

**IBN HALDUN UNIVERSITY
SCHOOL OF GRADUATE STUDIES
DEPARTMENT OF MANAGEMENT**

MASTER THESIS

**THE EVALUATION OF EFFECTIVENESS OF INTERNAL CONTROL
SYSTEM AND ITS IMPACTS ON THE FINANCIAL AND NON-
FINANCIAL PERFORMANCE OF BANKS USING COSO INTERNAL
CONTROL FRAMEWORK: THE CASE OF GHANAIAI BANKS**

ABDULLAI MOHAMMED

THESIS SUPERVISOR: PROF. TAMER AKSOY

ISTANBUL, 2020

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COSO INTERNAL CONTROL FRAMEWORK: THE CASE OF
GHANAIAAN BANKS**

by

ABDULLAI MOHAMMED

**A thesis submitted to the School of Graduate Studies in partial
fulfillment of the requirements for the degree of Master of Arts in
Management**

THESIS SUPERVISOR: PROF. TAMER AKSOY

ISTANBUL, 2020

APPROVAL PAGE

This is to certify that we have read this thesis and that in our opinion it is fully adequate, in scope and quality, as a thesis for the degree of Master of Arts in Management.

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I hereby declare that all information in this document has been obtained and presented in accordance with academic rules and ethical conduct. I also declare that, as required by these rules and conduct, I have fully cited and referenced all material and results that are not original to this work.

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ÖZ

İÇ KONTROL SİSTEMİNİN ETKİNLİĞİNİN VE BANKALARIN FİNANSAL VE FİNANSAL OLMAYAN PERFORMANSINA ETKİLERİNİN COSO İÇ KONTROL ÇERÇEVESİ KULLANILARAK DEĞERLENDİRİLMESİ: GANA BANKALARI ÖRNEĞİ.

Yazar Mohammed, Abdullahi

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Bu çalışmanın amacı, Gana'da faaliyet gösteren bankaların iç kontrol sistemlerinin (ICS) etkinliğine ve performansları üzerindeki etkisine ulaşmaktır. Çalışmada bağımsız değişken olarak COSO iç kontrol çerçevesi (Kontrol Ortamı, Risk Değerlendirmesi, Kontrol Faaliyetleri, Bilgi ve İletişim, İzleme Faaliyetleri), bağımlı değişken olarak da firma performansı kullanılmıştır. Çalışma, hem finansal performans (FP) hem de finansal olmayan firma performans (NFP) göstergelerini ele almaktadır. Bu araştırmanın evrenini Gana'da faaliyet gösteren ticari bankalar oluşturmaktadır. Çalışmada veri toplama anketi ve analiz için Sosyal Bilimler için İstatistik Paketi (SPSS) sürüm 25 kullanılmıştır. Yapılan testler arasında tanımlayıcı istatistikler (ortalamalar, standart sapma), t-testi, korelasyon ve regresyon analizleri bulunmaktadır. Hedeflenen katılımcılar iç kontrol ve iç denetim bölümlerinin yöneticileri ve çalışanlarıdır. Hedef popülasyonuna gönderilen 113 anketten geri dönüşüm sağlanan ve %64,6 yanıt oranını temsil eden 73 anket toplanmış ve analiz edilmiştir. Çalışmada dört grup araştırma sorusu yanıtlanmıştır. Metodolojik olarak nicel analiz yöntemi kullanılmıştır. Çalışmanın sonuçları, Gana bankalarında iç kontrol sisteminin etkili olduğunu göstermektedir. İlaveten çalışma, iç kontrol sisteminin hem finansal performans hem de finansal olmayan performans üzerinde güçlü bir etkiye sahip olduğunu ortaya koymuştur. Çalışma ayrıca, bankaların kurumsal yönetim, kurumsal risk yönetimi, şeffaflık, hesap verilebilirlik, sürdürülebilirlik, güvenilir raporlama, hedeflere ulaşma, etkinlik, verimlilik, yasal düzenlemelere uyum vb açılardan iç kontrol sisteminin etkinliği konusunu ihmal etmemelerini, daha başarılı sonuçlar ve yüksek performans için iç kontrol sisteminde özel önem verilmesi gerektiğine dikkat çekmektedir. Ayrıca, bankalar diğer finansal kurumlara göre daha yüksek risk altında

alıřtıkları iin risk ynetimine daha fazla yatırım yapmalıdır. Bylece, oluřması ve karřılařılması muhtemel olumsuz sonulardan kaınmak ve banka iin byk tehdit olabilecek olası hileli faaliyetleri nlemek de mmkn olabilecektir.

Anahtar Kelimeler: İ Kontrol, Performans, Bankalar, Kontrol Ortamı, Risk Deęerlendirmesi, Kontrol Faaliyetleri, Bilgi ve İletiřim, İzleme Faaliyetleri, COSO.



ABSTRACT

THE EVALUATION OF EFFECTIVENESS OF INTERNAL CONTROL SYSTEM AND ITS IMPACTS ON THE FINANCIAL AND NON-FINANCIAL PERFORMANCE OF BANKS USING COSO INTERNAL CONTROL FRAMEWORK: THE CASE OF GHANAIAIAN BANKS

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The aim of this study is to evaluate the effectiveness of internal control systems (ICS) of banks operating in Ghana and the impact it has on their performances. The study employed COSO internal control framework (Control Environment, Risk Assessment, Control Activities, Information and Communication, Monitoring Activities) as the independent variable and firm performance as the dependent variable. The study considered both financial performance (FP) and non-financial performance (NFP) indicators of firm performance. The population for this study consisted of the banks operating in Ghana. The study, employed questionnaire in data collection and Statistical Package for Social Sciences (SPSS) version 25 used for analysis. Among the tests conducted, include descriptive statistics (means, standard deviation), t-test, correlation and regression. The targeted respondents were the managers and the employees of IC and internal audit departments. Data gathered and analyzed was from 113 of the target population. Out of 113 send questionnaires, 73 copies were received representing 64.6% response rate. In the study, four sets of research questions were answered. Methodologically, the researcher used quantitative research method approach. The results of the study depicts that, there is effective positive ICS in Ghanaian banks. In addition, the study found IC to have strong impact on both financial performance and non-financial performance. The study recommends that banks should not be negligent but should work much harder to ensure higher results. Furthermore, banks should invest more into risk management since banks work under high risk than any other financial institutions. Thus, to prevent any possible embezzlement or fraudulent activity that could occur and could be big threat to the bank.

Keywords: Internal Control, Performance, Banks, Control Environment, Risk Assessment, Control Activities, Information and Communication, Monitoring Activities, COSO.



DEDICATION

This thesis is dedicated to my indefatigable mother Ayishatu Mustapha for her tireless efforts made to educate my siblings and me. I love you mum.



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First, I give thanks to the Almighty ALLAH for my life and the ability to be able to make it this far in my academic career. I would like to thank my family for their love, support and prayers.

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LIST OF ABBREVIATIONS

CA	Control Activities
CE	Control Environment
COSO	Committee of Sponsoring Organizations of the Treadway Commission
DV	Dependent Variable
IC	Internal Control
ICS	Internal Control Systems
In&Com.	Information and Communication
IV	Independent Variable
MA	Monitoring Activities
NGO	Non-Governmental Organization
RA	Risk Assessment
ROA	Return on Assets
ROE	Return on Equity
ROI	Return on Investment
SERVQUAL	Service Quality

CHAPTER I

INTRODUCTION

1.1 Study Background

Organizations have failed due to scandals and fraudulent activities including banks. Many pressures that organizations face both internally and externally require a methodology to assist them with continuing to be active and important in the business sector. Hence, the aptitude to grasp its aims rely hugely on the set methodology and the availability of well-established and effective internal control systems. The Enron and WorldCom financial scandals in the United States of America inculcated the importance of Internal Control Systems (ICS) as well as reliable financial reporting, strengthening corporate governance, increasing corporate responsibility, re-ensuring auditor independence, establishing and providing efficiencies of internal audit, internal control and risk management systems, strengthening management and public oversight functions (Aksoy, 2005a). Internal control system became one of the crucial factors and safety valves of sustainability, corporate management and business success after the scandals. This is because SOX (The Sarbanes–Oxley Act), the committee charged to investigate the scandals found lack of effective ICS as the main course of the scandals. As a result, the process of ensuring the existence and effectiveness of internal control system within banks too became more important following the global accounting and auditing scandals (Aksoy & Mohammed, 2020). Banks are the backbone of most economies which if faulted could lead an entire country into bankruptcy. The ICS of an organization is vital to cultivating the proficiency and returns of an organization (Kantzios & Chondraki, 2006) thus it guarantees the effective running and usage of the assets of an organization. Organizations improve their internal control systems by unceasingly readjusting their internal guidelines and this according to Jokipii, (2009) originates from agency and contingency theories.

The Committee of Sponsoring Organizations of the Treadway Commission (COSO) posits that internal control is vital in running the affairs of an organization. It comprises of the schemes, methods and procedures espoused to realise the aims of an

organization and guarantee the running of performance (COSO, 2006). Feeble Internal control system could be the course for fraudulent activities. According to Millechamp, (2000), within an organization, internal control framework is considered a self-directed assessment pursuit to review the methods of control and the evaluation of executed actions.

In addition, Fadzil et. al, (2005) indicated that an operative internal control system guarantees the realisation of organization performance and it is certified through systematic assessment of financial information, protection and proper usage of assets, obeying governing strategies and certifying effectiveness in the administration activities. Conferring to Mawanda, (2008) as indicated in his work that, well established ICS in an institution leads to effective financial performance. Effective internal control systems establishes transparency in financial reporting since judicious and precise information is tantamount to effective management.

According to COSO, (2004) and Carmichael et al., (1996) the internal control components of an organization consist of control environment, risk assessment, control activities, information communication and monitoring activities. These components interrelate with one another hence positioning the organization to be able to adopt to any changes in its environment (Pickett, 2011). Thus, ICS is knotted with an organization's operational activities, which lead to the success of the organization (Steinberg, 2011). However, (Kaplan 2008; Campbell, 2008) argue that, it is important for every organization no matter the size to establish its own control framework in order to achieve its goals because ineffective internal control system results in weak procedures and consequently leads to embezzlements.

The main aim of every business entity is to make profit, and this is hugely affected by the performance of the entity. Performance measures are measurements used to evaluate the viability and productivity of an activity of an organisation (Bourne et al., 2003). Performance refers to the amalgamated valuation of how well an organization achieves its most vital constraints. There are two forms of performance assessments, financial and Non-financial (Smith, 2005). Financial performance measures involve the use of indicators such as profitability margins, ROA and ROE in assessing the performance of an organization. Non-financial performance indicators include service quality, resource allotment efficiency, invention and customer satisfaction (Epstein, &

Manzoni, 2010). Wanjohi, (2013) posits the assessment and appraisal of performance is tantamount to control. Internal control system is the means, which assesses financial performance.

1.2 Statement Problem

In the atmosphere of globalization, advancement in information technology, increasing level of risk and fraudulent activities and the complexity in transacting businesses, internal control as an apparatus for corporate governance has gained much attention across business sectors globally. The administration of the complexities following globalization expanded the requirement for sufficient internal control frameworks to control risks and increase performance of organizations (Bastia, 2008). Agency theory exhibits clearly how vital ICS framework is boosting the performance of organizations (Ahiabor & Mensah, 2013; Jensen and Meckling, 1976).

Researchers have investigated the relationship between performance and internal control across the globe. For instance, the study by Agbigbi, (2016), Oppong et al., (2016) and Mawanda, (2008) assessed the impact internal control has on performances of Microfinances, NGOs and Higher learning institutions respectively. Similar to these are studies by Njeri, (2014), Wanjohi, (2013), Juan & Hung, (2015), Al-Matari et al., (2017), Ahmed & Mohammed (2018), and Mbilla et al., (2020).

The dimensions of ICS framework employed by the researchers is a concern. COSO theorizes that in measuring the effectiveness of internal control of an organization, all five components (control environment, control activities, monitoring, risk assessment and information and communication) ought to be used by researchers in their studies. Otherwise, any results gained using some and not all will not be viable for laudable decision-making. For instance, Mawanda, (2008), Noel, (2010) used two and three variables respectively in their analysis. Due to that, their studies produced weak R-squares.

By using correlation, Ejoh & Ejom, (2014) and Chebungwen & Kwasira, (2014) investigated the relationship between internal control and performance. Fink, (2013) posits that, correlation is best used in establishing relationship between two variables. Based on Fink's study, correlation cannot be used to evaluate the degree at which one variable affect the other, hence, there is existence of methodological feebleness in both

studies (Amissah, 2017). Moreover, in measuring performance majority of the studies considered financial performance only neglecting the non-financial performance aspect of performance. Though non-financial metrics are not quantifiable thus cannot be expressed in a monetary form, it plays a hidden role in a successful financial performance achievements of an organization.

