systems and the financial performance of banks does exist in the baking industry. The findings of the current study would either confirm or dispel the assertions.

NOBIS

CHAPTER THREE

RESEARCH METHODS

Introduction

This chapter described the research methodology of the study. It explained the procedural strategy that was used by the researcher to answer the research questions validly, objectively, efficiently, and accurately. This section of the study, therefore, describes the research philosophy, research design, target population, data collection instruments, procedures, and data analysis.

Research Design

The research adopted the correlational research design. The correlational research design was adopted because the researcher seeks to examine relationships between or among study variables and helps determine how one or more variables affect or influence the behavior of another variable. According to Sarstifield and Garson (2018), a correlational research design is used when a study seeks to find out if a relationship or association exists between two or more variables, and if so, to what degree the relationship or association occurs. Using this design, the correlation between the predictor variables (Internal control system) and the outcome variable (Financial Performance of Banks) as well as the moderating variable (board size) was computed. The design would also help in making further predictions between the internal control system, and banks' performance.

Research philosophy refers to an overarching term concerning the development of knowledge and how the knowledge came about (Saunders et al 2009). The studies applied the positivism principle since the study builds on previous theories to develop hypotheses. To be independent in your study,

thus if the researcher does not want to affect or be affected by the subject or the research, then adopting positivism is the way to go (Saunders, Lewis, & Thornhill 2016). Therefore, the research philosophy is the positivist approach. This approach is based on the premise that the world can be described and can be explained. Over the years, positivist research philosophy has been used in accounting research due to its ability in theory construction and verification (Bisman, 2010).

According to Bisman (2010), the positivist allows for generalization which implies quantitative methodology. Furthermore, he adds that studies that seek to predict or explain a phenomenon from a theory can best achieve its objective through positivist philosophy. In line with the explanation of the positivist approach, this study aims at explaining or predicting the relationship between Internal Control Systems and bank performance, the moderating role of corporate governance.

Population

The population for a study comprises all the individuals of interest to the study with related attributes (Mwathi et al 2017). The study centered on the internal control systems of the 23 licensed commercial banks in Ghana. These financial institutions are supposed to establish internal controls in their respective banks to assist in accountability, fraud detection, and prevention, hence the study population is the licensed commercial banks in Ghana. The research was centered on licensed commercial banks because of the recent banking sector crisis and the unfortunate demise of several banks and therefore it necessitated the growing need to prevent fraud within the financial institutions.

Data Collection Instrument

The research used a secondary source of data. Secondary data is data that was previously collected for some other exercise rather than the current study but considered useful by the researcher. The main secondary source of data was the annual audited report of all 23 commercial banks in Ghana and which was retrieved from the website of the various banks for ten years period (2010 – 2019). The use of secondary research other than its original use is backed by the following literature. Annual audited reports are considered to be the most vital and extremely reliable source of information on corporate activities and performance in many fields and are widely recognized by all shareholders and other stakeholders (Mensah, 2020). Audited financial reports are regarded as important documents that incorporate activities owing to the high reliability, they lend to information reported within them, hence their use by several stakeholders as the sole source of certain information, and their prevalent distribution (Duff, 2016).

Data Processing and Analysis

Obtaining information or gaining understanding from data that have been collected and processed in a study is known as data analysis. According to Creswell (2017), the paramount objective of scrutinizing data is to handle the evidence fairly, to make convincing analytical decisions, and to rule out different explanations.

The data gathered was analyzed with the aid of micro-soft excel and SPSS version 22 statistical data analysis tool. The study used a multiple linear regression model to examine whether banks' performance is a function of the independent variables based on the objectives of the study. The researcher

conducted a diagnostic test for regression analysis to examine the validity of the model specified. Test for Multicollinearity was undertaken to establish whether the predictor variables in the regression model were highly correlated.

Empirical Model

The general equation for the research is that the financial performance of banks is a function of internal control systems. The equation is further analyzed to derive the general model that encompasses wholly the predictor variables and the outcome variable using their respective proxies.

However, the model below indicates a direct correlation exists between the outcome variable and the predictor variables using a linear regression model based on the conceptual framework.

Model Specification

ROA = $\alpha + \beta_{1it}L/D_t + \beta_{2it}L/TA + \beta_{3it}AQ_t + \beta_{4it}BI_t + \beta_{5it}L/D*BS + \beta_{6it}L/TA*BS + \beta_{7it}AQ*BS + \beta_{8it}BI*BS \epsilon...$ equation 1

Where:

ROA = Dependent variable (Return on Asset)

 α = the constant term

 β 1 =Regression Coefficients of the independent variables.

L/D = Loans to Deposit ratio

L/TA = Loans to Total Assets ratio

AQ = Audit Quality

BI = Board Independence.

BS = Board Size

 ε = Error Term.

it = Time period

Table 1: Operationalization and Measurement of Variables

Variables	Variable	Proxies	Measurements	Source
	type			
Financial	Dependent	Return on	ROA	Audited
Performance		Asset		Report
Control	Indopondent	Loop to	Loans to total assets	Audited
	Independent	Loan to		
Activities		Deposit Ratio.	ratio.	Report
7		Loan to Total	Loans to deposit	
		Asset ratio.	ratio.	
Monitoring	Independent	Board	A number of	Audited
		Independence.	independent board	Report
		Audit Quality.	members as a ratio of	-
	1		a total board member.	
		A Later	Use of top four	
			auditing firms	
	- C		<i>G</i> 1	
Corporate	Moderating	Board Size.	Board Size.	Audited
Governance.				Report

Source: Authors construct (2021)

Ethical Consideration

The researcher used secondary data, which is a greatly ethical practice because it augments the benefit of public investments in data collection, it minimizes the problem of obtaining an adequate response from respondence if it was primary data and therefore greater transparency of the study procedures and integrity of the research work is assured.

Chapter Summary

The chapter concentrated on the methodology adopted by the researcher to collect data for the study. The population for the research was the 23 commercial banks in Ghana. Data for the research was gathered from the website of the various banks and was analyzed with the aid of micro soft excel and SPSS Version 22.0 data statistical analysis tool. It should also be noticed that the design used for this study sought to only determine whether board size and internal had effect on financial performance of banks and there were no

© University of Cape Coast https://ir.ucc.edu.gh/xmlui

qualitative data collected from the firms to contextualize or corroborate the quantitative results produced using this design. Nevertheless, the researcher ensured that elements that could further influence the reliability of the findings were held at bay by sticking strictly to the scope defined, under delimitation, for the study.



CHAPTER FOUR

RESULTS AND DISCUSSION

Introduction

The study seeks to examine the relationship between internal control and bank performance in Ghana. This chapter presented the findings and discussion for the study. It starts with the descriptive statistics results, followed by the results of the correlation analysis and variance inflation factor (VIF) tests indicating the level of relationship between the descriptive variables used in the regression model. Outcomes from the linear regression model are then discussed. The focus is to explain the relationship between internal controls systems and banks' performance in Ghana from the period 2010 to 2019, based on the respective objectives of the study.

Descriptive Statistics

Descriptive statistics apply the statistical method to explore patterns in a data set. It usually summarizes the details in a data set by bringing out the average measure of the variables used in the study and presents that information in an appropriate manner (Kumari, & Malhotra, 2014). The descriptive statistics of the variables of interest are presented in Table 3.

Table 2: Descriptive Statistics

Variables	Mean	SD	Min.	Max.			
Loan-deposit	.0489	.0325	.0000	.3335			
Loan-Total Asset	5.7703	.8340	3.7467	7.9161			
ROA	.6821	.0765	.5141	.9333			
Audit quality	.9194	.2728	.0000	1.0000			
Board Independence	.6511	.1268	.3333	1.6000			
Board size	6.2662	3.956	.0250	15.000			
Source: Annual report	(2021)		Obs. = 211				

38

Table 2 above concerning descriptive statistics indicates that 211 observations were made. The 23 commercial banks in Ghana, on average their loans to deposit ratio, recorded a mean of 0.049 with a minimum figure of 0.00 and a maximum of 0.333. The data with respect to loan to total asset ratio recorded an average mean figure of 5.77. This means that the banks relied on only 6% of the loan as part of their asset, which is very encouraging. Also, the loan to total assets indicates a minimum figure of 3.74 and a maximum figure of 7.92.