In Ghana, several studies focused on internal control and its relationship with performance in several sectors. For instance, Amissah, (2017); Akotey et al., (2013); Boadi et al., (2013) concentrated on insurance companies while Gyebi & Quain, (2013) based their study on the electricity company of Ghana, Oppong et al., (2016) on NGOs while Agbenyo et al., (2015) and Ekumah, (2016) based their study on Ghana revenue authority. In addition, Ayagre et al., (2014); Mbilla et al., (2020); Nyamekye et al., (2013); Owusu-Boateng et al., (2017) and Agyemang, (2015) investigated the effectiveness and relationship of internal control and performance of Ghanaian banks. After carefully examining all available works, the researcher has not come across any work in Ghana on banks that investigated both performance indicators (NP and NFP). This implies that, there is an existing gap in the literature regarding the effect of ICS on the Bank performance in Ghana. In addition, the state of ICS and disparities in the ICS components among the banks have not also been properly investigated. Therefore, to add to the literature on ICS, this study would fill this gap by examining the effects of the five components of internal control systems on both financial and non-financial performance of banks in Ghana.

1.3 Objective of the Study (general)

The main aim of this study is to evaluate the effectiveness of internal control of Ghanaian banks and the impact it has on their performance.

1.4 Specific objectives

Specifically, this work is pursued to find out whether

1. Internal control systems exist in Ghanaian banks and how effective are they,
2. Substantial differences and/or similarities exist in the internal control systems of Ghanaian banks.

3. Internal control system framework has effect on the financial performance of Ghanaian banks.
4. Internal control system framework has effect on the non-financial performance of Ghanaian banks.

1.5 Research Question

Research question for the first objective.

1. What is the effectiveness of ICS and its impact on performance of Ghanaian banks?

1.6 Scope and limitations of the study

The effects of internal control systems on performance in Ghanaian banks is digested in this study. The study makes use of all the five internal control components as posit by COSO, (1994). They include control environment, risk assessment, information and communication, control activities and monitoring. As at the time of this research, twenty-three banks were in operation in the Ghanaian banking sector. Unfortunately, not all the banks were considered for this study due to time constraints and the difficulties in gathering data.

1.7 Importance of Study

This study will be beneficial to both policy makers and academicians. In academics, this study will add to the knowledge of literature on internal control and performance and will serve as a stepping-stone for future research in the field or related fields. Furthermore, this study will serve as point of reference for government, financial institutions and interested groups for effective enactment of regulations regarding banks. Moreover, the results of this study will help Ghanaian banks to know the level of their internal control effectiveness and the recommendations will let them know the appropriate steps to take in their quest to achieving organizational objectives.

1.8 Organisation of the Study

This thesis is made up of five chapters. Chapter 1 is about the general introduction. It comprises study background, statement of the problem, objectives of the study, research hypotheses, importance of study and the organisation of the study. Second chapter comprises of theories and the review of related literatures. It comprises of the introduction, theoretical review, internal control systems, empirical review of previous studies, conceptual framework, knowledge gap and chapter summary. Chapter 3 is about the methodology of the study. An introduction, research design, the study area, population, sampling procedures and data collection are discussed in this chapter. The fourth chapter presents the results and discussions. This chapter comprises of various analyses and results from the study and finally, chapter five presents summary, conclusions and recommendations of the study.

CHAPTER II

THEORIES AND LITERATURE REVIEW

In this chapter, the researcher delved into both theoretical and empirical reviews regarding ICS. Theoretical review include agency theory, Institutional theory and contingency theory. Under empirical review, some the literatures related to ICS and performance carried out across the globe with their findings are briefly looked at.

2.1 Agency Theory

In every business entity, there exists a shareholder (owner) and manager (agent). The two can be the same person or two separate persons. To help comprehend the relationship that exist between the owner and the agent, Ross & Mitnick (1973) introduced the agency theory. According to Mitnick, (2019), Ross developed the economy theory of agency and Mitnick developed the institutional theory of agency. Agency theory in other words called agency relationship is all about the relationship between owners of a business (owner) and the person running the routine affairs of the business (agent). The assumption of agency theory is that, the separation of ownership and management leads to one party having more information than the other does (Arnold & De Lange, 2004; Lang, 2006). To a large extend, the agents are well informed about the administration of the business entity than the owners (Eilifsen et al, 2006). Trust is tantamount to success. The owner vest more running power onto the agent to represent the utmost interest of the owner. The agent vested with more information blundered with personal motives forces the owner to believe the agent will thrive to achieve personal goals to the detriment of owner or business according to Sharma, (1997); Bonazzi & Islam, (2007); Lan & Heracleous, (2010) and this may results into goal conflict (Pratt & Zackhauser, 1985; Koch, Ostner, Peisker & Schülke, 2009). Hence, the need for control methods by the owners to guarantee the agents work in the interest of the business to increase performance and achieve business goals. Internal control and auditing are the commonly used control methods. Nonetheless, Wallace, (1980) argues that auditing is not an appropriate check tool since auditors can

conspire. Therefore, to protect the interest of owners', agency theory advocates the usage of internal control system as a check tool. COSO posits that internal control when properly implemented results in achievement of high results (COSO, 2013). Lubatkin, (2005) and Donaldson, (2006) stated that, there is a methodological loophole in the theory hence it is not practical in the actual world. These loopholes include individuality, regressive simplification, defensiveness of Government and wrong conceptual framework. The lack of trust between owner and agent, the issues of information disproportionateness and the fact that all parties are rational leads to agency cost that affects the performance of the business. According to Payne, (2003) IC serves as the best tool in reducing agency costs, hence, the importance of this theory to this study. IC monitors the actions of the agent and reports appropriately to the owner, which decreases the problem of information disproportionateness and increase performance, which results in high yields of profit for both parties.

2.2 Institutional Theory

William Richard Scott developed institutional theory in 1995. Institutional theory refers to the elasticity of social structures. These structures work to elevate the standard of living and enhance financial stands of the public. Regulative, normative and cultural cognitive are the fundamentals of social structure (Lagat, 2018).

In accounting, institutional theory refers to the connections between organizations and social structures that contribute to the success of the organization. Per the institutional and neo-institutional theory, normative, coercive and mimetic forces cause environmental alignment and organizational practices, which do away with organizational consistency. The best solution to this problem as suggested by Tickle, (2013) is the implementation of effective internal control system.

Lagat, (2018) states that, institutional theory's weakness is the assumption of organizational positives and neglecting strategic behaviour. This theory is important to study because it portrays how viable internal control systems is and ICS when well implemented brings consistency and conformity of social expectation to an organization.

2.3 Contingency Theory

Environment in which an organization operates plays huge role in its success. This is supported by the contingency theory introduced by Drazin and Van de Van, (1958), which states that, the optimal organization of an entity depends on the environment within which it operates. There are two assumptions to this theory by its followers. Firstly, Bergeron et al, (2001); Venkatraman, (1989); Donaldson, (2006) stipulate that, no strategy is considered generally superior and no best way of organization exists (Donaldson, 2006). The second assumption is that “the choice of approach, structure or control system depends on the contingent circumstances such as the environment, risk profile, strategy, size, the organisational structure and best activities at hand” (Amisshah, 2017 p. 21).

Contingency theory stipulates that an entity cannot achieve optimal performance if it does not place much attention on the environment within which it operates. According to Jokipii, (2006) firms consider the features of the environment in which they operate and structure themselves to fit in. Hence the need for an effective organizational structure to enhance and maintain performance. IC as a part of organizational structure is the best tool employed in this context. This theory is important to this study because the environment of an organization matters a lot, it serves as the organizational attitude, which affects control awareness, and offers sound grounds for an active system of internal control.

2.4 Internal Control System (ICS)

Financial scandals such as Enron and WorldCom in the 21st century posed much attention on internal control hence its importance increases in the management of businesses, organizations, government institutions, schools and countries. IC lacks a universally accepted definition because as some scholars see it as a portion of an organization others see it to cut across all sections of the organization. According to Basel, IC is a continuous process operating within all levels in a bank and not a procedure exhibited at a particular time (Basel, 1998). IC is a complete system established by management to ensure efficiency, adherence to management strategies, safeguarding of business properties and transparency in reports and accuracy in records (Olatunji, 2009). Internal control according to Hannah, (2013) is a set of

measures and strategies that certify effective processing of transaction in an organization. In addition, Hopkin, (2018) defines internal control as merged approaches, plans and measures that protect the resources of a firm and increase performance. Basel mention that IC is a process, which is affected by all levels of an organization (Basel, 1998). In addition, Udu, (2006) believes that booboos, oversights, fraud that devastate an organization's performance reduce drastically if an organization implements an effective ICS. Meanwhile, Mayo & BPP, (1988) are of the view that IC is the steps taken by an entity in its quest to protect its resources against fraud, inefficiency and waste as well as ensuring transparency in financial reporting. Furthermore, Awe, (2005) defined IC as an implemented organizational structure, procedures and policies to prevent risk and ensure that organizational goals are reach based on management-initiated concerns. The objective of IC is to minimize errors, prevent waste of organization's resources, eliminate corruption and embezzlement, and enhance transparency in financial reporting. Types of Control activities include detective control, corrective control, preventive control, and compensating controls. Several models of control have been developed and used in several regions in the world. These include COSO, CoCo, CobiT, eSAC and SysTrust.

2.4.1 Models of IC

There are various models of IC developed and used in America, Canada and the United Kingdom. Among these are CoCo, COSO, CobiT, eSAC and SysTrust (Aksoy, 2005b).

COSO (Committee of Sponsoring Organizations of the Treadway Commission): This is a model developed in the USA to help curb or reduce the level of corporate scandals in the US. The model has five main components and seventeen principles. This is the most widely accepted, continuously developed, updated and most comprehensive IC model.

CoCo (Criteria of Control): This defines IC as actions that ensure a company gets the best outcome it desires. The Certified Public Accountant (CPA) formerly Canadian Institute of Chartered Accountants (CICA) introduced it in 1995. CoCo summarizes twenty criteria, which if implemented by management will increase organizational performance and enhance effective decision-making. The framework underscores that

control comprises the whole organization but starts with the employee. Unlike COSO framework, which has five components, CoCo framework is outline under four headings for effective control. These include Purpose, Commitment, Capability, Monitoring and learning (CoCo Internal Control Framework: Definition & Key Concepts, 2017)

CobiT (Control Objectives for Informatics technology): Developed in 1996 by IT Governance Institute (ITGI) and ISACA (Information Systems Audit and Control Association) to control risks in information technology. CobiT is purposely for IT governance and management and the current version is CobiT 5.0. It intends to be a helpful instrument for managers and allows joining the crucial gap between technical issues, business risks, and control requirements ("What is COBIT? COBIT Framework and Its Components", 2020).

eSAC (Electronic Systems Assurance and Control): It was developed in 2001, it is directed towards the risk that arise due to e-business, the computer environment and the use of electronic systems. It offers executive management, corporate governance bodies and auditors innovative evidence to comprehend, screen, evaluate and alleviate technological risks ("Electronic Systems Assurance and Controls - Accountopedia", 2020).

SysTrust (System Trust): The American Institute of Certified Public Accountants (AICPA) and Canadian certified Institute of Accountants (CICA) developed it in 1999. It intends to ensure the reliability of information produced in electronic media.

2.5 COSO IC Framework

COSO's framework is the most established and widely used internal control model as previously stated. Most publicly listed firms in America and other parts of the world use it. COSO states that the main aim of internal control is 'to provide reasonable assurance regarding the achievement of objectives in the following categories: Effectiveness and efficiency of operations, Reliability of financial reporting, Compliance with applicable laws and regulations' (COSO, 1992) and protection of the assets of the organization (Hopkin, 2012). The functions that COSO performs in an organization includes providing 'thought leadership and guidance on internal control, Enterprise Risk Management and Fraud deterrence' (Protiviti, 2014, p. i). The 1992

framework also known as internal control – integrated framework was the first to be introduced by COSO (COSO, 2003). Following the emergence of fraud activities in huge companies like Enron and subsequently the enactment of the SOX law, the framework gain much attention in the US. COSO released an extended version of the framework known as Enterprise Risk Management – Integrated framework in 2004 and since 1992, the IC framework has been updated once in 2013 (COSO, 2004). COSO’s internal control framework has five main elements: Control environment, Risk assessment, Control activities, Information and communication and Monitoring activities and seventeen principles (COSO, 2011). Figure one (1) illustrates the five components (See appendix one for the list of the 17 principles).

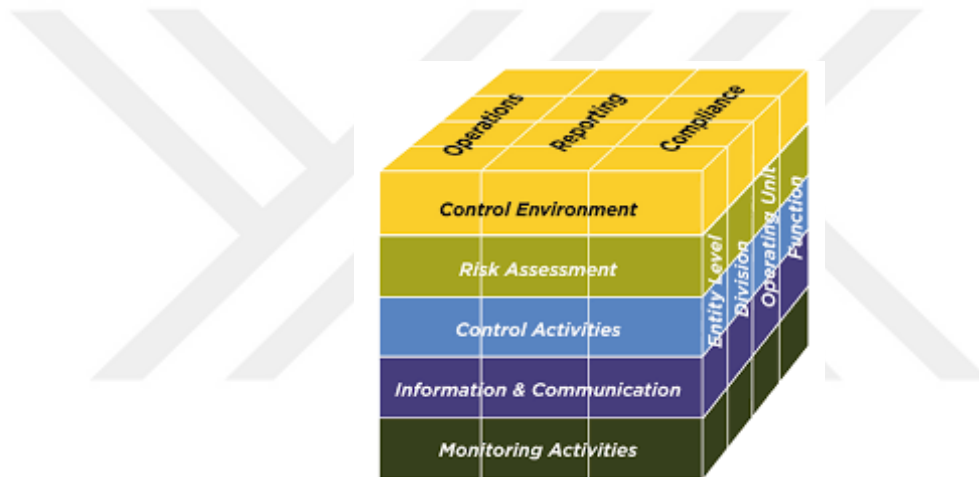


Figure 2.1: COSO 2013 Internal Control Framework

Source: COSO, (2013)

2.5.1 Control Environment (CE)

This is the first component of internal control that needs critical attention in its implementation. The environment of an organization matters a lot, because it is the organizational tone, which affects control awareness, and provides sound grounds for an active system of IC. CCEis the structure and discipline, which ensures internal control aims, are achieved (Whittington and Pany, 2010). CE is the pivot, around which the other IC components rotate (Aksoy & Mohammed, 2020). In addition, the control environment reproduces the panel’s adherence to internal control by managers and administrators, and provides the control system with consistency and structure

(Solomon, 2017). However, Hevesi, (2005) posits that control environment creates an assertive awareness of internal control to be established and maintained by the administration and workforce of an organization. Integrity and ethical values should be seen within all staffs starting from the top management to the lowest employee. A well-established ethic strategy and control mechanism should be in place and communicated to all levels of organization effectively. The CE's components include: organizational structure, management mentality and operating style, integrity , professionalism and staff aptitude, external factors influencing the activities and risk management practices of the company, the focus and guidance provided by the board of directors and its committees, and the efficacy of human resources policies and procedures. (Solomon, 2017; COSO, 2013). Omane-Antwi, 2009 aligns that the dimensions of control environment congregate around responsibilities, assignment of duties and formation of strategies to support the objectives of an organisation. In addition, Kaplan, (2013) posits that, the aim of human resources strategies should be to entice, develop and maintain clever employees to help achieve organization's goals and increase organizational performance. Accountability dimension is the strategy put in place according to COSO to hold employees liable for their actions (COSO, 2011). The essence of liability is to lessen embezzlement and mismanagement of organizations resources (COSO, 2013). CE if well established according to Gyasi, (2013) would result in achievement of high performance.

2.5.2 Risk Assessment (RA)

RA is the method employed by management to determine and examine the risk that pose threat to the attainment of organization's goals. RA forms the basis for the identification and examination of any threat that hinders the attainment of organization's goals (Lannoye, 1999). Risk assessment is a methodical process for infusing professional decision about likely opposing conditions and actions, which are likely to cause financial and non-financial losses to an organization (Solomon, 2017). Management has to put substantial measures in place to help them identify, analyse and manage risk as and when they occur. One of the ways management can identify available and potential risk is by carrying out SWOT analysis across all departments especially among the departments that are prone to higher risks. SWOT (Strength, Weakness, Opportunity, and Threat) is the commonly used tool in performance

evaluation. Through evaluating of its performance, an organization will be able to figure out the potential hindrances to goal achievement and work to curb them accordingly. The external and internal environment of an organization should be well scrutinized by management. According to Lannoye, (1999) some of the means through which risk can be identified include administration planning meetings, strategic planning, regular assessments of department's actions, changing or rotating of management team and natural misfortunes. After risk is identified, management must come out with measures on how to manage the risk. Management can analyse risks by estimating the degree of significant to know the appropriate approach to employ in curbing it. An ineffective design and faulty implementation of risk assessment processes would detorerate organizational performance (Kaplan, 2008). In addition, Saiyor, (2010) posits that the relevance of an effective risk assessment process on performance is apparent because it dictates the significance of ICS.

According to Solomon, (2017) approaches may vary among agencies but they must be designed to maintain risk at levels that management deems appropriate, taking into account the concepts of reasonable expectation and cost-benefit. There should be regular monitoring of approach used to avoid reoccurrence and increase effectiveness (Lannoye, 1996; Woolf, 2013). RA dimensions help in specifying goals, risk recognition and classification, change in management and risk construes (COSO, 2013).

2.5.3 Control Activities (CA)

CA plays a critical role. It ensures that relevant steps are taken to tackle risk in the quest to achieving the objectives of an organization. CA help board and management to take the right action towards controlling risks that could impede the attainment of the firm's goals. Management should establish efficient and well-organized control activities. According to Walker, (1999), CA happen at all levels of a company including a wide variety of specific actions such as approvals, permits, substantiations, resolutions, and performance reviews. Wide-ranging control activities include new systems to ensure information management efficiency and entry access to information systems. Nyeri, (2014) submits that control activities help to avoid redundant expenditure and aid quick adjustment to changes in environments. Dimensions of control activities, per the study of Arwing, (2013), include preventive, detective or

both. Meanwhile, COSO, (2013) stipulates the dimensions of control activities as strategies and procedures, selection and expansion of control activities. Strong and reliable control activities results in high performance achievement of organizations.

2.5.4 Information and Communication (IC)

One of the causes of agency problem in an organization is lack of free flow of information. Information and communication component of internal control ensures the effective flow of important directives and policies between the hierarchies of an organization in quest to achieve the organization's goal. For IC frameworks to be successful and effective there should be free flow of information within the hierarchies by distinguishing, catching and passing on relevant information in a convenient way to people for proper judgement (Amissah, 2017). Information relating to the entire activities of an organization must be communicated in a clear and timely manner to stakeholders of the organization. These could be in regards to organization's plans, the environment (internal and external), risks, and/or performance. According to Steihoff, (2001) information from both internal and external sources must be scrutinized before being communicated to the users who need it in a clear and timely form. This is because subordinates work with the orders of superiors through communication. Transfer of wrong or mischievous information will result into wrong actions by subordinates and consequently will affect the organization's performance greatly. Information and communication systems empower all employees to know the chain of command in the organization. They know who they are responsible and report to. It will require the company to provide accurate and appropriate financial statements including interim reports. The board of directors and management must ensure that they are provided correct and sufficient information to allow them to fulfill their tasks.

2.5.5 Monitoring Activities (MA)

Monitoring activities ensure the flow of the entire process of internal control framework. Monitoring is the audit of an entity's activities and set the grounds for the evaluation of the effectiveness of control (DiNapoli, 2007). The dimensions upon which COSO evaluates monitoring activities include continuous and divided evaluations, reporting of errors and applying corrective steps (COSO, 2011). According to Amudo & Inanga, (2009) monitoring of processes guarantees effective

running of internal controls system. Monitoring helps an organization to enforce effective implementation of policies by employees in their duties. According to Bowrin, (2004) frequently overseeing and managing activities, such as monitoring of complaints and audits steered by internal auditors will result in effective decision-making hence increase in performance. In addition, risks that hinder improvement in the organization will be resolved. Internal auditors may examine and evaluate the framework of internal control and the efficiency with which the different roles are executed when performing their assigned duties. They can thus provide an organized and controlled method for assessing and improving risk management activities and the process of effective governance. Rezaee et al., (2001) maintains that monitoring ensures that the results of audits and other assessments are fixed on time. We can conclude that, the main function of MA is to see to it that the entire internal control system is in full function and to help minimize all kinds of risks. COSO, (2013) align the various dimensions to help in the effective implementation of internal control systems. Table 1 below displays the summary of COSO internal control components with their dimensions.

Table 2.1: Dimensions of COSO IC Components

COMPONENTS	DIMENSIONS
Control environment	Integrity and ethical values assignment of duties formation of strategies human resource management
Risk assessment	Specifying goals, risk recognition and classification, change management and risk construes
Information and communication	Interior communication Exterior communication
Control activities	preventive, detective as strategies and procedures, selection and expansion of control activities
Monitoring Activity	continuous and divided evaluations, reporting of errors and applying corrective steps

Source: Author, (2020)

2.6 Types of Control activities

2.6.1 Preventive Control

Preventive controls forecast possible deviations and make amendments to avert them from occurring. Lacotelli, (2003) defines preventive control as procedures design by organisation to deflect and anticipate confrontation with strategies and procedure. Preventive control gives management the clear vision to put the right directives and measures in place to combat any possible future repetition of fallacies in the organization. This type of control can be effective if staffs are periodically train, duties are assign to the right person, separation of duties takes place, and appropriate endorsement and ratification are in place.

2.6.2 Detective Control

As the term implies, this is the means of spotting deviations in an organization's plans. This means the fallacies existed but not realized. Solomon, (2017) states that, detective control reveals issues such extortion, inconsistency and blunders. Meanwhile Kinyua et al., (2015) assert that, detective controls perceive and report the occurrence of an oversight or a malicious action.

Detective control gives clear indication that there is error and preventive control hinders from happening if well implemented. Hence, detective control proof that the preventive controls are functioning and evading misfortunes (Wells, 2006). According to Solomon, (2017) detective control's cases include audits, examinations, surveys, reconciliations and physical inventories.

2.6.3 Corrective Controls

This type of control puts errors in shape after detection. Simmons, (1995) refers to corrective controls as the control, which addresses any wrong issue happening inside the control system. Corrective controls ensure that the influence of a risk is reduced, the source fallacies is identified and handled accordingly. According to Singleton et al., (2006) Corrective controls solve the fallacies revealed by detective controls, put the right measures in place to lessen the degree of future occurrences. Solomon, (2017) posits that, the examples of corrective controls include system re-adjustment,

observing, review of posts and employment of punishments to ruthless manners by administrators.

2.6.4 Compensating Controls

Compensating controls are to ensure that resource limitations preclude the establishment of more direct controls. Thus, it establishes the need for security measure that seem not effective at a particular time.

2.7 Performance measurement

Performance assessment is the efficiency in the usage of the resources of an organization for effective results in its quest to achieving organizational objectives. Performance assessment according Okwo & Mariri, (2012) is about how well an entity fuses its performance into providing quality services to stakeholders and not only about how well it is performing. Hence, it enables organizations to centre their activities on grasping the strategic goals of the organization (Dixon, et al., (1990). While Neely, et al., (2005) define performance assessment as the financial parameters that quantifies the activities of an organization effectively and efficiently when put to use, Bourne et al., (2003) believe there is loophole in the definition and define performance assessment as simply the usage of multi-dimensional agreed performance strategies. Thus, considering of both financial and non-financial performance measurement metrics in analysis.

2.7.1 Financial performance

Financial performance is the quantification of all the strategies, policies and activities of an organization in the form of money. According to Kinyua et al., (2015) financial performance is the total assessment of an entity's financial stands over a period of time which can be used to carry out inter and intra industrial comparison of firms. There are several parameters used to measure financial performance but the commonly used parameters as posit by Mishkin, (2007) include ROI, ROA, operating profit, and net profit. These measures could be relative or absolute as propounded by (Khan and Jain, 2013). The determinants of financial performance according to Lagat, (2018) include internal control system, firm size and capital structure. Fadzil et al., (2005) posit that an active internal control system explicitly correlates with organizational

accomplishment. Internal control systems aims at attaining the objectives achieving the objectives of an organization and enhancing an error free financial reporting. Financial reporting is portrayed in the year-end financial statements of an entity and the main aim of financial statement is to determine the financial health of an entity in a given period of time hence financial performance. (Doyle et al., 2007) posit that stakeholders used information from financial statements for economic decision-making and organizations should strive to achieve positive financial performance. Nevertheless, Kinyua et al., (2015) believe that achievement of positive financial performance is only possible when errors are eradicated from services processes and systems. Financial performance plays a vital role in financial performance measurement of an organization. Nonetheless, some researchers believe there are loopholes in the parameters used to assess financial performance hence does not make it hundred percent viable for decision-making. For instance, Smith, (2005) and Venanzi, (2011) submit that financial performance parameters are historical and can be manipulated example ROI and ROA. In addition, managers in their quest to achieving positive financial performance may pay much attention to achieving short-term financial performance neglecting long-term and the consequences will felt in the long-run (Dallas, 2011; Drury, 2012).

2.7.2 Non-Financial Performance

The second part of multi-dimensional performance measurement approach is non-financial performance measures. Non-financial measures also referred to as qualitative measure's parameters are non-accounting thus cannot be expressed in figures unlike the case in financial performance parameters. Agyei-Mensah, (2009) states that qualitative measures are performance parameters used by cost and revenue institutes to examine and enforce their actions with no financial input. Some of the parameters for measuring non-financial performance according to Kaplan, (2014) include quality customer service, effective utilization of resources, innovation, flexibility and competitiveness. Fitzgerald & Moon, (1996); Hongren et al., (2006) believe that non-financial performance plays a vital role in the achievement of long-term productivity of an entity but Kaplan, (2014) argues it is sometimes too broad. Researchers such as Hongren et al., (2006); Kaplan & Norton, (1996); Fitzgerald & Moon, (1996) and

Abdel-Maksoud & Abdel-Kader, (2007) all employed non-financial measures in their various works hence testifying its reliability and validity.

2.8 Empirical Literature Review of Previous Studies

In this section of chapter two, the researcher digs deep into some of the literatures written on internal control and performance. While some authors put efforts to find out the effectiveness of IC of organizations like banks others posit to find out how IC is affecting the performance of banks.

Ayagre et al., (2014) evaluated the effectiveness of the internal control of Ghanaian banks. They employed the control environment and monitoring elements of COSO's internal control framework. Ayagre et al., (2014) believe comprehensive knowledge of the two components give general indication of the effectiveness of the entire system. However, COSO, (2013) posits that in measuring the effectiveness of internal control of an entity, all the five components (control environment, risk analysis, control environment, information and communication and monitoring) should be considered or else results from the study will not be viable for decision-making. Data collected through questionnaires was analysed using SPSS and presented results in the form of means and standard deviations. Results of means ascertained indicated that both variables are effective and strong among Ghanaian banks. Ayagre et al. (2014) then recommended that the boards of the banks should work much harder to ensure more effectiveness and should not be complacent about the results.