The return on asset (ROA) which measures the financial performance of banks, recorded an average mean value of 0.682 (68.2%) with a minimum value of 0.514 (51.4%) and a maximum value of 0.933 (93.3%). This showed that commercial banks were earning very significant positive returns on their assets. The data on audit quality recorded a mean figure of 0.919 (91.9%). This indicates that the majority of the financial institutions in Ghana engaged the services of the big four audit firms in Ghana (PWC, Deloitte, KPMG, and Ernst and Young). It also indicates a minimum figure of 0.000 and a maximum figure of 1.000. This clearly showed that whiles the majority of the financial firms engages the services of the big four audit firm in Ghana, others do not engage them at all.

The mean value with respect to board independence was 0.651, with a minimum value of 0.333 and a maximum value of 1.000. This means that on average, the 23 commercial banks in Ghana have 65.1% of its board members being independent board members. Finally, the data on board size recorded an average mean value of 6.226 with a minimum value of 0.025 and a maximum figure of 15.000. The means that commercial banks in Ghana have on average

6 members on the board with a minimum of 3 members and maximum members of 15.

Correlation Coefficients

Correlation matrix analysis was used in analyzing the data. Using the correlation matrix analysis to analyze the data, a diagnostic test was initially carried out to test for multicollinearity among the predictor variables. Multicollinearity was necessitated by the fact that; it allows the study to determine and detect an objectionable condition where correlations amongst the predictor variables are strong. The SPSS Version 22.0 was used by the researcher to test for Correlation Matrix and Variance Inflation Factor (VIF) that measures multicollinearity in the regression model since multicollinearity falsely increases the standard errors in Table 3 and Table 5 respectively.

Table 3: Correlation Coefficients

Variables		L/D	L/TA	ROA	AQ	BI	Board size
L/D	Pearson	1	.079	.008	081	049	265**
	Correlation		1	And	7		
L/TA	Pearson	.079	1	013	002	160 [*]	083
7	Correlation		-			1	
ROA	Pearson	.008	013	1	071	.054	407**
	Correlation						
AQ	Pearson	081	002	071	1	053	.025
	Correlation		and the same of	7			
BI	Pearson	049	160*	.054	053	1	144*
	Correlation						
board	Pearson	265 [*]	*083	407**	.025	144*	1
size	Correlation						
	N	211	211	211	211	211	211

Source: Annual Report (2021)

The Pearson correlation matrix results as presented in Table 3 above indicates the correlation among the independent or the predictor variables for the 23 licensed commercial banks in Ghana. The results with respect to the correlation showed that the correlation coefficient with the largest results between the predictor variables is 0.079 for Loan to Total Asset and -0.002 for Audit Quality which indicates a weak correlation among the variables. It, therefore, shows that there is no multicollinearity among the variables. Also, the correlation coefficient between the variables of interest, the independent variables, all fall within the required range as proposed by scholars. Bryman and Cramer (2004) proposed a cutoff of 0.80 to avert the issues of multicollinearity; Anderson, Sweeney, and Williams (1990) proposed 0.70, and Kennedy (2008) argued 0.90 as a cutoff.

Therefore, even taking the position of the lowest proposition, 0.70, (Anderson, Sweeney & Williams, 1990), it can be concluded that there is no existence of multicollinearity between the study variables. However, for the researcher to be double sure of the studies, a VIF test was conducted. This is necessary because the correlation matrix only explains the association that exists between the variables of interest, the independent variable but does assure the existence of multicollinearity that is a collinearity situation because of the combined effect of two or more variables (Hair, Black, Anderson& Tatham, 2006).

The VIF was used to measure how much the variance of the estimated coefficients is increasing over the case of no correlation among the independent variables. From the results with respect to VIF, it shows clearly that the figures are less than five, thereby indicating that there are no issues of

collinearity relating to the variables. The VIF values were also inversely related to the Tolerance values (VIF = 1/Tolerance). Best and Kahn (2012), indicate that large Variance Inflation Factor (VIF) values (normally have a threshold is 10.0, which corresponds to a tolerance of 0.10) show a high degree of multicollinearity between the predictor variables. In all, the contribution of the predictor variables on the dependent variable largely was not a result of the strong association among the independent variables. Results of the analysis are shown in Table 5 below.

Table 4: Multicollinearity Test Using Variance Inflation Factor

Variables	77			
	Sig.	Tolerance	VIF	
Loan-Deposit	.933	.986	1.015	
Loan-Total asset	.939	.969	1.032	
Board Independence	.333	.990	1.010	
Audit Quality	.479	.970	1.031	

Source: Annual report (2021)

The multicollinearity test conducted using the Variance Inflation Factor (VIF) and correlation displayed no serious collinearity issues with respect to the data and other diagnostic tests conducted thereby indicating that there is no severity with regards to collinearity of the data.

The multicollinearity test outcome indicates that the predictor/ independent variables such as Loan to Deposit = 1.015, Loan to Total Asset = 1.032, Board Independence = 1.010, and Audit Quality = 1.031 all possesses a Variance Inflation Factor (VIF) which are within the acceptable range i.e., less than 10 showing that the data set have no collinearity issues as far as this study

is a concern. This, therefore, shows that the results presented above in the table with respect to collinearity show clearly that problems of collinearity that might have caused by simply transferring data do not exist but there exists an insignificant level of collinearity among the variables. However, with this low level of collinearity, it does not have any serious impact with respect to the

regression analysis.

Table 5: Model Summary

Model	R	R	Adjusted	Std. Error	R	F	Sig. F
		Square	R Square	of the	Square	Change	e Change
				Estimate	Change		
1	.087a	.008	012	.0770	.008	.395	.812
2	.448 ^b	.201	.169	.0697	.193	12.226	.000
	-						

Source: Annual reports (2021)

Model 1

The regression analysis in Table 5 above presents a model summary on the association between internal control system (control activities and monitoring) and bank performance (ROA). The model summary coefficients show the rate of influence the independent or the predictor variables have on the outcome or the dependent variable in this case bank performance (ROA). Therefore, per the findings with respect to table 6 above, the coefficients of R is 0.087 which indicates clearly that the predictor variables have a slight positive relationship with regards to commercial bank performance in Ghana.

However, the R-Square indicates clearly that the predictor variables explain 0.8% (0.008) of the variations in the performance of commercial banks in Ghana. The results, therefore, mean that considering other factors constant, the Control Activities (Loan to Deposit and Loan to Total Asset) and

Monitoring (Audit Quality, Board Independence) contribute 0.8% growth with respect to commercial bank performance in Ghana. However, some other unidentified factors are not included in the model regarding the current study which accounts for almost 99.2% growth regarding commercial bank performance and this may inform future researchers to consider exploring those factors in their studies.

Model 2

The results presented in Table 5 above with respect to the model summary indicating the moderating effect of corporate governance (Board Size) on the relationship between the predictor variables and the dependent or the outcome variable being commercial bank performance in Ghana. The second model summary was obtained after the first model summary produced a result showing the relationship between internal control (Control Activities and Monitoring) and financial performance of commercial banks in Ghana as captured in Tables 5 above. The outcome of the second model indicates a positive change with regards to R-Square showing of variation associated with respect to the independent variable went up from 0.8 percent to 20.1 per cent. This shows a 19.3 per cent increase which is very significant and confirming the impact of the moderating variables in the study. This, therefore, indicates that corporate governance being the moderating variable contributes 19.3 % growth-wise with respect to the internal controls on the financial performance of banks in Ghana.

Considering the model summary above with respect to the impact of the moderating variables, it is clear that the independent variables (Loan to Deposit, Loan to Total Asset) explain that 20.1% of the variability in terms of financial performance regarding commercial bank performance in Ghana. This is represented in the model summary with an R^2 of 0.201.