Contrary to the study by Ayagre et al., (2017); Mbilla et al., (2020) studied the influence internal control has on banks listed on the Ghana stock Exchange. In addition, the study considered monitoring, information and communication of internal control elements. A purposive sampling technique used in the selection of the banks for the study. The study employed both primary (questionnaires 300) and secondary data (financial statements of banks). Hair, et al., (2012) in their study invoked 100 respondents are enough for empirical judgement. SPSS used to analyse data and findings showed Monitoring has no effect on the banks' financial performance and information and communication has a weak impact on financial performance. Mbilla et al., (2020) recommended that, management of the banks should increase investment in information and communication due to its influential impact on financial

performance of the banks and be wise to invest in monitoring activities not neglecting it totally.

Furthermore, the relationship of ICS and performance in the telecommunication sector (Asia cell) in Kurdistan Region of Iraq was the field of study by Ahmed & Muhammed, (2018). The aims of the study were to find out the effects internal control system has on return on assets (ROA), the usefulness of internal control to firm performance and the relationship between financial performance of Asia cell and internal control system in Kurdistan Region of Iraq. The results of the study showed strong existence of positive relation between financial performance and internal controls especially control environment, risk assessment, information and communication, and control activities. Similar to the findings by Mbilla et al., (2020), monitoring indicated negative relationship. The study recommended consistent and orderly monitoring of internal control systems by the management of Asia cell and the audit committee of government. Moreover, similar study by Nmai & Delle, (2014) was on assessing the effect internal control; corporate structure and code of governance as cooperate governance dimensions have on employee job satisfaction among the companies in the Ghanaian telecommunication sector. Nmai et al., (2014) found internal control to have impact on employee job satisfaction.

In addition, Asiligwa & Rennox, (2017) in their study posit that banks have stout financial performance in Kenyan commercial banks. This stout financial position was partly related to the effectiveness of internal control system. In their study, Asiligwa and Rennox used frequency tables, correlation and regression tables to display the results gained from data gathered from 43 commercial banks. The IC elements considered as independent variables and performance as dependent variable. Despite the results depicting the availability of stout effect of internal control on performance, recommendation was that banks should continue implementing and investing in internal control systems because banks operates under high risk and negligence could lead to fraudulent activities consequently bankruptcy.

In Nigeria, Umar & Mohammed, (2015) used stratified random sampling survey in their quest to find the effects internal control has on the performance of Nigerian commercial banks. SPSS v 23 and smart PLS 3 were used to analyse data collected from questionnaires. The results from the study portrayed that information and

communication element of internal control framework had weak relation with bank performance. The rest of the four had strong influence on performance of banks because their t-values were all more than two. The study recommended that banks should improve their information and communication channels. In every organization, when information is easily disseminated and understood by subordinates, there is less possibility of the occurrence of misconducts and fraudulent activities.

A dissertation by Awdat, (2015) in Jordan investigated the effectiveness of internal audit in enhancing the financial performance of commercial banks. Questionnaires were used which was filled by the internal auditors. 65 copies were received. The study found internal audit to have statistical insignificant effect on the financial performance of Jordanian commercial banks. Similarly, a PhD dissertation by Haddat & Pakure, (2019) found the impact internal control and supply chain integration have on Jordanian banks' performance as well as the relationship between "service quality dimensions and customer satisfaction". Two hundred and eighty three publications were analysed for the thesis. Data collected through questionnaire were analysed using SPSS. Tests run include descriptive statistics and exploratory factor analysis (EFA). The findings were that, supply chain integration and internal control have high impact on financial performance and service quality has affirmative and substantial impact on customer satisfaction.

Meanwhile, Haddat & Pakure, (2019) in the evaluation of customer satisfaction, applied SERVQUAL model. SERVQUAL model is the widely used tool for measuring customer satisfaction. Parasuraman, Zeithml and Berry (1985) first introduced it in their work entitled 'A Conceptual Model of Service Quality and Its implications for Future Research'. Shahraki, (2014) and Bhatnagar, (2016), conducted similar studies with similar results.

In Kenya, Lagat, (2018) studied the effects of internal control on financial performance of government owned sugar companies. Data collected from through a semi structure questionnaire then analysed using SPSS v21. Results obtained indicate that internal control (control environment, risk assessment, information and communication, monitoring) of the government owned sugar companies has effect on their performance. Control activity on the other hand found negatively related contrary to the work by Mbilla et al., (2020) where Monitoring is negatively related. In

recommendation, the management of the companies are advised to be flexible in controlling and provide procedures to decrease risk which could lead to fraudulent activities.

Kinyua et al., (2015) based their studies on the companies listed on the stock exchange of Nairobi. Random sampling technique used to select 38 companies out of 115. Contrary to Lagat, 2018 and Haddat & Pakure 2019, the independent variables considered in the study include internal audit, risk management, control environment and corporate governance. SPSS v21 used for analysis of data and the results showed a significant relation between control environment of internal control and financial performance. The companies advised to enhance their financial performance by working more on the internal control environment.

In Palestine, the effect of internal control and risk management on banks investigated by Bayyoud and Sayyad, (2015). Novel banking restorations and guidelines on the risk valuation, documentation, and extenuation in banks were the effects identified. The study found both risk management and internal control to have significant impact on both financial and non-financial performance of Palestinian banks.

ICS and internal auditing practices of Malaysian companies were the matter of examination by Fadzil, et al., (2005). The study aimed at determining whether the internal audit departments complied with the Standards for the Professional Practice of Internal Auditors (SPPIA). It also aimed at determining whether compliance to SPPIA will affect the quality of ICS. The result pointed to the direction that management of internal audit department, professional proficiency, objectivity and review, significantly influence the monitoring aspect of ICS. Krishnan, (2005) studied the Audit Committee quality and its relation with ICS in Indian companies. The results indicated that Committees with adequate financial expertise were significantly less likely to be associated with the incidence of ICS problems.

Badara & Saidin, (2013) based their study on the Impact of the effective internal control system on the internal audit effectiveness at local government level. It aimed to examine the relationship between effective internal control system and internal audit effectiveness at local government level. The result concluded that effective internal control system can influence the effectiveness of internal auditors at local level”.

Petrovits, et al., (2011) based their study on the causes and consequences of internal control problems in non-profit organizations. It aimed to examine the causes and consequences of internal control deficiencies in the non-profit sector using a sample of 27,495 public charities from 1999 to 2007. The results suggest that donors and government agencies react either directly or indirectly to internal control information”.

El Hadi & El Bashary, (2006) based their study on the role of ICS in the promotion of operational efficiency in Sudanese banking sector. The study aimed to highlight the importance and the various characteristics of ICS in different establishments. They averred that in the event of any weakness in the organizational structure, there would be difficulties in having proper ICS. Mostaf and Halim, (2007) evaluated the methods and tools of ICS in the Sudanese banking system. They identified the methods and tools of ICS and the scientific basics of Auditing. The study showed that using ICS lead to the achievement of banking safety.

In Ghana, a study on how Faith NGO’s performance is impacted by internal control done by Oppong et al., (2016) used a data collected from 118 respondents to a questionnaires designed by the authors. SPSS v. 20 used to analyse data and results displayed in pie chart and bar chart. The study found all elements of internal control having positive impact on the performance of the NGO except risk assessment. Management of NGOs are advised to put in place standard risk assessment strategies and all-inclusive measures to evaluate their effectiveness and influence on operations persistently.

Hypothesis

Based on the literature, the author is adopting the following hypothesis. Hypothesis is design to determine whether there is enough evidence to clarify the aim of a particular study. The following hypothesis are design to help achieve the stipulated objectives.

H1: Internal control in Ghanaian banks is not effective.

H0: Internal control in Ghanaian banks is effective

H2: There is no effect of internal control on financial performance of Ghanaian banks.

H0: Internal control has effect on the financial performance of Ghanaian banks.

H3: There is no effect of internal control on non-financial performance of Ghanaian banks.

H0: Internal control has effect on non-financial performance of Ghanaian banks

H4: Substantial similarities exist in the internal control systems of Ghanaian banks

H0: Substantial similarities do not exist in the internal control systems of Ghanaian banks.

2.9 Conceptual Framework

A conceptual framework according to Camp, (2001) is an arrangement, which the researcher trusts explains the phenomenon being studied. Thus, it describes the relationship that exist between dependent and independent variables. A conceptual framework connects the ideas, experimental research and vital theories used by the researcher to systemize knowledge embraced (Peshkin, 1993). The main aim of this study is to evaluate the effectiveness of internal control (independent variable) of Ghanaian banks and the impact it has on their performance (dependent variable).

INDEPENDENT VARIABLES

DEPENDENT VARIABLES

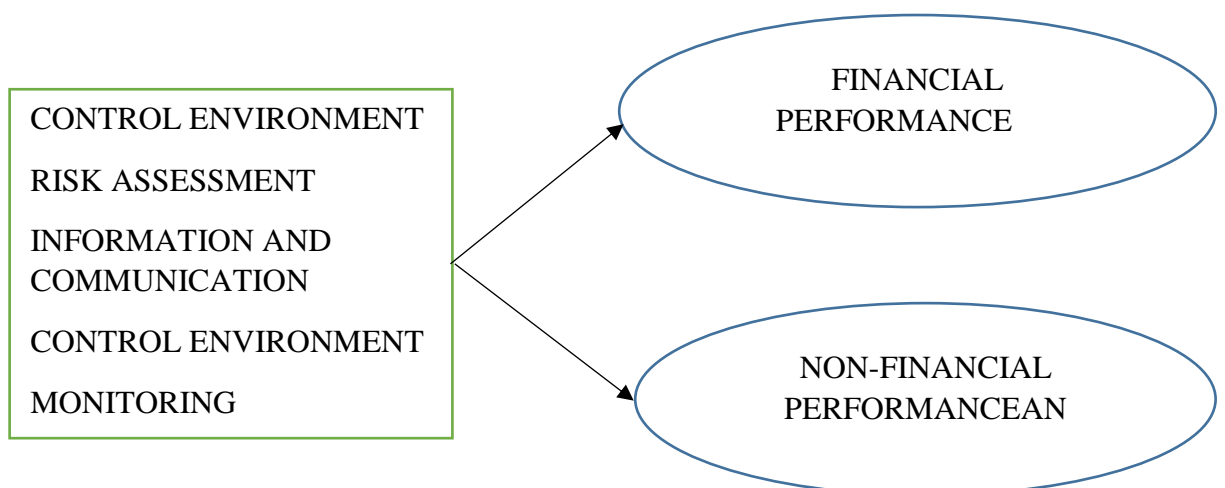


Figure 2.2: Study Variables

Source: Author, (2020)

Figure 2 portrays the positive relationship between IC and performance and the effect of IC on performance. This positive affiliation is clarified by the agency theory, institutional theory and contingency theory used in this research. The direction of the black arrows indicate the flow of relationship. Thus, it reflects the positive influence of ICS on performance of banks operating in Ghana. The green square box labelled independent variables denotes the internal control variables and the blue ovals labelled dependent variables denotes performance.

2.10 Knowledge Gap & Chapter Summary

The theories analysed in this study revealed the following: agency theory helps to eradicate or in the worst situation reduced agency cost and enhances the performances of firms, contingency theory on the other hand stipulates that organizations when making decisions regarding internal control must consider their contingent environment for effective and efficient objectives to be realized. Institutional theory also revealed how important social structures are to an organization. These structures work to elevate the standard of living and enhance financial stands of the public. Since the public turn out to be the largest stakeholders of business entities, enhancement in their standard of living is enhancement in the financial performance of the entities.

Majority of the studies pertaining internal control across the globe are based on the banking sector. Nevertheless, in computing for the effects of internal control on performance, majority of them considered only financial performance neglecting the non-financial performance indicator. Hence, the need to fill this gap by applying it on the banks operating in Ghana. In addition, it was noticed that majority of the studies used questionnaire (Likert scale) in data collection and SPSS for data analysis. Furthermore, from the empirical studies, it was noticed that, majority of the literature employed COSO framework in measuring internal control effectiveness. Some used all the five elements while others just considered few of them. Furthermore, inferential statistical (correlation, regression) and descriptive (means, standard deviation) methods were applied in most studies. All these lead to variation in results in deferent studies despite using the same tool of measurement. While some found internal control in banks to be effective and have impacts on bank's performance, others found it to be insignificant.

The knowledge gap, which entices the researcher to carry out this study on Ghanaian banks, is the lack in the usage of multi-dimensional method in measuring performance as well as not considering all the variables of internal control framework in analysing the effectiveness of internal control as revealed through the literature review analysis. This leads to establishment of concrete methodology discussed in the next chapter.



CHAPTER III

METHODOLOGY

In this chapter, the researcher discusses the methodology deemed suitable to examine the variables of this study in finding answers to the research questions. This includes the research design, population under study, sample size, instrument used in the study and method of data analysis.