The results therefore clearly signal that other unidentified factor are not part of the current study which contributes to 79.9% of the variation in the performance of the commercial bank in Ghana. Also, the results in Table 8 above indicate 16.9 per cent reliability with respect to the Adjusted R². It, therefore, indicates that the findings can be relied on in explaining the effect of the moderating variable on the relationship between the internal control system and bank performance (ROA)

Table 6: Analysis of Variance and F-Test results (ANOVA)

M	odel	Sum of	Df	Mean	F	Sig.
		Squares	_	Square		
1	Regression	.009	4	.002	.395	.812
V	Residual	1.222	206	.006		
1	Total	1.232	210		7	
2	Regressi <mark>on</mark>	.248	8	.031	6.354	.000
	Residual	.984	202	.005		
7	Total	1.232	210		5	

Source: Annual reports (2021)

Model 1

The results of the ANOVA in Table 6, as displayed above, indicates clearly that there is an association between internal control (control activities and monitoring) and bank performance. However, the relationship between internal control and bank performance produced a result of (p = 0.812) which is greater than 0.05. Furthermore, the F value obtained from the analysis as indicated in the ANOVA Table above shows a value of (F = 0.395) which is less than 1. However, the results did not affect the reliability of the model in

explaining the influence of the independent or the predictor variables on the bank performance.

Model 2

From the ANOVA Table 6 above, the significant value which enables the study to test the reliability of the model regarding the moderating effect of corporate governance on the relationship between internal control (control activities and monitoring) and financial performance of banks in Ghana being Return on Asset (ROA) was 0.00 which is obviously less than the *p*-value of 0.05 thereby confirming the critical at 95% significance level. This result is significantly higher than the coefficient of determinants that were obtained in the previous model regarding the relationship between the predictor variables and the outcome variable without the impact of corporate governance being the moderating variable, therefore showing the significant effect of corporate governance as a moderating variable on the relationship between internal controls variables and financial performance of the bank in Ghana.

Statistically, it, therefore, means that the model is significant in determining the moderating effect of corporate governance (Board Size) on the association between internal controls and bank performance. The results in Table 9 above shows an F-value of 6.354 showing a greater significant level of the model regarding the relationship. The results, therefore, indicate how the entire model was statistically significant and how it can be relied on in explaining the moderating effect of corporate governance with respect to the relationship that exists between the independent variables and the dependent variable. However, with the introduction of board size as a moderating variable, the study observed a significant change with respect to how the

independent variables influenced bank performance because of the presence of board size.

Regression Results

Linear regression was conducted in this study to demonstrate the relationship between the independent variables and the dependent variable. The independent variables were internal control systems (Control Activities and Monitoring) whiles the outcome variable or the dependent variable was bank performance examined by a proxy being Return on Asset (ROA) obtained from annual audited reports of the 23 commercial banks in Ghana ranging from 2010 – 2019 being ten years period. Linear regression analysis conducted also tested the moderating effect of corporate governance (Board Size) on internal controls and bank performance in Ghana.

The regression analysis test was carried out in two different steps. The first regression model presented the coefficients for the predictor variables or the independent variables together with the outcome variable or the dependent variable. The second model containing the moderating variable, also presented the results of coefficients for the internal control being the predictor variables and the moderating variable being board size.

The results of the relationship between the independent variables and the dependent variable are discussed and findings are made in this section. To demonstrate the degree of the impact of internal controls on the financial performance of commercial banks, regression tests were conducted. Regression analysis results describe the regression model showing the degree of growth variability due to the effect of the predictor variables (internal controls) as provided by the determination coefficient, the ANOVA table

showing the importance of the regression model, as well as the regression coefficients.

Effect of Control Activities on the Financial Performance of Commercial Banks in Ghana

The first objectives of the study sought to assess the effect of control activities (Loan to Deposit ratio and Loan to Total Asset) on commercial banks' financial performance in Ghana. To accomplish this objective, the researcher conducted a regression analysis, and the results are as shown in Table 7 below.

Table 7: Regression Coefficients

Model		Unstandardized	Standardized	T	Sig.
		Coefficients	Coefficients		
	В	Std Error	Beta		
Constant	.682	.054		12.523	.000
Loan to Deposit	.014	.164	.006	.084	.933
Loan to Total Asset	.000	.006	005	077	.939

Source: Annual reports (2021)

Dependent Variable: ROA

The results presented in Table 7 above indicate that considering all other factors or the variable in the study being constant, the financial performance of commercial banks in Ghana will produce an intercept of 0.682. The results presented in Table 7 also indicate a unit improvement of Loan to Deposit ratio considering all other factors ceteris paribus results in 0.014 increased with respect to the financial performance of the 23 commercial banks performance ranging from a period of 2010 to 2019. Again,

a unit improvement in Loan to Total Asset, with all other factors being constant, leads to 0.000, being no increase with respect to commercial banks performance from the period of 2010 to 2019 in Ghana. Loan to Deposit ratio and Loan to Total Asset ratio both are proxy to Control Activities with respect to internal controls.

The first objective of the study is to examine the effect of control activities (Loan to Deposit ratio and Loan to Total Asset ratio) on the financial performance of commercial banks in Ghana. The results from Table 7 reveals that Loan to Deposit ratio ($\beta = 0.014$; p = 0.933) and Loan to Total Asset ratio of ($\beta = 0.000$; p = -0.077) both represent Control Activities being an internal control. The findings based on the results in table 7 above clearly indicate that there is an insignificant or a weak positive relationship between control activities and financial performance with respect to the 23 commercial banks in Ghana from 2010 to 2019. This, therefore, suggest clearly that there is no relationship between control activities (Loan to Deposit and Loan to Total Asset) and bank performance as measured by Return on Asset (ROA).

Again, the findings of the study confirm the research hypothesis, which suggests that there is no statistically significant relationship between bank performance and control activities in Ghana. The researcher, therefore, failed to reject the null hypothesis. However, the findings of the study are contrary to the findings by Barra (2010) whose study came out with the findings, which indicates that control activities and separation of duties presence increase the cost of engaging fraud among staff and therefore banks operations are assured of security. The study went further to indicate that since the benefits of engaging in the fraudulent activity must outweigh the cost in an environment

of segregated duties for staff to engage in fraud, workers find it difficult in engaging in fraudulent activities and this leads to an increase in operations efficiency and the financial performance of bank increases as well. The study is also contrary to the findings by Bayyoud et al (2015) which indicated that internal control and risk management system in Palestine have affected positively the performance of banks.

Control activities related to policies, procedures, mechanisms, and techniques that help management to ensure that risk which may be associated with the commercial banks are reduced and in effect leads to an increase in the financial performance. However, with regards to loan to deposit ratio, it indicates clearly that the banks relied on only 33.3% of the deposits from customers to be given out as loans to their customers. This is somewhat not bad because if there are delays in servicing the loans, it might not trigger liquidity problems for these financial institutions. But with this positive indication, it does not commensurate with the financial performance of the banks under study regarding return on asset (ROA).

Furthermore, with respect to loan to total asset, loans only contribute 6% of the total asset of commercial banks in Ghana within the study period, that is 2010 to 2019. This clearly, however, showed that there are control activities (Loan to Deposit ratio and Loan to Total Asset ratio) put in place in these banks, practically it does not have a rippled effect on the financial performance of the banks. This, therefore, means that the recent banking sector crisis in Ghana that led to the demised of the seven local commercial banks was because of other factors other than inadequate control activities.

This so because it's evident from the study that control activities have no significant effect on the financial performance of banks in Ghana.

Effect of Monitoring on the Financial Performance of Commercial Banks in Ghana

The second objectives of the study sought to assess the effect of monitoring (Audit Quality and Board Independence) on commercial banks' financial performance in Ghana. To achieve this objective, the researcher conducted a regression analysis, and the results are as shown in Table 8 below.