3.1 Research Design

Research design refers to the connection of data collected for a specific study to the initially outlined research questions. According to Creswell, (2003) research design links methods to the outcomes of a particular study. This refers to the approach employed by a researcher in a study. A research approach according to Kothari, (2008) is the testing of the correlation between dependent and independent variables. Hence, its emphasis is on the underscore ideas of the study (Amissah, 2017). In addition, Bryman & Bell, (2007) submit that research design, focuses on data collection strategies and the study problem. Generally, three types of research approach are in existence (Khan, 2012). These are qualitative, quantitative and mixed research approaches. Qualitative is subjective and quantitative is objective. According to Creswell, (2009) qualitative research approach enhances a wide context flexibility and thorough examination of problems while quantitative research approach establishes connections between variables statistically. Quantitative research approach is common in the natural sciences while qualitatively is commonly used in the social sciences.

Qualitative approach according to Kothari, (2008) focuses on subjective analysis of issues and produces findings in a non-numerical form (Bryman & Bell, 2007). This type of research approach produces results, which give an in-depth comprehension of a particular issue. According to Ofori & Dampson, (2011) observation, case studies and interviews are the methods used to collect data for qualitative research.

Quantitative approach gears towards realization of findings, which are accurate and reliable through the development of hypothesis and theories (Amissah, 2017; Saunders et al., 2012). This approach gears towards establishing correlation between theory and research through data gathering and it is customarily applied in the natural sciences (Ofori & Dampson, 2011). Data collection strategies commonly used under this approach according to Creswell, (2009) include questionnaires, surveys, personality test and homogenous research instrument. Cooper & Schindler, (2001) defines a survey as a method of interrogating a respondent through the usage of pre-designed questions to be used by both the respondent and the interviewers. In addition, Tabachnick & Fidell, (2013) posit that survey involves the gathering and examining of huge variety of measurable data from an ample population employing descriptive and inferential statistics.

The mixed method research approach is, therefore, the use of qualitative research approach as well as quantitative research approach in the investigation of a particular issue (Morse & Niehaus, 2009). In applying this to a study, the researcher can decide to start with any of them. Some prefer to start with qualitative approach in other to have the hypotheses and the various test to run well stipulated before quantitative is applied for analysis. According to Bryman & Bell, (2007) when quantitative is applied first then, it is to set the bases for qualitative analysis. According to (Grix 2004; Dornyei 2003; Rudestam & Newtom 2001; Jicks 1979) to ensure reliability of outcomes of a particular study and also to counter-balance the boundaries of one research approach with the strengths of the other, mixed research approach should be employed.

The main aim of this study is to evaluate the effectiveness of internal control of Ghanaian banks and the impact it has on their performance. Hence, a quantitative approach employed in this study taking the study objectives, the relationship between the variables under study, the need for a survey questionnaire and test hypothesis into consideration. This would help in depicting implications and deductions about the relationships between the variables under study. The research pursues to find out and examine the disparity existing between the dependent and independent variables of the banks. Hence, it deemed it appropriate for this type of study design.

3.2 Study Scope

This research employs a study scope, which is restricted to companies in the banking sector of Ghana specifically, banks operating in Accra. The banking sector considered for this study because banking sector is the backbone of the economy. In addition, some of the studies conducted on this sector considered one, two or five banks as well as measuring only the financial performance of the banks neglecting the non-financial performance indicator of performance. Ghana is a country in West Africa, it shares borders with Togo to the east, Côte d'Ivoire to the west, Burkina Faso to the north and Gulf of Guinea to the south. Ghana has sixteen (16) regions ("Know the 16 regional capitals of Ghana", 2019) thus sixteen administrative and political cities. Previously, there were ten (10) regions until 2019 when six (6) new regions were created through a referendum as displayed in figure three (3). Accra is the business and political capital of Ghana and the regional capital of Greater Accra Region. The list of the regions with their regional capitals can be seen in table two ("Know the 16 regional capitals of Ghana", 2019). The current population of Ghana according to Ghana Population - Worldometer, (2020) is approximately 32 million.

Table 3.1: Regions of Ghana and their regional capital

	REGIONS	REGIONAL CAPITALS
1	Ahafo Region	Goaso
2	Ashanti Region	Kumasi
3	Bono East Region	Techiman
4	Bono Region	Sunyani
5	Central Region	Cape Coast
6	Eastern Region	Koforidua
7	Greater Accra Region	Accra
8	North East Region	Nalerigu
9	Northern Region	Tamale
10	Oti Region	Dambai
11	Savannah Region	Damango
12	Upper East Region	Bolgatanga
13	Upper West Region	Wa
14	Volta Region	Ho
15	Western North Region	Sefwi Wiawso
16	Western Region	Sekondi

Source: ("Know the 16 regional capitals of Ghana", 2019)



Figure 3.1: Ghana Map
 Source: (ghanamask, 2019)

Banks and Specialised Deposit-Taking Institutions Act 2016, Act 930 govern the banking sector of Ghana ("Banking Regulation in Ghana | Lexology", 2020). It serves as the main decree overriding banking industry in Ghana and has combined the decrees involving deposit taking and adjusts institutions that do on deposit-taking business ("Banking Regulation in Ghana | Lexology", 2019). The bank of Ghana

(BoG) controls the affairs of all other financial institutions in Ghana. Detailed background on the Ghana Banking Sector given in chapter four (4).

3.3 Population, Sampling Selection Techniques and Sample Size

This research is regarding the internal control system of Ghanaian banks. The population of the study was the regional branches of the 23 banks operating in Ghana. Due to the reasonableness of the number of commercial banks in Ghana. All banks were considered for the study. A request was sent to all 23 regional branches of the 23 banks. However, only 15 banks consented to our request and as such a questionnaire was administered to the bank staff in the Internal Control and Internal Audit departments of these banks. In this study, Yamane (1967: 886) formula employed in the estimation of the sample size. This is illustrated below

$$n = N / (1 + Ne^2)$$

where:

n= Sample size

N= Population

e² = marginal error

According to the Yamane formula above, the size of the sample calculated for this study is 113 as seen below. In addition, the formula gave the researcher 93% confidence that the sample represents the population of 258 respondents (managers and employees of IC and internal audit units of the banks) and a marginal error of 7% (Yamane, 1967: 886; Sagarán, 2015).

$$n = 258 / (1 + 258(0.07)^2)$$

$$n = \mathbf{113}$$

Table three (3) displays the list of banks (sample entities) and sample sizes. In other to persuade the respondents to respond to the questionnaire designed for this study, the researcher had to promise them that, their identities and that of the banks will be kept confidentially, hence the banks will be named as B1, B2, B3, and so on.

Table 3.2: Sample Entities (Banks) and Sample Sizes

Banks	SAMPLE SIZE	Quantitative method used
B1	10	Questionnaire
B2	10	Questionnaire
B3	10	Questionnaire
B4	10	Questionnaire
B5	10	Questionnaire
B6	10	Questionnaire
B7	10	Questionnaire
B8	10	Questionnaire
B9	10	Questionnaire
B10	10	Questionnaire
B11	4	Questionnaire
B12	1	Questionnaire
B13	5	Questionnaire
B14	1	Questionnaire
B15	3	Questionnaire
TOTAL	113	

Source: Author, (2020)

3.4 Data Collection

Data collection according to Gillis and Jackson, (2002) is the method of collecting statistics needed for the analysis of a particular study. This study employed only primary data. The data was collected using questionnaire. The questionnaires were administered to the managers and employees of the internal control and internal audit departments of the banks. The researcher chose internal control and audit departments because they are in charge of implementing internal control activities in the banks and are believed to be well vest in the field.

The questionnaire was in four sections: A, B, C and D. Section A introduces the researcher briefly who he is and the purpose of carrying out the research. In section B, the respondents were asked to answer few questions regarding their banks. Questions

include, name of bank, total number of workers, regularity in board meetings, existence of organizational charts among others. Section C comprises of questions related to internal control systems while section D has to do with performance related questions.

In sections C & D, a Likert scale with five magnitudes varying from strongly agree (SA) to strongly disagree (SD) coded as 5 and 1 respectively was used to access the level of knowledge of the respondents about the impact of internal control systems on the performance of the banks under study. The researcher uses Likert scale because it is easy to read and analyse. Out of 113 issued questionnaires 73 copies received fully answered representing 64.6% response rate. Table four (4) displays the number of questionnaires issued to and received from the various banks statistically.

Table 3.3: Frequency Distribution of Issued and Received Questionnaires

Banks	Total number Received		Total number Issued	
	Number	Percentage (%)	Number	Percentage (%)
B1	10	13.8	10	8.8
B2	10	13.8	10	8.8
B3	9	12.3	10	8.8
B4	8	10.9	10	8.8
B5	0	0	10	8.8
B6	9	12.3	10	8.8
B7	8	10.9	10	8.8
B8	9	12.3	10	8.8
B9	1	1.4	10	8.8
B10	9	12.3	10	8.8
B11	0	0	4	3.5
B12	0	0	1	0.8
B13	0	0	5	4.3
B14	0	0	1	0.8
B15	0	0	3	2.6
TOTAL	73	100	113	100

Source: Author, (2020)

CHAPTER IV

DATA ANALYSIS AND INTERPRETATIONS

In this chapter, the research questions and hypothesis were answered. Statistical Program for Social Sciences (SPSS) version 25 was used in running and analysing the data collected. Several tests run to measure effectiveness and establish the relationship between internal control and performance (financial performance and non-financial performance). Pre-tests, Reliability and Normality tests done to ascertain the validity and distribution of the data collected respectively. In addition, among other tests run are descriptive statistics (means & standard deviations) for the analysis of the effectiveness of independent variables in Ghanaian banks, inferential statistics to evaluate the effects of internal control on performance and multi-regression to estimate the degree of correlation that exist between ICS and Performance of the banks. Results of the tests presented in the form of tables.

4.1 Reliability test

Reliability estimates both consistency and stability of data by means of Cronbach's Alpha (Nantambelele & Gopal, 2018). In addition, Cooper and Schindler, (2011) posit that a reliability test is important since it helps the researcher to evaluate the legitimacy and trustworthiness of the data collected. The Cronbach's Alpha reliability coefficient examines the degree at which concepts confidently correlate. The coefficient of Cronbach's Alpha is between zero and one and the more nearer it is to one, the greater reliability steadiness (Sekaran & Bougie, 2016). Sekaran & Bougie, (2016) further posit that it is advisable to reverse all the negative worded items before used for reliability test in order to attain accurate reliability scores. In the case where the Cronbach's Alpha of a particular is low, that variable can be eliminated to enhance interterm consistency, but this can negatively affect the validity of the variables (Nantambelele & Gopal, 2018). For full reliability of a construct according Pallant, 2010; Nunnally, (1978) the coefficient Cronbach's Alpha should be at least 0.7 but

(Reynaldo et al., 1999) argue that in literature lower verges are occasionally considered.

Reliability test done by the researcher revealed Cronbach's Alpha coefficients of more than 0.7 for both the dependent and independent variables. Table five (5) below shows the various variables with respective Cronbach's Alpha coefficients.

Table 4.1: Reliability Test of Dependent and Independent Variables

Variables	No. of items	Cronbach's Alpha	Consistency
Control Environment	72	.941	Better
Risk Assessment	72	.852	Good
Information and Communication	72	.864	Good
Control Activities	72	.911	Better
Monitoring	72	.860	Good
Financial Performance	78	.974	Best
Non-Financial Performance	78	.814	Good

Source: Author, (2020)

4.2 Test of normality

A test run by the researcher reveals no outliers. Hence, the normality of the data tested. Test of normality is to assert whether collected sample data is from normally distributed population (Ghasemi & Zahediasl, 2012). A representative sample data from a population should have the same pattern of distribution in other to pave way for the estimation of the characteristics of the population. According to Sekaran & Bougie, (2016) a sample is representative when the characteristics of the population in a sample are neither overrepresented nor underrepresented. Thode, (2002) affirms that, in statistics, normality is the widely used assumption.

Normality test in other words termed as probability plot correlation Maximilan, (2010) is a consonance scattering through which numeric data can be plotted as a bell shaped (Sunder et al., 2009). It is to rectify whether the variables are normally distributed or not. If normally distributed a parametric test, if not a non-parametric test is run. Normality test can be computed in several ways by using Shapiro-Wilk test, t-test, Kormogorov-Smirov test, or Wilcoxon-Mann-Whitney test but the commonly used

one is Shapiro-Wilk test. For normal distribution, the P value (Sig) should be more than 0.05.

The researcher did the test to affirm whether the data collected are normally distributed or not. As displayed in table six (6), none of the variables is distributed normally in Shapiro-Wilk test and only control activities normally distributed in Kolmogorov-Smirnov test. Hence, the null hypothesis is rejected and alternative hypothesis is adopted (Elliot, 2007). Nevertheless, Pallant, (2010) posits that, if the sample size is huge thus more than 30, normality assumptions can be violated. So, based on this assumption, the researcher run parametric tests.

Table 4.2: Normality test of dependent and independent variables

Variables	Kolmogorov-Smirnov			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	Df	Sig.
ControlEnvironment	.130	72	.004	.883	72	.000
RiskAssessment	.132	72	.003	.920	72	.000
Control Activities	.084	72	.200*	.956	72	.014
Information and Communication	.178	72	.000	.920	72	.000
Monitoring Activities	.157	72	.000	.945	72	.003
Financial Performance	.242	72	.000	.823	72	.000
Non-Financial Performance	.142	72	.001	.902	72	.000

Source: Author, (2020).

Research objective one: Evaluation of whether internal control system exists in Ghanaian banks and how effective it is.