Table 8: Regression Coefficients

Model	- 500	Unstandardized	Standardized	T	Sig.
		Coefficients	Coefficients		
	В	Std Error	Beta		
Constant	.682	.054		12.523	.000
Audit Quality	.019	.020	.068	.971	.333
Board Independence	.030	.043	.050	.710	.479

Source: Annual reports (2021)

Dependent Variable: ROA

The results presented in Table 8 above indicate that considering all other factors or the variable in the study being constant, the financial performance of commercial banks in Ghana will produce an intercept of 0.682. The results presented in Table 11 also indicate a unit improvement of Audit Quality considering all other factors ceteris paribus results in 0.019 increased with respect to the financial performance of the 23 commercial banks performance ranging from a period of 2010 to 2019. Again, a unit improvement in Board Independence, with all other factors being constant,

leads to a 0.030 increase with respect to commercial banks' performance from the period of 2010 to 2019 in Ghana. Audit Quality and Board Independence both are proxies to Monitoring with respect to internal controls.

The second objectives of the study examine the effect of monitoring on the financial performance of commercial banks in Ghana. The results presented in Table 8 indicate a negative and an insignificant positive relationship between audit quality and financial performance (ROA) within the study period (β = -0.019; p = 0.333). The study taken into consideration regarding the findings in Table 11 above, proposed that there is no association between Audit Quality and banks' performance as a measure of return on asset (ROA).

The results imply that financial institution that engages the services of the big audit firms to ensure financial performance should think otherwise because they have no impact on the financial performance. This, therefore, suggest that other factors contributed largely to the growth of financial institution with respect to financial performance in Ghana rather than relying on the report of the big four auditing firms in Ghana. Management and shareholders ought to consider exploring other strategies to ensure increase or growth in the financial sector so that Ghana would not witness yet another financial sector crisis in the future.

Moreover, the results as presented in Table 8 above indicate a statistically insignificant positive relationship between Board Independence and financial performance in Ghana ($\beta = 0.030$, p = 0.479). Based on the findings, the study sort to conclude that there is no relationship between Board Independence and financial performance as measure by Return on Asset

(ROA). It is evident that the results and the findings established in Table 8 above that Board Independence does not contribute much regarding the financial performance of commercial banks in Ghana. The findings are in line with Kyereboah-Coleman and Bieke (2006) which indicate that there is a negative relationship between board independence and financial performance. Again, the findings with regards to board independence are also in line with the following previous studies by Bhagat and Black (2002); Costa (2015); Wei (2007); Dalton (1998); Wang (2014), and Bayinger and Bullter (1985) in the developed world and the same findings by AL-Matari (2012) reported that there is no relationship between board independence and financial performance of commercial banks.

The findings of the current study and the earlier studies can be explained by a study conducted by Bar-Yosef and Prencipe (2009) who made a firm argument that even if board members are formally independent, the board member might have indirect ties with people running the affairs of the bank and this can cause these board members not to discharge their duties independently and effectively. It, however, suggests that the processes of choosing independent board members can be another problem. Because independent board members are very vital because they must exercise professionalism to the board and therefore, they must be carefully selected. Moreover, the possible reason for this finding could be that the independent board of directors may be merely playing an advisory role instead of performing a monitoring role in these financial institutions and that could mean that they are part-time workers. This will therefore affect their ability to monitor and offer appropriate advice to the board, simply because they do not

have enough information to carry out their functions adequately and efficiently.

Again, because they are considered part-time staff, there is no enough motivation in terms of incentives to encourage them to fulfill their responsibilities. The independent board of directors might also have other assignments elsewhere and that would affect their devotion to duty in terms of monitoring effectively and efficiently. Further, the independent board members might not be familiar with the institutions regarding their operations and business processes.

However, the finding is contrary to the findings by Abor and Bieke (2007) who found a positive effect of board independence on the performance of commercial banks in Ghana.

However, both Audit Quality and Board Independence are proxy to Monitoring as a measure of internal control as far as this study is concerned. Therefore, the overall effect of the findings concluded that there is no statically significant effect of monitoring on the financial performance of commercial banks in Ghana within the period under study. The researcher, therefore, failed to reject the null hypothesis. The findings are however contrary to Akimana (2019) whose findings indicated that monitoring had the highest impact with respect to the financial performance of the private hospital in Kenya as compared to another measure of internal controls such as control activities, control environment, risk assessment, and information and communication.

However, according to the findings in Table 8 regarding Audit Quality and Board Independence both being proxy to Monitoring, indicates a positive moderating effect on internal control and bank performance.

Monitoring refers to the processes to of a routine check-up on the performance of the financial institutions to be specific commercial banks in Ghana. In this current study, monitoring is conceptualized using Audit Quality and Board Independence. However, the findings with respect to the big four audit firms in Ghana do not have a significant impact on the financial performance of commercial. The study has confirmed the survey by BoG with respect to the recent banking sector crisis. The survey indicates that the majority of the commercial banks that collapsed were audited by these big four audit firms and therefore banks that engaged the service of these audit firms did not get a rippled effect in terms of return on asset (ROA).

Furthermore, Board Independence which falls under the monitoring of the internal controls systems does not significantly affect the financial performance of commercial banks in Ghana. The results could mean that majority of the independent board members could have been appointed to these banks without the necessary expertise. The recent banking sector crisis in Ghana which led to the collapsed of seven local banks indicates quite clearly that a bank like the capital bank had some of its independent board members without insight knowledge with regards to the banking sector crisis. The presence of the dominance of independent board members does not have a significant ripped effect on the financial performance of commercial banks in Ghana. Recently the banking sector crisis that hit Ghana between 2017 and

2018 led to the collapse of seven local banks all had a majority of their board members being independent, but it does not translate into performance.

Finally, there are monitoring mechanisms put in place in these banks, it was not effectively executed and hence led to the serious banking sector crisis that Ghana recently witnessed between 2017 and 2019. What this therefore means is that instituting internal control measures in these banks alone does not guarantee performance.

The third objective of the study sought to assess the moderating effect of corporate governance (Board Size) on internal control systems (control activities and monitoring) and the financial performance of commercial banks in Ghana. To achieve this objective, the researcher conducted a regression analysis, and the results are as shown in Table 9 below.

Table 9: Regression Coefficients

Model		Unstandardized	Unstandardized	t	Sig.
		Coefficients	Coefficients	6	
	В	Std. Error	Beta		
Constant	.726	.056		12.942	.000
Loan to Deposit	400	.230	170	-1.738	.084
Loan to Total Asset	.013	.011	.146	1.219	.224
Audit Quality	063	.030	226	-2.120	.035
Board Independence	.012	.056	.020	.211	.833
L/D*BS	.026	.039	.082	.653	.515
L/TA*BS	002	.001 5	735	-2.062	.040
AQ*BS	.008	.004	.425	1.902	.059
BI*BS	005	.008	161	161	.577

Source: Annual reports (2021)

The results from Table 9 above represent objective 3 of the study. The objective sought to look at the moderating effect of corporate governance on

internal control (Control Activities and Monitoring) and commercial banks performance in Ghana. The results of the second model were analyzed juxtaposing that with the first model to obtain the moderating effect of corporate governance (Board Size) on the internal control and financial performance of banks in Ghana.

Without the moderating variable effect on control activities (Loan to Deposit and Loan to Total Asset) and financial performance, the results indicate ($\beta = 0.014$; p = 0.933). Whereas, after moderating corporate governance measured by board size with regards to the second model the results indicate ($\beta = -0.400$; p = 0.084). The differences between the two coefficients of determinations with regards to model 1 and model 2 in pre and post-moderation of board size are large ($\beta = 0.414$; p = 0.849). The results however indicate clearly that the moderating variable being board size played a significant role in the regression model and therefore resulting in significant changes in the analysis.

Again, model one without moderation produced a result with respect to Loan to Deposit a coefficient of determination and a significance level of (β = 0.000; p = -0.077). Whiles after moderating corporate governance as measured by board size, the coefficients of determination and significance levels are (β = 0.013; p = 0.224). The pre and post-differences between the two coefficients of determinants after the introduction of the moderating variable are large (β = 0.013, p = 0.301). It is therefore clear from the results that the moderating variable being board size was vital to the regression model and therefore led to significant changes with regards to the analysis. This is therefore evident that corporate governance as measured by board size being moderated had a

significant effect on Control Activities (Loan to Total Asset, Loan to Deposit) and financial performance of the commercial banks in Ghana.

Moreover, without the moderation variable, the coefficients of determinant with respect to Audit Quality are (β = -0.019; p = 0.333). After the introduction of the moderation variable being board size, the coefficient of determination with respect to Audit Quality is (β = -0.063; p = 0.035). The differences with respect to the coefficients of determination after the pre and post moderation of board size are large (β = -0.044; p = 0.298). These differences obviously indicate that board size being the moderation variable played a significant role in the regression model and therefore led to significant changes in the analysis.

Again, the regression results from Table 11 indicate that without the moderating variable being introduced into the first model, the coefficients of determination with respect to board independence equal to (β = 0.030; p = 0.479). However, the results in Table 11 above indicate that the coefficients of determination with respect to board independence to be (β = 0.012; p = 0.833) as a result of the moderated variable being introduced into the second model. The differences between the two coefficients of determination regarding pre and post moderation of board size are quite insignificant (β = -0.018, p = 0.354). The results, therefore, indicate quite clearly that the moderating variable being board size was not so important to the regression model and as results led to an insignificant change in the analysis.

Furthermore, in Table 9 above the researcher went further to moderate board size against each of the independent variables to obtain a direct effect of board size on internal control and bank performance.

The results from Table 9 shows that moderating L/D*BS results in a (β = 0.026; p = 0.515). These findings, therefore, indicate that when the Loan to Deposit ratio (L/D) is moderated with Board Size (BS), there would be a positive relationship between internal control and financial performance of commercial banks in Ghana.

Also, the findings of Table 9 showed that moderating board size against Loan to Total Asset (L/TA*BS) clearly indicates a coefficient of determination of (β = -0.002; p = 0.040). These results, therefore, illustrate that there is an insignificant negative and positive significant relationship between Loan to Total Asset and financial performance.

Moreover, model 2 as shown in Table 12, also illustrates that moderating Audit Quality against Board Size specifically indicates a positive relationship between Audit Quality and financial performance of commercial banks in Ghana. The findings based on the results indicate clearly that there exists a positive and significant relationship between Audit Quality and financial performance ($\beta = 0.008$; p = 0.059).

Finally, the model showed that moderating Board Size against Board Independence indicates an insignificant negative and positive relationship between board independence and financial performance ($\beta = -0.005$; p = 0.577).

The findings with respect to objective 3 sorts to examine the moderation effect of Corporate Governance (Board Size) on Internal Control (Control Activities and Monitoring) and Bank Performance as measured by Return on Asset (ROA). The findings, therefore, posit that there is a positive and significant effect of corporate governance as measured by board size

being the moderation variable on Internal Control (Control Activities and Monitoring) and financial performance of commercial banks in Ghana as measured by return on Asset (ROA). This is evident as indicated by the ($R^2 = 24.8\%$, F = 6.354, p = 0.000).

It, therefore, showed clearly that there is a significant effect or influence of corporate governance on the financial performance of commercial banks in Ghana. There are however previous studies which find both negative and positive relationship between corporate governance (board size) and financial performance. The finding is however in line with the findings of Hoque, and Rayhan (2013) which showed that there is a significant relationship between corporate governance (board size) and bank performance as measured by return on asset (ROA). Again, the findings also confirm the study conducted by Cifti, Tatoglu, Wood, Demirbag, and Zaim (2019) who found a positive and significant relationship between Return on Asset and Board Size. However, the findings on the other hand are also contradictory to the findings of Ramano, Ferretti, and Quirici, (2012) also found that banks' financial performance does not have any relationship with board size.

Furthermore, the findings are also inconsistent with the findings by Farkhanda (2015) who also found that there is absolutely no relationship between the financial performance of banks and board size. The explanation to these findings suggests that some board members are block holders and therefore this may influence the appointment of board members rather than appointment based on expertise and ability and it may result in these people influencing management decision and which is likely to weaken the board supervision and coordination.

© University of Cape Coast https://ir.ucc.edu.gh/xmlui

In the nutshell, corporate governance mechanisms can be categorized into two, i.e. internal and external corporate governance mechanisms (Owusu & Weir, 2016). However, the current study focused on internal governance (board size). The findings of the study however indicate that corporate governance (board size) plays a very significant role in influencing the financial performance of banks in Ghana. The study showed that the maximum number of board size is 15 members, and this, therefore, suggests that a large board size tends to increase the financial performance of commercial banks given the wide range of industry knowledge and skills available to aid in effective decision making and monitor management. Again, with larger board size, CEOs are constraints from dominating the board and this would help to enhance the bank's performance.

Chapter Summary

The chapter presented and discussed the results from the analysis. Descriptive statistics for the variables of interest were presented. The study further conducted a correlation matrix and variance (VIF) test, to test for multicollinearity between the variables which showed clearly that there was no multicollinearity. The study proceeded to analyze the effect of internal control (control activities and monitoring) and the financial performance of banks. Finally, the study analyzed the moderating effect of board size on internal control and financial performance of commercial banks in Ghana.

CHAPTER FIVE

SUMMARY, CONCLUSION, AND RECOMMENDATIONS

Introduction

This chapter presents the summary of the study, draws conclusions based on major findings of the study and recommendations of the study. It gives a brief overview of the study, which includes the purpose of the study, methodology, and findings. Recommendations are made to help understand better the relationship between internal control and bank performance, and provide suggestions for further research.

Summary of Key Findings

The purpose of the study was to examine the effect of internal control system (Control Activities and Monitoring) on the financial performance of commercial banks in Ghana. With respect to variables of the study, the research focused on two components of the COSO Framework i.e., Control Activities and Monitoring as the independent or the predictor variables. In fact, the Committee of Sponsoring Organization (COSO) came with five components of internal control system (Risk Assessment, Control Environment, Control Activities, Monitoring, and Information and Communication) but the study limited its scope to only two of the components. The rationale for the choice of the two components of the COSO Framework of the internal control system was to manage the scope of the research and also the researcher believed that gaining an understanding of control activities and monitoring activities component of the internal control system will provide a clearer picture on the relationship between the whole internal control system and bank performance.

While the performance of banks was the dependent variable which was measured using Return on Asset (ROA), the study also considered the moderating role of corporate governance (Board Size) on the performance of commercial banks in Ghana. The study first examined the effect of control activities (loan to deposit ratio and loan to total asset ratio) on the financial performance of commercial banks in Ghana. Secondly, the study examined the effect of monitoring (Audit Quality and Board Independence) on the performance of banks in Ghana. Lastly, the study examined the moderating role of corporate governance (Board Size) in the relationship between internal control systems and bank performance.

Theoretical and empirical literature with respect to the internal control system, banks' performance, and corporate governance were reviewed. The various definitions with respect to internal control systems and the reasons why banks engaged in internal control exercise were discussed. The main theory of the study was system theory which was discussed extensively by the researcher. The conceptual framework for the research was designed to describe graphically the relationship between internal control systems and bank performance in Ghana as well as the moderating role of corporate governance in the relationship.

The study employed a quantitative approach. Times series data set of the individual commercial banks were used for the study. The population consisted of all the 23 commercial banks in Ghana. The study used secondary data which was obtained from the annual audited report of the individual commercial banks over ten years (2010-2019). The data were analyzed using both descriptive and inferential statistics. With regards to the data, descriptive

such as mean, standard deviation, minimum and maximum were for all the objectives was analyzed. The correlation matrix and Variance Inflation Factor (VIF) were used to analyse the data with respect to various objectives of the study to test for correlation and multicollinearity among the independent variables. Multiple linear regression was used to analyse and discuss the data within the context of the stated objective while references were made with respect to previous literature. The findings that emerged from the study were as follows:

The first objective of the study sought to assess the relationship between Control Activities (Loan to Deposit and Loan to Total Asset) and the financial performance of banks in Ghana. Findings from this objective of the study are that Loan to Deposit which is a proxy for Control Activities has an insignificant positive relationship between control activities and financial performance of commercial banks in Ghana. Again, Loan to Total Asset which was also used as a proxy for control activities showed that there is no significant relationship between control activities and bank performance. It was therefore concluded that control activities (Loan to Deposit and Loan to Total Asset) do not have a significant effect on the financial performance of banks. The findings, therefore, confirm the research hypothesis, which suggests that there is no statistically significant relationship between control activities and the financial performance of banks in Ghana.