4.3 Descriptive statistics

In a quest to achieving the first objective for this study, the researcher employed descriptive statistics. The effectiveness of the internal control of the banks where investigated through the means and standard deviations of all the variables under the five COSO components (independent variables).

Mean explanation, 0.0-1.5 = very weak; 1.6-2.5 = weak; 2.6-3.5 = moderately effective; 3.6-4.5 = effective and 4.6-5.0= very effective.

4.3.1 Examination of Control Environment component

The respondents generally agreed to “Ethical standards observed by staff meet the forecasts of management and board of directors” and “All necessary and essential checks of potential new employees done including training by the bank” because the two variables scored the highest means for the control environment category. The two scored means and standard deviations of 4.29 (.911) and 4.38 (.795) respectively as can be seen from table seven (7) below. Similarly, there was a general agreement to “Top management provides support for integrity and ethical values.” and “The board of directors possess full knowledge of Internal Control and implement it”. Since the two recorded same means of 4.25 but different standard deviations of .967 and .915 respectively. This indicates a general level of agreement for the variable among respondents though the standard deviation showed discrepancy with the responses. A mean of 4.18 and standard deviation of .893 affirmed by “Mentoring and training opportunities provided regularly to personnel by the bank” indicates that the banks get their workers active and up to date with changes for the achievement of organizational goals. Meanwhile, the affirmation, “The organizational structure is appropriate for the bank” and “Specific lines of authority and responsibility are established” respectively recorded 4.00 (SD .971) and 4.07 (SD .946). The overall average mean for control environment is 4.20.

Table 4.3: Control Environment of Ghanaian Banks' Internal Control

Variables	Means	Std. Deviations
Ethical standards observed by staff meet the forecasts of management and board of directors.	4.29	.911
Top management provides support for integrity and ethical values.	4.25	.967
Management is demonstrating commitment to integrity and ethical values effectively.	4.22	.755
Policies are in place, which give members the right to question and scrutinize management.	4.24	.927
The board of directors possess full knowledge of Internal Control and implement it.	4.25	.915
The organizational structure is appropriate for the bank.	4.00	.971
Specific lines of authority and responsibility are established.	4.07	.946
The management/board of the bank comprehends the importance of internal controls.	4.13	.855
Regular employee evaluations are kept and make available to parties periodically.	4.21	1.034
Mentoring and training opportunities provided regularly to personnel by the bank.	4.18	.893
All necessary and essential checks of potential new employees done including training by the bank.	4.38	.795
Total average	4.20	.906

Source: Author, (2020)

A total mean average of 4.20 (SD 0.906) indicates that, control environment component of Ghanaian banks' internal control system is effective.

4.3.2 Examination of Risk Assessment component

The variables "Specification of goals is done by the bank and risk that may course hindrance" and "The management of the bank properly implements risk management activities" scored the same means of 4.33 and respective standard deviations of .822 and .671 demonstrating an over-all agreement for the workforce of banks with consistent responses. Similarly, the variables "Management is reserving resources needed to achieve wanted operational and financial performance" and "Management has established concrete basis for the allocation of resources" score respectively means of 3.94 (SD 1.013) and 4.07 (SD 1.025) indicating how spread it is from the average. In addition, the variables "Management put down measures to ensure that recognized

risks would not end in material errors” and “The bank periodically develop and control KPIs” scored means of 4.13 (SD .808) and 4.13 (SD .804) respectively. The general average mean for risk assessment is 4.19 (SD .857) which confirms that the internal control component – risk assessment of Ghanaian banks is effective.

Table 4.4: Risk Assessment of Ghanaian banks’ Internal Control

Variables	Means	Standard deviations
Specification of goals is done by the bank and risk that may course hindrance identified	4.33	.822
Management is reserving resources needed to achieve wanted operational and financial performance.	3.94	1.013
Management has established concrete basis for the allocation of resources	4.07	1.025
Management put down measures to ensure that recognized risks would not end in material errors.	4.31	.808
The management of the bank properly implements risk management activities.	4.33	.671
The bank periodically develop and control KPIs	4.13	.804
Total average	4.19	.857

Source: Author, (2020)

4.3.3 Examination of Control activities component

All the variables “Management determines which relevant bank processes require control activities”, “Management considers control activities at various levels in the bank.” and “Management isolates mismatch duties and develops alternative control activities where necessary” indicate that respondents agree to a higher extend management pays much attention to control activities. This is affirmed by the respective means 4.25 (SD .900), 4.22 (SD .773) and 4.10 (SD .842). The means of 4.17 (SD .737) and 4.13 (SD .691) for the variables “The bank has employed security guards at its various branches nationwide” and “The bank uses Close Circuit Television (CCTV) systems to monitor activities of staff” respectively indicate the importance attached to security by the banks. In addition, the availability of CCTV

indicates security of personnel matters a lot to the management as well serves as a means to prevent employees from undertaking any fraudulent act. Finally, the variable “The bank has established policies, which helps it protect its assets and keeping records of them eg. Cash, equipment, disbursements and procurement” scored a mean of 4.08 (SD .824). As displayed in table nine (9) below, based on the total average mean 4.13 (SD .818) of control activities of the internal control system of Ghanaian banks effective.

Table 4.5: Control Activities of Ghanaian Banks’ Internal Control

Variables	Means	Standard deviations
Management determines which relevant bank processes require control activities.	4.25	.900
Management considers control activities at various levels in the bank.	4.22	.773
Management isolates mismatch duties and develops alternative control activities where necessary.	4.10	.842
The bank keep backups of daily activities and control the functionality of the files to prevent complete data loss in case of disasters.	3.99	.957
The bank has employed security guards at its various branches nationwide.	4.13	.691
The bank uses Close Circuit Television (CCTV) systems to monitor activities of staff.	4.17	.737
The bank has established policies, which helps it protect its assets and keeping records of them eg. Cash, equipment, disbursements and procurement.	4.08	.824
Total average	4.13	.818

Source: Author (2020)

4.3.4 Examination of Information and communication component

The variables, “One or more of the following review rules and regulations: governing board, audit, finance or other committee”, “The bank carries out accounting activities in accordance with applicable regulations” and “The bank’s accounting system provides for separate identification of each transaction” scored respective means of 4.10 (SD .790), 4.17 (SD .805) and 4.18 (SD .775). This indicate that the banks obtain and uses relevant, quality information to support the functioning of other components of internal control. In addition, “Bank frequently audits the branches to determine whether policies and procedures are being applied, as they should be” with mean 4.01 (SD .971), “All staff understand that, they are accountable for activities they conduct” 4.24 (SD .918) and “Management executes implementation and communication of updated policies properly” 4.10 (SD .740) points out the effectiveness of internal communication. Majority of the respondents agree that in Ghanaian banks, information is well dispersed to the intended persons and all employees know their responsibilities. The total average mean for information and communication component is 4.13 (SD .823) and this means that information and communication component of Ghanaian banks’ internal control is effective.

Table 4.6: Information and communication of Ghanaian banks’ internal control

Variables	Means	Standard variations
One or more of the following review rules and regulations: governing board, audit, finance or other committee.	4.10	.790
The bank carries out accounting activities in accordance with applicable regulations.	4.17	.805
The bank’s accounting system provides for separate identification of each transaction.	4.18	.775
Effective communication exists between management and the board of directors so that both have information needed to fulfil their roles with respect to the bank’s purposes.	4.10	.759
Bank frequently audits the branches to determine whether policies and procedures are being applied, as they should be.	4.01	.971
All staff understand that, they are accountable for activities they conduct.	4.24	.918
Management executes implementation and communication of updated policies properly.	4.10	.740
Total average	4.13	.823

Source: Author (2020).

4.3.5 Examination of monitoring activities component

The respondents to the variables “The bank periodically measures business proceedings for example cash management”, “Bank frequently audits the branches to determine whether policies and procedures are being applied, as they should be” “The banks periodically evaluates internal controls per the Banks Act 2016, Act 930” indicate that evaluation is well executed by management. They scored respective means of 4.00 (SD .894), 4.00 (SD .910) and 3.99 (SD .847). Management of the banks also communicates internal control deficiencies to the appropriate parties for the right actions to be taken and to prevent any potential fraudulent activities. This was proven by the responds of majority of the respondents agreeing that “Periodic feedback on monitoring activities and risk is communicated to management” mean of 4.11 (SD .797), “There is specific measure that ensures easy report of actual or suspected fraud” mean of 4.07 (SD .678). In addition, “The bank periodically monitors branches to prevent misallocation of resources and wrong implementation of resources” which score a mean of 4.25 (SD .712) indicate that management ensures effective and efficient use of organization’s resources to achieve the objectives of the banks.

Table 4.7: Monitoring Activities of Ghanaian Banks’ Internal Control

Variables	Means	Standard deviation
The bank periodically measures business proceedings for example cash management.	4.00	.894
Bank frequently audits the branches to determine whether policies and procedures are being applied, as they should be.	4.00	.910
Periodic feedback on monitoring activities and risk is communicated to management.	4.11	.797
There is specific measure that ensures easy report of actual or suspected fraud.	4.07	.678
The banks periodically evaluates internal controls per the Banks Act 2016, Act 930.	3.99	.847
The bank periodically monitors branches to prevent misallocation of resources and wrong implementation of resources.	4.25	.712
Total average	4.07	.806

Source: Author, (2020)

4.3.6 General summary

Per the average means and standard deviations scored by the individual components, the researcher concludes that internal control system exist in Ghanaian banks and it is generally effective.

Table 4.8: Summary of the ICS Components and Their General Average Means and Specifications

Components (variables)	Average means	Standard deviations	Specification
Control Environment	4.20	.906	Effective
Risk Assessment	4.19	.857	Effective
Control Activities	4.13	.818	Effective
Information and Communication	4.13	.823	Effective
Monitoring Activities	4.07	.806	Effective
General average of averages	4.144	0.842	Effective

Source: Author, (2020)

Research Objective 2: To ascertain this objective, the researcher run a t-test by paring the independent variables with the dependent variables one after the other as displayed in table 4.9.

4.4 T-test

According to the rule of thumb of t statistics, a variable is significant if the t value is greater than two (2) and or if the p value is less than 0.05. From appendix A it is observed that, the independent variables CE, RA, CA, InCo and MA paired with FP produces t values of more than 2. Hence, this implies that there is no difference in the internal control of the banks operating in Ghana in relation to financial performance.

On the other hand, the IC components when paired with NFP generates insignificant t values (see appendix A). This means that with regards to NFP, there are differences in the internal control systems of the banks operating in Ghana.

Research Objectives 3 & 4

In a quest to establish the relationship that exist between the independent variables (IC) and dependent variables (Performance) of Ghanaian banks, the researcher run several tests among them are correlation, regression and anova.

4.5 Correlation analysis

Correlation analysis is the tool used to pronounce the brawn and path of the linear connection between two variables. The value falls between +1 to -1 indicating the existence of positive or negative relation. If it is positive, it means an increase in one variable leads to increase in the other and a decrease in one variable will lead to a decrease in the other when the relation is negative. Positive value also means strong relation and negative means weak relation exist between variables. A correlation of zero (0) value means there is no relation between the variables. Hence, an increase or decrease in one variable has no effect on the other.

The researcher run a Pearson correlation to detect the relation that exist between dependent and independent variables. As can be seen from table fourteen (14) below the results obtained indicate that there is positive correlation between CE and FP ($r=.677$) and NFP ($r=.675$) at significant level of $p=.000$ which is less than 0.05. This denotes that an enhanced financial and non-financial performance is related with a rise in control environment. The results from the study also indicate that Risk assessment, control activities, information and communication and monitoring activities variables of internal control all positively correlate with FP and NFP and all significant. These are testified with RA ($r=.641, .660; p=.000$), CA ($r=.597, .644; p=.000$), In&Com ($r=.704, .711; p=.000$) and MA ($r=.656, .616; p=.000$). This means that all the variables increase simultaneously. Since most of the relationships, are more than 60%, the researcher run a collinearity test to check whether the variables are collinear or not.

Table 4.9: Correlation

		CE	RA	CA	In & Co	MA	FP	NFP
CE	Pearson Correlation	1	.887**	.781**	.757**	.720**	.677**	.675**
	Sig. (2-tailed)		.000	.000	.000	.000	.000	.000
	N	73	72	72	72	72	73	73
RA	Pearson Correlation	.887**	1	.810**	.739**	.699**	.641**	.660**
	Sig. (2-tailed)	.000		.000	.000	.000	.000	.000
	N	72	72	72	72	72	72	72
CA	Pearson Correlation	.781**	.810**	1	.794**	.721**	.597**	.644**
	Sig. (2-tailed)	.000	.000		.000	.000	.000	.000
	N	72	72	72	72	72	72	72
In & Co	Pearson Correlation	.757**	.739**	.794**	1	.795**	.704**	.711**
	Sig. (2-tailed)	.000	.000	.000		.000	.000	.000
	N	72	72	72	72	72	72	72
MA	Pearson Correlation	.720**	.699**	.721**	.795**	1	.656**	.616**
	Sig. (2-tailed)	.000	.000	.000	.000		.000	.000
	N	72	72	72	72	72	72	72
FP	Pearson Correlation	.677**	.641**	.597**	.704**	.656**	1	.806**
	Sig. (2-tailed)	.000	.000	.000	.000	.000		.000
	N	73	72	72	72	72	73	73
NFP	Pearson Correlation	.675**	.660**	.644**	.711**	.616**	.806**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	
	N	73	72	72	72	72	73	73

Source: Author, (2020).