The second objective sought to examine the effect of Monitoring (Audit Quality and Board Independence) on the financial performance of banks in Ghana. The findings revealed that Audit Quality does not have a significant effect on the Return on Asset (ROA) of commercial banks in

Ghana. It was also revealed that Board Independence does not have a significant effect on Return on Asset (ROA) of the financial performance of commercial banks in Ghana. Furthermore, the overall effect of the findings found that monitoring (Audit Quality and Board Independence) which is a proxy for internal control does not have a significant effect on Return on Asset (ROA) of the financial performance of commercial banks in Ghana. The researcher, therefore, failed to reject the hypothesis which suggests that there is no statistically significant effect of monitoring on financial performance.

The third objective of the study sought to examine the moderating effect of corporate governance (board size) on the relationship between internal control systems (control activities and monitoring) and the financial performance of banks. Testing the moderating effect of board size, the study found that the board size has a significant effect on the relationship between internal controls and the financial performance of commercial banks in Ghana. This indicates that board size that is a proxy to corporate governance plays a very significant role that affects positively the financial performance of commercial in Ghana. Furthermore, the findings presented in the earlier chapter showed that the moderating variable i.e., board size contributed 19.3% to growth in the financial performance of banks in Ghana.

Conclusions

Given the data analysis and findings obtained in chapter four above, taking into consideration the specific objectives of the study. With regards to the first objective which sought to examine the effect of control activities on the financial performance of banks. One can conclude that Control Activities

within the commercial banks in Ghana are positively and insignificantly related to the financial performance of the banks. The control activities for internal control kept in place by the commercial banks were effective but do not have rippled effect on the financial performance of the banks. This, therefore, means that other internal control systems rather than control activities need to be put in place by the commercial banks to obtain a commensurate effect on the financial performance.

Furthermore, with respect to the second objective of the study which sought to examine the monitoring effect on the return on asset (ROA) of commercial banks, one can conclude that monitoring within commercial banks is positive and insignificantly related to the financial performance of banks. The majority of the commercial banks engaged the services of the big four audit firms in Ghana but their effectiveness could not be assured because its rippled effect on return on asset (ROA) was insignificant. This therefore could have been occasioned because of the long-term working relationship between these banks and audit firms and that resulted in their infectiveness to conduct their responsibility properly.

This assertion can be supported by the recently collapsed banks that were audited by these audit firms and given clean reports but the Bank of Ghana Asset Quality Review reported otherwise. Again, board independence was also insignificant which suggested that independent board of directors have no significant effect on the return on asset (ROA) of the banks. This issue could have been occasioned by the agency problem because these independent directors have no investments in these banks to protect.

Remarkably, when the corporate governance variable i.e., board size was introduced in the basic model, the insignificant relationship between the internal control system and financial performance of banks no longer holds. The study found the moderating effect of corporate governance i.e., the board size, within the commercial banks is positive and significantly related to financial performance. The findings, however, confirm the findings by Hoque et al. (2013) which found that there is a significant relationship between corporate governance (board size) and financial performance of banks i.e., return on asset (ROA). One can therefore conclude that a larger number of board members have the tendency to increase the Return on Asset (ROA) of the commercial banks because given the wide variety of industrial knowledge and skills available to help in effective decision making and monitoring. Again, with larger board size, the CEOs are not able to dominate the board and this would help to enhance the financial performance of the banks.

Recommendations

In light of the findings and conclusions drawn, the study, therefore, recommends that players in the banking sector industry in Ghana i.e., stakeholders should design and develop proper control activities i.e., policies, procedures, and techniques, and implemented effectively to help management to ensure that risk associated to commercial banks are reduced and in effect could lead to increase in the financial performance. The study also recommends that all current control activities in the commercial banks should be reviewed and the necessary adjustment made to guide their operations.

Monitoring has a positive and insignificant relationship with the financial performance of banks. The study recommends that stakeholders in

the banking sector should reconsider their long-term engagement with these audit firms to reduce the familiarity threats posed as a result of their long-term relationship with them. The study also recommends that an independent board of directors should be appointed based on their expertise so that they could come to the boardroom with rich knowledge and not based on relations or being a block holder.

Finally, board size has a positive and significant relationship with the financial performance of banks. The study, therefore, recommends that stakeholders and shareholders in the banking sector industry should consider appointing a relatively larger board of directors. Bank of Ghana which is cloth with the powers to enact policies for the banking industry should come with deliberate policies that ensure banks have a large board size. Having a large board size ensures that board members come with a wide variety of knowledge and skills to help ensure good corporate governance and better financial performance of commercial banks in Ghana.

Suggestions for Future Research

- The current study concentrated on two components of the COSO
 Framework, future research should exploit all the five components of the COSO Framework in the area of internal control systems and banks' performance using secondary data.
- 2. This study also restricted itself to all licensed commercial banks in Ghana, future research can be conducted on rural community banks and insurance companies in Ghana.

REFERENCES

- Adeyemi, B., & Adenugba, A. (2011). Corporate governance in the Nigerian financial sector: The efficacy of internal control and external audit. In *Global Conference on Business and Finance Proceedings* 6(2), 691-698.
- Ahmed, I., & Manab, N. A. (2016). Influence of enterprise risk management success factors on firm financial and non-financial performance: A proposed model. International Journal of Economics and Financial Issues, 6(3).
- Ahmed, I., & Manab, N. A. (2016). Influence of enterprise risk management success factors on firm financial and non-financial performance: A proposed model. *International Journal of Economics and Financial Issues*, 6(3).
- Akimana, K. J. (2019). Effect of Internal Controls on Financial Performance of Small and Medium Enterprises in Nairobi County (Doctoral dissertation, United States International University-Africa).
- Al-Dhaafri, H. S., Al-Swidi, A. K., & Yusoff, R. Z. B. (2016). The mediating role of TQM and organizational excellence, and the moderating effect of entrepreneurial organizational culture on the relationship between ERP and organizational performance. *The TQM Journal*.
- Alhmeidiyeen, M. S. (2019). Change Management and Organizational

 Development: A Critical Conceptual Study. Global Journal of

 Management and Business Research.

- Ali, K. H. (2013). Contribution of the internal control system to the Financial performance of financial institution A case of people's bank of Zanzibar ltd (Doctoral dissertation, Mzumbe University).
- Aliyu, N. S., Muhammad Jamil, C. Z., & Mohamed, R. (2014). The mediating role of the management control system in the relationship between corporate governance and the performance of bailed-out banks in Nigeria. *Procedia-Social and Behavioral Sciences*, 164, 613-620.
- Al-Weshah, G. A., Al-Manasrah, E., & Al-Qatawneh, M. (2019). Customer relationship management systems and organizational performance:

 Quantitative evidence from the Jordanian telecommunication industry.

 Journal of Marketing Communications, 25(8), 799-819.
- Anderson, D., Sweeney, D., & Williams, T. (1990). Statistics for Business and Economics. Saint Paul.
- Antwi, S. K., & Hamza, K. (2015). Qualitative and quantitative research paradigms in business research: A philosophical reflection. European journal of business and management, 7(3), 217-225.
- Apostolou, B., Dull, R. B., & Schleifer, L. L. (2013). A framework for the pedagogy of accounting ethics. *Accounting Education*, 22(1), 1-17.
- Arrawatia, R., Misra, A., & Dawar, V. (2015). Bank competition and efficiency: empirical evidence from the Indian market. *International Journal of Law and Management*.
- Arslanalp, S., & Liao, Y. (2014). Banking sector contingent liabilities and sovereign risk. *Journal of Empirical Finance*, 29, 316-330.