4.6 Regression Analysis

In this part, the researcher regressed the dependent variables thus financial performance and non-financial performance of Ghanaian banks against the independent variables (Control environment, Risk assessment, Control activities, Information and communication, Monitoring activities) at a significant level of five percent (5%). Two separate regressions run for the two dependent variables against the independent variables. The results obtained displayed in table 4.11.

4.6.1 Model Summary for Financial Performance

Table 4.10: Model Summary for Financial Performance

Model	R	R Square	Adjusted R square	Standard Error of the Estimates	Durbin-Watson
1	.746	.556	.522	.84345	1.085

Source: Author, (2020)

The value scored for R, the correlation coefficient was .746 (74.6%) and this indicate the existence of stout positive relationship between the dependent variables (financial performance) and the independent variables (CE, CA, RA, In&CO, MA). In addition, the determinant of coefficient R square, which is equal to .556, posits that the independent variables contribute 55.6% impact on financial performance of Ghanaian banks. This implies that, other factors that affect the financial performance of the banks operating in Ghana exist and that sum up to 44.4%. The R square adjusted value, 0.522 portrays that the variation in the financial performance of banks operating in Ghana was 52.2%.

4.6.2 Anova - Analysis of variance

Table 4.11: Analysis of Variance for Financial Performance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	58.797	5	11.759	16.530	.000
	Residual	46.953	66	.711		
Total		105.750	71			

Source: Author, (2020)

The value of significance is 0.00, F value is equal to 16.530 with $p=0.05$. This indicates that, in assessing how the predictors (CE, RA, CA, In&Com and MA) affect the financial performance of banks operating in Ghana, the model is significantly fit since $p=0.05$ is greater than 0.00.

4.6.3 Coefficients of the model

Table 4.12: Coefficients of the Model

Model		Unstandardized Coefficients	Std. Error	Beta	T	Sig.
1	Constant	-2.185	.737		-2.963	.004
	Control Environment	.448	.328	.260	1.366	.177
	Risk Assessment	.179	.365	.096	.491	.625
	Control Activities	-.246	.325	-.123	-.757	.452
	Information and Communication	.713	.297	.391	2.401	.019
	Monitoring Activities	.353	.282	.179	1.254	.214

Source: Author, (2020).

For a variable to be significant, the p value has to be less than 0.05. From the findings above, it can be seen clearly that there is positive and substantial relationship between information and communication and FP since it scored p value of .019, which is less than 0.05. This means that, information and communication contribute positive and significant values to the dependent variables. All the other variables had no impact on the dependent variables. This is proven by their p values of .177, .625, .452, .214 for control environment, risk assessment, control activities and monitoring activities respectively.

The regression equation obtained for this research displayed below.

$$FP = -2.185 + 0.448CE + 0.179RA - .246CA + .713In\&Co + .353MA$$

Where:

FP – Financial Performance; **CE** – Control Environment; **RA** – Risk Assessment; **CA** – Control Activities; **In&Co** – Information and Communication; **MA** – Monitoring Activities

Per the regression equation above, the constant = -2.185 means that if all independent variables are equated to zero, the FP of Ghanaian banks will be equal to -2.185 thus negative impact but FP of the banks will observe an increase by .044 if there is a unit increase in CE. In addition, a unit increase in RA, In&Co and MA will result in .179, .713 and .353 increment in the FP of banks operating in Ghana but will see a decrease of -.246 when there is a unit increase in control activities.

4.6.4 Model Summary for Non-Financial Performance

Table 4.13: Model Summary for Non-Financial Performance

Model	R	R Square	Adjusted R square	Standard Error of the Estimates	Durbin-Watson
1	.743	.553	.519	.51893	1.398

Source: Author, (2020)

The value scored for R, the correlation coefficient was .743 (74.3%) and this indicate the existence of stout positive relationship between the dependent variable (non-financial performance) and the independent variables (control environment, risk assessment, control activities, information and communication and monitoring

activities). In addition, the determinant of coefficient R square, which is equal to .553, posits the independent variables contribute 55.3% impact on non-financial performance of Ghanaian banks. This implies that, other factors that affect the non-financial performance of the banks operating in Ghana exist and that sum up to 44.7% but were not used in this model. The R square adjusted value, 0.519 portrays that the variation in the non-financial performance of banks operating in Ghana was 51.9%.

4.6.5 Anova - Analysis of Variance

Table 4.14: Analysis of Variance for Non-Financial Performance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	21.949	5	4.390	16.301	.000
	Residual	17.773	66	.269		
	Total	39.722	71			

Source: Author, (2020).

The value of significance is 0.00, F value is equal to 16.301 and $p = 0.05$. This indicates that, in assessing how the predictors (CE, RA, CA, In&Com and MA) affect the non-financial performance of banks operating in Ghana, the model is significantly fit since $p = 0.05$ is greater than 0.00.

4.6.6 Coefficients of the Model

Table 4.15: Coefficients of the Model

MODEL		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	Constant	.391	.454		.862	.392
	Control Environment	.184	.202	.174	.910	.366
	Risk Assessment	.168	.225	.147	.750	.456
	Control Activities	.044	.200	.036	.220	.826
	Information and Communication	.471	.183	.421	2.577	.012
	Monitoring Activities	.033	.173	.027	.188	.851

Source: Author, (2020).

From the findings in the above, it can be seen clearly that there is positive and substantial relationship between information and communication and NFP since it scored p value of .012, which is less than 0.05. This means that, information and communication contribute positive and significant values for this research. All the other variables performed negatively. This proven by their p values of .366, .456, .826, and .851 for control environment, risk assessment, control activities and monitoring activities respectively. The regression equation obtained for dependent variable (NFP) displayed below:

$$\text{NFP} = .391 + .184\text{CE} + .168\text{RA} + .044\text{CA} + .471\text{In\&Co} + .033\text{MA}$$

Per the regression equation above, the constant = .391 means that if all independent variables are equated to zero, the NFP of Ghanaian banks will be equal to .391. In addition, NFP of the banks will observe an increase by .184 if there is a unit increase in CE. Same logic applies to the other variables. A unit increase in RA, CA, In&Co and MA will result in .168, .044, .471 and .033 increment in the NFP of banks operating in Ghana respectively.

4.7 Discussions of Research Findings

The main aim of this study is to evaluate the effectiveness of internal control of Ghanaian banks and the impact it has on their performance. COSO's IC framework is used in measuring the effectiveness of the banks operating in Ghana. The components control environment (CE), risk assessment (RA), control activities (CA), information and communication (InCo) and monitoring activities (MA) are considered in the study as the independent variables. On the other hand, financial performance (FP) and non-financial performance (NFP) are employed in assessing the general performance of the banks operating in Ghana. Questionnaire structured by the researcher was the means used to collect data. The target population was the managers and employees of internal control and audit committee departments of the banks considered for this study. Several tests run to achieve the study objectives. Among them include, reliability and validity tests, descriptive statistics, correlations, regressions and Pearson t-test.

On reliability, the dependent variables (FP & NFP) scored Cronbach's Alpha of .974 and .814 respectively. Cronbach's Alpha was used because it is the widely used tool in assessing the validity consistency and stability of data (Nantanbelele & Gapal, 2018). In addition, the independent variables CE, RA, CA, InCo and MA had Cronbach's Alpha coefficients of .941,

.852, .864, .911, and .860 respectively. The results of the variables testify the validity of the data collected which then paved way for normality test to be conducted.

Normality test is one of the initial test run on collected data to determine the type of further test(s) that need to be run. None of the variables is distributed normally in Shapiro-Wilk test and only the variable "control activities" normally distributed in Kolmogorov-Smirnov test. Despite the fact that the data for this study was not

normally distributed, still parametric test was conducted on the assumption the sample size is more than 30 as posit by Pallant, (2010) that, if the sample size is more than 30 or 40 normality assumptions can be violated.

Descriptive statistics was the test run to attest the existence and effectiveness of ICS in Ghanaian banks. Means and standard deviations scores of the IC variables explained. The definition of means used was 0.0-1.5 = very weak; 1.6-2.5 = weak; 2.6-3.5 = moderately effective; 3.6-4.5 = effective and 4.6-5.0= very effective. The findings of the study indicated the existence of ICS in banks operating in Ghana and it is effective. The general mean and standard deviation average scores of the IC components prove this.

On the t-test analysis, the independent variables were paired with the dependent variables to check variances as to whether there are substantial similarities or differences in the ICS of Ghanaian banks. Based on the t and p values ascertained, FP when paired with IC components showed that there are no differences in the ICS of banks operating in Ghana with regards to FP. This was because; the p values of the pairs (pair 1-5) were all less than 0.05 and t values more than two (2). On the contrary, the NFP when paired with IC components indicated differences in the ICS of Ghanaian banks portrayed by pairs (pair 6-10). The p values of these pairs were more than 0.05 and t values less than two with 'monitoring activities' scoring negative t value. In practice, it means that the IC components are contributing positively to FP but in terms of NFP, negative relation exists. This means that the variables used are not the only variable that affect the NFP of the banks. Other factors such motivation, flexibility in work schedule, which are not considered in this study, could also be affecting factors.

The findings from correlation matrixes showed that there was a stout correlation between all the IC components (CE, RA, CA, InCo and MA) and performance (FP, NFP). In addition, the model summaries for both dependent variables indicated that there are stout relationship between IC and FP ($R = .746$) as well as IC and NFP ($R = .743$). With regards to FP, the independent variables (CE, RA, CA, InCo and MA) explain about 55.6% of the total variance of the banks operating in Ghana. This means besides COSO IC framework, other factors making up 44.4% could be employed in assessing the FP of Ghanaian banks. On the contrary, NFP's total variations of 55.3% was explained by the independent variables (CE, RA, CA, InCo and MA). Meaning,

other factors such as motivation, conducive working environment summing up to 44.7% affect the NFP of Ghanaian banks.

On Anova (Analysis of variance), at significant level of 0.05, the results of the study showed that the model was significant for both FP and NFP. Both NP and NFP had same p value of .000 and F score of 16.530 and 16.301 respectively. The findings indicated that the model is significantly fit in assessing the impact of the independent and dependent variables of the banks operating in Ghana.



CHAPTER V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

In this chapter, the researcher concentrates on the summary of the findings, conclusions and recommendations of the study as well as tips for further studies.

5.1 Summary

In this study, the researcher sought to achieve four objectives. First, the study is pursued to find out whether internal control system exists in Ghanaian banks and its effectiveness. In addition, the study is pursued to find out whether there are substantial similarities or differences in the internal control systems of Ghanaian banks. The third and fourth objective were on whether internal control system framework has effect on financial performance and non-financial performance of Ghanaian banks respectively. To achieve the objectives, the study employed one research question and four hypotheses. The independent and dependent variables for this study were COSO ICS framework and performance (FP & NFP) of Ghanaian banks respectively. The population of the study was the regional branches of the 23 banks operating in Ghana. By using Yamane's sample size formula, the researcher arrived at a sample size of 113.

The primary data used in this study was gathered from questionnaire adopted from Amissah (2017). The questionnaires answered by the managers and employees of the internal control and audit departments of Ghanaian banks were then analysed using SPSS version 25. Out of 113 distributed questionnaires, 73 copies were received representing 64.6% response rate. Tests such as reliability, normality, descriptive statistics, correlations, regressions and t-test were run to help achieve the objectives of this research.

First, reliability of the data collected tested using Cronbach's Alpha. The Cronbach's Alpha of the variables were all above 0.7. This means that data was reliable for further tests. After reliability, normality test conducted to test whether collected sample data is from normally distributed population using Shapiro-Wilk test and Kolmogorov-

Smirnov test. From the findings, none of the variables was found to be normally distributed in Shapiro-Wilk test and only control activity was found to be normally distributed in Kolmogorov-Smirnov test. Based on the results of the normality test, non-parametric tests were supposed to be conducted but the researcher conducted parametric tests on the bases that if the sample size is large thus more than 30, normality assumptions can be violated according to Pallant, (2010).

The findings from descriptive statistics (means and standard deviation) depicted the existence of effective ICS in the banks operating Ghana. All the variables scored average of means more than 4.00 and a general mean of 4.144 and standard deviation of 0.842.

T-test was conducted for the second objective “are there substantial similarities or differences in the internal control systems of Ghanaian banks”. The independent and the dependent variables were paired one after the other. The t-test results for the pairing between independent variables and FP were all above 2.00 and p values of less than 0.05 indicating that they were all significant. Hence, this implies that there is no difference in the internal control of the banks operating in Ghana in relation to financial performance. On the other hand, the IC components when paired with NFP generates insignificant t values as displayed in the table above. This means that concerning NFP, there are differences in the internal control systems of the banks operating in Ghana.

The correlation results showed stout relationship between ICS and FP as well as NFP. This denotes that an enhanced financial performance and non-financial performance is directly related with a rise in ICS components (CE, RA, CA, In&Co, MA). The values of model summary R square for FP and NFP respectively were .556 and .553 indicating that the independent variables (predictors) explained 55.6% and 55.3% of the variations in the dependent variables respectively. This implies that, other factors comprising 44.4% and 44.7% justify for changes in the FP and NFP of Ghanaian banks respectively.