- Asat, S. H., Maruhun, E. N. S., Haron, H., & Jaafar, M. (2015, July).

 Enterprise risk management (ERM) and organizational performance:

 The case of housing developers in Malaysia. In *MARIM International Conference, Langkawi*.
- Asiedu, K. F., & Deffor, E. W. (2017). Fighting corruption by means of effective internal audit function: Evidence from the Ghanaian public sector. *International Journal of Auditing*, 21(1), 82-99.
- Asiligwa, M., & Rennox, G. (2017). The Effect of internal controls on the financial performance of commercial banks in Kenya. *Journal of Economics and Finance*, 8(3), 92-105.
- Ayagre, P., Appiah-Gyamerah, I., & Nartey, J. (2014). The effectiveness of Internal Control Systems of banks. The case of Ghanaian banks.

 International Journal of Accounting and Financial Reporting, 4(2), 377.
- Barra, R. A. (2010). The impact of internal controls and penalties on fraud.

 Journal of Information Systems, 24(1), 1-21.
- Bayyoud, M., & Sayyad, N. A. (2015). The impact of internal control and risk management on banks in Palestine. *International Journal of Economics, Finance and Management Sciences*, 3(3), 156-161.
- Belkhaoui, S., Lakhal, L., Lakhal, F., & Hellara, S. (2014). Market structure, strategic choices and bank performance: a path model. *Managerial Finance*.
- Belkhaoui, S., Lakhal, L., Lakhal, F., & Hellara, S. (2014). Market structure, strategic choices and bank performance: a path model. *Managerial Finance*.

- Benaroch, M., Chernobai, A., & Goldstein, J. (2017). An internal control perspective on the market value consequences of IT operational risk events. *International Journal of Accounting Information Systems*, 13(4), 357-381.
- Bett, J. C., & Memba, F. S. (2017). Effects of Internal Control on the Financial Performance of Processing Firms in Kenya: A Case of Menengai Company. *International Journal of Recent Research in Commerce Economics and Management*, 4(1), 105-115.
- Bett, J. C., & Memba, F. S. (2017). Effects of internal control on the financial performance of processing firms in Kenya: A case of Menengai company. International Journal of Recent Research in Commerce Economics and Management (IJRRCEM), 4(1), 11-22.
- BoG. (2018). Government establishes new indigenous bank. Retrieved from
- Brennan, N. M., Solomon, J., & Jones, M. J. (2008). Internal control, accountability, and corporate governance. *Accounting, Auditing & Accountability Journal*.
- Bryman, A., & Cramer, D. (2004). Constructing variables. *Handbook of data* analysis, 17-34.
- Callahan, C., & Soileau, J. (2017). Does enterprise risk management enhance operating performance?. *Advances in accounting*, *37*, 122-139.
- Chen, C. H., & Al-Najjar, B. (2012). The determinants of board size and independence: Evidence from China. *International Business Review*, 21(5), 831-846.

- Ciftci, I., Tatoglu, E., Wood, G., Demirbag, M., & Zaim, S. (2019). Corporate governance and firm performance in emerging markets: Evidence from Turkey. *International Business Review*, 28(1), 90-103.
- Committee of Sponsoring Organizations of the Treadway Commission. (2013). Internal control-integrated framework.
- Cooper, D. R., & Schindler, P. S. (2014). *Business research methods*. McGraw-Hill.
- Creswell, J. W., & Creswell, J. D. (2017). Research design: Qualitative, quantitative, and mixed methods approach. Sage publications.
- Daouia, A., Simar, L., & Wilson, P. W. (2017). Measuring firm performance using nonparametric quantile-type distances. *Econometric Reviews*, 36(1-3), 156-181.
- De Silva, D. N., Chinna, K., & Azam, S. F. (2020). The Influence of Net Interest Margin (NIM) on Profitability of Sri Lankan Banking Industry.

 Global Journal of Management And Business Research.
- Dei Ofosu-Hene, E., & Amoh, P. (2016). Risk management and performance of listed banks in Ghana. European Journal of Business Science and Technology, 2(2), 107-121.
- Donati, F. (2019). The effect of internal control on the financial performance of mining industry in Tanzania: a case of Tanzanite One Company (Doctoral dissertation, The University of Dodoma).
- Dowdell, T. D., Kim, J. C., Klamm, B. K., & Watson, M. W. (2013). Internal control reporting and market liquidity. *Research in Accounting Regulation*, 25(1), 30-40.

- Duff, A. (2016). Corporate social responsibility reporting in professional accounting firms. *The British Accounting Review*, 48(1), 74-86.
- Eldenburg, L., Hermalin, B. E., Weisbach, M. S., & Wosinska, M. (2004).

 Governance, performance objectives and organizational form: evidence from hospitals. *Journal of Corporate Finance*, 10(4), 527-548.
- Eling, M., & Zhu, J. (2018). Which insurers write cyber insurance? Evidence from the US property and casualty insurance industry. *Journal of Insurance Issues*, 41(1), 22-56.
- Eniola, A. A., & Entebang, H. (2015). Government policy and performance of small and medium business management. *International Journal of Academic Research in Business and Social Sciences*, 5(2), 237-248.
- Fama, E. F., & Jensen, M. C. (1983). Agency problems and residual claims.

 The journal of law and Economics, 26(2), 327-349.
- Galbraith, C., & Schendel, D. (2016). An empirical analysis of strategy types.

 Strategic management journal, 4(2), 153-173.
- Gamage, C. T., Lock, K. L., & Fernando, A. A. J. (2014). A proposed research framework: Effectiveness of internal control system in state commercial banks in Sri Lanka. *International journal of scientific research and innovative technology*, 1(5), 25-44.
- Gavrilov, L. A., & Gavrilova, N. S. (2001). The reliability theory of aging and longevity. *Journal of Theoretical Biology*, 213(4), 527-545.
- Githaiga, P. N., Yegon, J. C., & Kimosop, J. K. (2019). Income diversification and performance: should banks trade?. *Nile Journal of Business and Economics*, 5(13), 25-37.

- Gitonga, D. (2019). Influence of corporate governance on financial performance of listed corporations in Kenya (Doctoral dissertation, KeMU).
- Guo, J., Huang, P., Zhang, Y., & Zhou, N. (2016). The effect of employee treatment policies on internal control weaknesses and financial restatements. *The Accounting Review*, 91(4), 1167-1194
- Haelterman, H. (2019). Hard, soft or situational controls? Bridging the gap between security, compliance and internal control. *Security Journal*, 1-21.
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2006). *Multivariate Data Analysis*, (6thed). New Jersey: Pearson Education Inc
- Hakkak, M., & Ghodsi, M. (2015). Development of a sustainable competitive advantage model based on the balanced scorecard. *International Journal of Asian Social Science*, 5(5), 298-308.
- Hanafi, M. M., Setiyono, B., & Sanjaya, I. P. S. (2018). Ownership structure and firm performance: evidence from the subprime crisis period.

 Corporate Governance: The International Journal of Business in Society.
- Hayes, R., Wallage, P., & Gortemaker, H. (2014). *Principles of auditing: an introduction to international standards on auditing*. Pearson Higher Ed.
- Hoque, M. R., & Rayhan, M. I. (2013). Efficiency measurement on banking sector in Bangladesh. *Dhaka University Journal of Science*, 61(1), 1-5.

- Hussain, M., & Hoque, Z. (2002). Understanding non-financial performance measurement practices in Japanese banks. *Accounting, Auditing & Accountability Journal*.
- IMF. (2018). Financial crisis, macroeconomic shocks, and government balance
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs, and ownership structure. *Journal of financial economics*, *3*(4), 305-360.
- Jusoh, R., & Parnell, J. A. (2008). Competitive strategy and performance measurement in the Malaysian context. *Management decision*.
- Katushabe, P. (2016). Internal Controls and Organisational Performance of

 United Nations Organisation Stabilization Mission in the Democratic

 Republic of Congo, Entebbe base (Doctoral dissertation, Uganda Management Institute).
- Kennedy, D. (2008). Applied statistics in business and economics. New York, NY: McGraw-Hill.
- Kinney Jr, W. R. (2000). Research opportunities in internal control quality and quality assurance. *Auditing: A Journal of Practice & Theory*, 19(s-1), 83-90.
- Kirasi, S. (2018). Effect of Internal Controls on Revenue Performance in Organisations: A case of the National Forestry Authority (NFA), Uganda (Doctoral dissertation, Uganda Management Institute).
- Kumari, D., & Malhotra, N. (2014). Export-led growth in India: Cointegration and causality analysis. *Journal of Economics and Development Studies*, 2(2), 297-310.

- Langton, N., & Robbins, S. P. (2017). *Organizational behaviour: Concepts, controversies, applications*. Pearson Prentice Hall.
- Lawson, B. P., Muriel, L., & Sanders, P. R. (2017). A survey on firms' implementation of COSO's 2013 Internal Control–Integrated Framework. *Research in accounting regulation*, 29(1), 30-43.
- Ljungquist, U. (2016). How do core competencies discriminate? Identification of influencing similarities and differences. *Knowledge and process management*, 14(4), 237-247.
- Lueg, R., & Radlach, R. (2016). Managing sustainable development with management control systems: A literature review. European Management Journal, 34(2), 158-171.
- Magala, C. (2001). Management of change in tertiary institutions: The case of

 Makerere University. Makerere University: Unpublished MBA

 Dissertation.
- Mawanza, W. (2014). An analysis of the main forces of workplace fraud in Zimbabwean organisations: The fraud triangle perspective.

 International Journal of Management Sciences and Business Research.
- Mensah, J. (2020). Effects of board composition on performance of listed firms in Ghana (Doctoral dissertation, University of Cape Coast).
- Messier Jr, W. F., & Austen, L. A. (2000). Inherent risk and control risk assessments: Evidence on the effect of pervasive and specific risk factors. *Auditing: A Journal of Practice & Theory*, 19(2), 119-131.
- Moșteanu, N. R. (2019). International Financial Markets face to face with Artificial Intelligence and Digital Era. *Theoretical & Applied Economics*, 26(3).

- Mwathi, J., & Karanja, J. M. (2017). The effect of financing sources on real estate development in Kenya. *International Journal of Finance and Accounting*, 2(2), 43-62.
- Nabi, G. Y. A. E. (2016). Corporate Governance as an Internal Control System and Its Impact on Financial Performance Empirical Study: Companies

 Listed at Palestine Exchange. Corporate Governance as an Internal

 Control System and Its Impact on Financial Performance Empirical

 Study: Companies Listed at Palestine Exchange.
- Nandugga, C. (2019). Post Audit Practices and Internal Control

 Implementation in Local Government in Uganda: A Case of Wakiso

 District (Doctoral dissertation, Uganda Christian University).
- Ndoka, S., Islami, M., & Shima, J. (2017). The impact of liquidity risk management on the performance of Albanian Commercial Banks during the period 2005-2015. *International Journal of Social Sciences and Education Research*, 3(1), 70-76.
- Ngungi, T. M. (2013). Effect of Online Banking on financial performance of Commercial Banks in Kenya (Doctoral dissertation, University of Nairobi).
- Njiru, D. (2016). The effect of internal controls on the financial performance of public water companies in Kenya (Doctoral dissertation).
- Oche, J. J., Ogbe, I. E., & Igbabee, U. S. (2018). Effect of internal control on financial accountability in the Nigerian public sector. *KASU Journal of Accounting Research and Practice*, 7(1), 151-178.

- Okello, S., Kirori, G. N., & Ndiao, S. O. (2019). Financial Performance of the Banking Sector in Kenya: The Role of Internal Audit. *Journal of Finance and Accounting*, *3*(1), 29-50.
- Otley, D. (2016). The contingency theory of management accounting and control: 1980–2014. *Management accounting research*, 31, 45-62.
- Owusu, A., & Weir, C. (2016). The governance-performance relationship: evidence from Ghana. *Journal of applied accounting research*.
- Pathan, S. (2009). Strong boards, CEO power and bank risk-taking. *Journal of banking & finance*, 33(7), 1340-1350.
- Ramdani, D., & Witteloostuijn, A. V. (2010). The impact of board independence and CEO duality on firm performance: A quantile regression analysis for Indonesia, Malaysia, South Korea and Thailand.

 *British Journal of Management, 21(3), 607-627.
- Rasiah, R., Gammeltoft, P., & Jiang, Y. (2010). Home government policies for outward FDI from emerging economies: lessons from Asia.

 International Journal of emerging markets.
- Romano, G., Ferretti, P., & Quirici, M. C. (2012). Corporate Governance and Efficiency of Italian Bank Holding Companies during the financial crisis: an empirical analysis.
- Rubino, M., Vitolla, F., & Garzoni, A. (2017). The impact of an IT governance framework on the internal control environment. *Records Management Journal*.

- Saeidi, S. P., Sofian, S., Saeidi, P., Saeidi, S. P., & Saaeidi, S. A. (2015). How does corporate social responsibility contribute to firm financial performance? The mediating role of competitive advantage, reputation, and customer satisfaction. *Journal of business research*, 68(2), 341-350.
- Saunders, M., Lewis, P. H. I. L. I. P., & Thornhill, A. D. R. I. A. N. (2016).

 Research methods. *Business Students 4th edition Pearson Education Limited, England*.
- sheet: A panel analysis (IMF Working Paper No. WP/18/93). International Monetary Fund.
- Simmons, M. (1995). COSO-the framework for internal control: A strategic approach to internal audits. *Web Wise Concepts*, *LLC*.
- Stede, W. A. V. D., Chow, C. W., & Lin, T. W. (2006). Strategy, choice of performance measures, and performance. Behavioral research in accounting, 18(1), 185-205.
- Steeves, L. (2004). Centralization of Control over Educational Decision-Making in Saskat chewan: An Investigation of the Centralization for Control over Educational Decision Making in Saskatchewan School Divisions. www. ssta. sk. ca/order. htm.
- Stone, R. (2016). Fraud, security, and controls in small businesses: A proposed research agenda. *Journal of Business*, 1(3), 15-21.
- Thomas, J. R., & Kumar, J. (2016). Social performance and sustainability of indian microfinance institutions: An interrogation. *Journal of Sustainable Finance & Investment*, 6(1), 38-50.

- Tontiset, N., & Kaiwinit, S. (2018). The Factors Affecting Financial Reporting Reliability: An Empirical Research of Public Listed Companies in Thailand. *Journal of Modern Accounting and Auditing*, 14(6), 291-304.
- Umar, H., & Dikko, M. U. (2018). The effect of internal control on performance of Commercial banks in Nigeria. *International Journal of Management Research*, 8(6), 13-32.
- Uwuigbe, O. R., & Fakile, A. S. (2012). The effects of board size on financial performance of banks: A study of listed banks in Nigeria. *study*
- Van Horne James, C. (2002). Financial Management & Policy, 12/E. Pearson Education India.
- Wamukota, M., Munir, M., & Alala, B. O. (2018). Organization Structure and Financial Performance of Savings and Credit Co-Operatives in Western Region, Kenya. *Int. J. of Multidisciplinary and Current research*, 6.
- World Bank. (2020). GINI index (World Bank estimate). Washington, DC:

 The World Bank. Retrieved from data.worldbank.orgwww.bog.

 gov.gh.
- Zattoni, A., Witt, M. A., Judge, W. Q., Talaulicar, T., Chen, J. J., Lewellyn, K., ... & van Ees, H. (2017). Does board independence influence financial performance in IPO firms? The moderating role of the national business system. *Journal of World Business*, 52(5), 628-639.