In elaborating how ICS affects the FP and NFP of Ghanaian banks, the multiple regression models were found to be statistically significant. The study employed confidence level of 95%. The regression equations for both dependent variables attained were as follows:

FP = -2.185 + 0.448**CE** + 0.179**RA** - .246**CA** + .713**In&Co** + .353**MA**. Per the regression equation model above, FP of the banks will observe an increase by .044 if there is a unit increase in CE. In addition, a unit increase in RA, In&Co and MA will result in .179, .713 and .353 increment in the FP of banks operating in Ghana but will see a decrease of -.246 when there is a unit increase in control activities.

NFP = .391 + .184**CE** + .168**RA** + .044**CA** + .471**In&Co** + .033**MA**. Per the regression equation model above, the constant = .391 means that if all independent variables are equated to zero, the NFP of Ghanaian banks will be equal to .391. In addition, NFP of the banks will observe an increase by .184 if there is a unit increase in CE. Same logic applies to the other variables. A unit increase in RA, CA, In&Co and MA will result in .168, .044, .471 and .033 increment in the NFP of banks operating in Ghana.

5.2 Conclusions

The researcher reached at the following conclusions based on the results of the study and the study objectives.

The findings of the study showed that there are effective strong positive ICS in Ghanaian banks and there are no differences between the ICS of the banks operating in Ghana with respect to FP but there are differences between ICS of Ghanaian banks with the regards to NFP. In addition, the results revealed that there is a stout positive relationship between ICS (CE, RA, CA, In&Co, MA) and FP as well as NFP. In general, internal control systems positively affects the performance of banks operating in Ghana. The insinuation is that an improved ICS results in increase in performance of the banks.

The results of this study is comparable to a study by Kipesha, (2013) in Tanzania. Kipesha, (2013) assessed the performance of microfinance institutions integrating both FP and NFP indicators. The study used a five dimensional balance scorecard for analysis. These dimensions include social, customer, learning, growth and internal business processes. The results of the study indicate high average NFP and low average FP among the reviewed microfinance institutions. This means that, microfinance institutions in Tanzania are performing better in NFP than FP. In addition, Marie et al., (2014) investigated the effects financial and non-financial measures on quality of services in Islamic banks in the UAE. The study employed questionnaires in data collection. The respondents comprises of external customers (people who do transactions at the bank) and internal customers (employees). Using structural equation modelling techniques, the results gained indicated a strong positive relationship between quality of service and banks' performance in the UAE. Finally, a study by Bayyoud and Sayyad, (2015) in Palestine evaluated the effects internal control has on financial and non-financial performance of banks. The identified effects included novel banking restorations and guidelines on the risk valuation, documentation, and extenuation in banks. The study employed a close-ended survey and collected data from 10 banks. The result of the study reveals that internal control and risk management have significant and positive impact on both quantitative performance (FP) and qualitative performance (NFP) of Palestinian banks.

5.3 Recommendations

Based on the results of the study and the objectives of this study, the following recommendations are stipulated.

First, despite ICS of the banks operating in Ghana being effective, the researcher advised managers of the banks not to be negligent but should continue working hard to make it more effective. Especially, more attention should be on risk management since banks operate under high risk than any other financial institutions.

In addition, the results of the study indicate a weak relation between CA and FP and so the banks should put mechanisms in place to enhance general control to reduce or curb any kind of risk as well as prevent the occurrence of any sort of fraud.

Furthermore, the study found information and communication positively affecting performance of banks so communication of all relevant information within the banks should be clear and on time. This will enhance the taking of timely and effective decisions.

5.4 Tips For Future Research

This study could not cover all the banks operating in Ghana, so future study can consider that.

In addition, the study revealed that, there are other factors affecting performance and not only ICS, so those factors can be used in future studies.

Furthermore, similar comparison studies can be on the banks of the neighbouring countries of Ghana since they all operate within the same region.

This study concentrated on commercial banks, future studies can be on rural banks, investment banks and so on. In addition, comparison study can also be conducted.

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APPENDIX A: T-Test

Paired Samples Test									
		Paired Differences					T	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Control Environment – Financial Performance	.3853	.90258	.10564	.17480	.59598	3.648	7	.000
Pair 2	Risk Assessment – Financial Performance	.37292	.94584	.11147	.15066	.59518	3.345	7	.001
Pair 3	Control Activities – Financial Performance	.31994	.98611	.11621	.08822	.55167	2.753	7	.007
Pair 4	Information & Communication - Financial Performance	.31432	.88782	.10463	.10569	.52295	3.004	7	.004
Pair 5	Monitoring Activities - Financial Performance	.26204	.93877	.11063	.04144	.48264	2.368	7	.021

Pai r 6	Control Environment - Non-Financial Performance	.07261	.58897	.06893	- .06481	.21002	1.053	7 2	.296
Pai r 7	Risk Assessment - Non-Financial Performance	.05926	.58343	.06876	- .07784	.19636	.862	7 1	.392
Pai r 8	Control Activities - Non-Financial Performance	.00628	.58618	.06908	- .13146	.14403	.091	7 1	.928
Pai r 9	Information & Communication - Non- Financial Performance	.00066	.54346	.06405	- .12705	.12837	.010	7 1	.992
Pai r 10	Monitoring Activities - Non-Financial Performance	- .05162	.61058	.07196	- .19510	.09186	-.717	7 1	.475

Source: Author, (2020).

APPENDIX B: THESIS QUESTIONNAIRE SAMPLE

UNIVERSITY OF IBN HALDUN (TURKEY)
INSTITUTE OF GRADUATE SCHOOL
DEPARTMENT OF MANAGEMENT

TITLE: THE EVALUATION OF EFFECTIVENESS OF INTERNAL CONTROL SYSTEM AND ITS IMPACTS ON THE FINANCIAL AND NON-FINANCIAL PERFORMANCES OF BANKS USING COSO INTERNAL CONTROL FRAMEWORK: THE CASE OF GHANAIAN BANKS

Dear Sir / Madam

I am MA management student at Ibn Haldun University. In partial fulfilment for my master's degree, I am conducting a study on measuring the effectiveness and the impact of internal control systems on performance of Ghanaian banks using COSO framework. In order to sufficiently address the specific objectives of the study, questionnaire administration has become quite relevant. Your highly esteemed bank has been selected in soliciting for the data. I would therefore be pleased if your bank could respond to this questionnaire based on the internal control systems and performance indicators. Your responses will be used solely for this academic purpose and will be treated with utmost confidentiality. Thank you very much in advance.

SECTION A: BUSINESS INFORMATION

Please give brief information about your bank by answering the following. You can tick where necessary.

1. Which of the following banks do you work at?

Access Bank (), Agriculture Development Bank (), Cal Bank (), Ecobank (), Ghana Commercial Bank (), HFC Bank (), Standard Chartered Bank (), Trust Bank ().

2. Approximately how many workers are there in your bank

Less than 50 () 50-99 () 100-249 () 250-499 () 500-999 () 1000 and above

3. How many years has your company been in operation? Less than 5 years 5-10 years
 () 11-20 () 21-40 years () 40 years and above
4. How many years have you been working in this bank? Less than 5 years () 5-10 years
 () 11-20 years () 21-30 years () More than 30 years ()

SECTION B: INTERNAL CONTROL

The following statements will be helpful in finding out the extent to which your bank design and implement internal control system. *Please indicate your agreement, disagreement or otherwise with each of the statements by **ticking** the appropriate box. 5 for Strongly Agree (SA), 4- Agree, 3- Neutral, 2-Disagree, 1- Strongly Disagree (SD).*

Control environment		SA					SD				
		5	4	3	2	1	5	4	3	2	1
1.	Ethical standards observed by staff meet the forecasts of management and board of directors.										
2.	Top management provides support for integrity and ethical values.										
3.	Commitment to integrity and ethical values. being demonstrated by management effectively.										
4.	Policies are in place, which give members the right to question and scrutinize management.										
5.	The board of directors possess full knowledge of Internal Control and implement it.										
6.	The organizational structure is appropriate for the bank.										
7.	Specific lines of authority and responsibility are established.										

8.	The management/board of the bank comprehends the importance of internal controls.					
9.	Regular employee evaluations are kept and made available to parties periodically.					
10.	Mentoring and training opportunities provided regularly to personnel by the bank.					
11.	All necessary and essential checks of potential new employees done including training by the bank.					

Risk assessment

		<i>SA</i>					<i>SD</i>
		5	4	3	2	1	
12.	Specification of goals is done by the bank and risk that may course hindrance identified						
13.	Management is reserving resources needed to achieve wanted operational and financial performance.						
14.	Management has established concrete basis for the allocation of resources						
15.	Management put down measures to ensure that recognized risks would not end in material errors.						
16.	The management of the bank properly implements risk management activities.						
17.	The bank periodically develop and control KPIs						

Control activities		SA					SD
		5	4	3	2	1	
18.	Management determines which relevant bank processes require control activities.						
19.	Management considers control activities at various levels in the bank.						
20.	Management isolates mismatch duties and develops alternative control activities where necessary.						
21.	The bank keep backups of daily activities and control the functionality of the files to prevent complete data loss in case of disasters.						
22.	The bank has employed security guards at its various branches nationwide.						
23.	The bank uses Close Circuit Television (CCTV) systems to monitor activities of staff.						
24.	The bank has established policies, which helps it protect its assets and keeping records of them eg. Cash, equipment, disbursements and procurement.						
Information and communication		SA					SD
		5	4	3	2	1	
25.	One or more of the following review rules and regulations: governing board, audit, finance or other committee.						
26.	The bank carries out accounting activities in accordance with applicable regulations.						
27.	The bank's accounting system provides for separate identification of each transaction.						
28.	Effective communication exists between management and the board of directors so that both have information needed to fulfil their roles with respect to the bank's purposes.						
29.	All staff understand their role in the central system and how their activities relate to others						

30.	All staff understand that, they are accountable for activities they conduct.					
31.	Management executes implementation and communication of updated policies properly.					

Monitoring

		<i>SA</i>					<i>SD</i>
		5	4	3	2	1	
32.	The bank periodically measures business proceedings for example cash management.						
33.	Bank frequently audits the branches to determine whether policies and procedures are being applied, as they should be.						
34.	Periodic feedback on monitoring activities and risk is communicated to management.						
35.	There is specific measure that ensures easy report of actual or suspected fraud.						
36.	The banks periodically evaluates internal controls per the Banks Act 2016, Act 930.						
37.	The bank periodically monitors branches to prevent misallocation of resources and wrong implementation of resources.						

SECTION D: FIRM PERFORMANCE

This section is for the personal assessment of the bank's performance for the past year. *Please assess the performance of your firm for the year 2018, indicating by **ticking** the box that corresponds with your assessment*

Financial performance		SA					SD
		5	4	3	2	1	
1.	Our bank's return on asset has increased.						
2.	Our bank's liquidity based has increased.						
3.	Resource utilization in our firm has improved.						
4.	Our return on equity has increased.						
Non-Financial performance							
1.	The customer base of our entity has increased.						
2.	Our service quality has improved.						
3.	Our bank's responsiveness to clients' needs has improved.						
4.	Proportion of new services to old ones has increased.						

THANK YOU FOR THE VALUABLE CONTRIBUTION TO THE RESEARCH.

APPENDIX C: 17 PRINCIPLES OF COSO

1. CONTROL ENVIRONMENT

1. The organization demonstrates a commitment to integrity and ethical values.
2. The board of directors demonstrates independence from management and exercises oversight of the development and performance of internal control.
3. Management establishes, with board oversight, structures, reporting lines, and appropriate authorities and responsibilities in the pursuit of objectives.
4. The organization demonstrates a commitment to attract, develop, and retain competent individuals in alignment with objectives.
5. The organization holds individuals accountable for their internal control responsibilities in the pursuit of objectives.

2. RISK ASSESSMENT

6. The organization specifies objectives with sufficient clarity to enable the identification and assessment of risks relating to objectives.
7. The organization identifies risks to the achievement of its objectives across the entity and analyses risks as a basis for determining how the risks should be managed.
8. The organization considers the potential for fraud in assessing risks to the achievement of objectives.
9. The organization identifies and assesses changes that could significantly affect the system of internal control.

3. CONTROL ACTIVITIES

10. The organization selects and develops control activities that contribute to the mitigation of risks to the achievement of objectives to acceptable levels.
11. The organization selects and develops general control activities over technology to support the achievement of objectives.
12. The organization deploys control activities through policies that establish what is expected and procedures that put policies into action.

4. INFORMATION AND COMMUNICATION

13. The organization obtains or generates and uses relevant, quality information to support the functioning of internal control.

14. The organization internally communicates information, including objectives and responsibilities for internal control, necessary to support the functioning of internal control.
15. The organization communicates with external parties regarding matters affecting the functioning of internal control.

5. MONITORING ACTIVITIES

16. The organization selects, develops, and performs ongoing and/or separate evaluations to ascertain whether the components of internal control are present and functioning.
17. The organization evaluates and communicates internal control deficiencies in a timely manner to those parties responsible for taking corrective action, including senior management and the board of directors, as appropriate.

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1. Assessing bank's internal control effectiveness, International Journal of Research in Business and Social Science (2147-4478), 2020.
2. Measuring the effectiveness of internal control systems of Ghanaian listed banks considering control environment, risk assessment and monitoring activities components of COSO's Internal Control framework, EBES publications, 2020.
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