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Assessing bank's internal control effectiveness: The case of Ghanaian listed banks

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ABSTRACT

This paper aims to evaluate the effectiveness of Ghanaian listed banks using COSO's IC framework. Only Control environment, Risk assessment, and Monitoring activities components of the framework considered for this study. Methodologically, out of the 60 questionnaires, surveys distributed to the banks 37 copies received representing a 61.7% response rate. Statistic Package for Social Sciences (SPSS) v25 used to analyze data by running among other reliability tests, tests of normality, and descriptive statistics. The results of means and standard deviations gained ascertained that; strong controls existed in the control environment, risk assessment, and monitoring activities of internal control of the Ghanaian listed banks. A risk assessment had a low average mean compared to the control environment and monitoring activities. Because banks operate under higher risk than any other financial institution, we propose that Ghanaian listed banks should increase investment in risk assessment.

Introduction

Throughout the world, companies, organizations, banks and so on have gone through crises and failures, which lead to folding up. Organizations adhere to the implementations of strategies to withstand the wind blown by competitors in the same business sector. Organizations face interior and exterior pressures forces that require a methodology to assist them with continuing to be active and important in the business sector. The impact of the accounting and auditing scandals, which, occurred in the United States, was felt globally. Various factors played a dominant role in the occurrence of the scandals. The factors are categorised into primary and secondary. Primarily, the factors include problems, deficiencies, inefficiencies and fraudulent practices observed in functions such as financial reporting, accounting, auditing, corporate governance, oversight and internal control ineffectiveness. The deliberate damage and violation of ethical principles such as integrity, honesty, transparency, independence and accountability also stood out as factors playing a role in the secondary category. At Enron, the internal control system and crosschecks were disabled, excluded, and the effectiveness was not controlled. As a result, the effectiveness of internal controls, in addition to the others mentioned, gained vital importance in the process following the scandals, along with ethical principles and corporate governance principles.

The US Congress passed the Sarbanes-Oxley Act (SOX) of 2002 as results of the emergence of financial fraudulent activities in huge organizations such as Enron and WorldCom (U.S. House of Representatives, 2002). This lead to the need for internal control (IC) systems because the committee found lack of effective internal control systems (ICS) to be the main course of the scandals.

In the light of the lessons learned from the scandals and the SOX enacted in the United States following the scandals, the importance of effective internal control system become more prominent in the world. Furthermore, internal control function has become critical "safety valve" for the mutual interests of all stakeholders, and for business goals, corporate governance, quality assurance, corporate

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risk management (CRM), transparency, accuracy, accountability, sustainability and competitiveness. In addition to the scandals & SOX, new trends and developments occurred such as globalization, rapid change, technological developments, complexity, which have also deeply affected and highlighted the importance of effective internal control as a crucial elements of the business ecosystem. Hence, the need for effective internal control in all business sector.

An organization's management (including any applicable governing board) is responsible for the design, manage and the effectiveness of IC system. The management should be sure that the right internal controls and IC systems are in place, and that they are performing as intended. The COSO framework which enhance the chances of achieving an entity's objectives by effectively and efficiently developing and maintaining internal control systems was introduced (COSO, 2011) hence the implementation of COSO creates an appropriate platform for risk management as the company's activities develop.

Internal Control emphases on the achievement of the organization's aims and mission. International Federation of Accountants (IFAC) indicated that, internal control is a vital part of an entity's administration framework, it helps managers to oversee and manage corporate risks and create essentials to help in the accomplishment of the entity's aims while making, improving and ensuring the value of stakeholders (IFAC, 2011).

In addition, COSO posits that, ICS ensure management fulfil their duties to stakeholders in the right manner; ensure transparency in financial statements and law abiding (COSO, 2014). High-profile company failures usually result in the imposition of further rules and necessities and subsequent long and expensive compliance efforts. Per the New York State Control Task Force Report, the basic principles of IC are frozen in well-structured organizational techniques and principles. Effective IC also fabricates a competitive advantage, as an organization with effective controls stands the chance of managing any risk effectively. A viable internal control framework is the essential mainstay of all organizations everything being equal, the breakdown of which will cost the organization hugely. Internal control systems should be the key relevant aspect of organization's policies globally. The revision of the 1992 internal control framework (COSO, 1992) of COSO in 2013 was necessary due to the global change in business models. Organizations without or with weak ICS cannot survive as stated in the 1987 report of Treadway Commission, the lack of effective IC is the basic cause of fraudulent financial reporting of companies (Asiligwa & Rennox, 2017).

Lack of ICS is coursing the failure of lots of banks as well across the globe. Some of the largest financial institutions in America failed during the financial crises of 2008 and this obviously affected the banking sector throughout the world. The federal government in its quest to prop up big banks gave out hundreds of billions of dollars (Caplinger, 2018). The Wells Fargo's fake – account scandal where millions of accounts were created in the name of customers without their concerns resulted in the firing of 5000 employees and a fine of $185 million was imposed on the bank by the federal bank regulators.

Also, inefficient measures to combat Money laundering compelled HSBC in Europe in 2012 and US Bancorp in 2018 to pay finds of $1.9b (BBC, 2012) and $613m (Caplinger, 2018) respectively. The Ghanaian banking sector too has a share of the scandals pie (Dzawu, 2019). Banks like Bank for Housing and construction and Ghana Co-operative Bank both failed in the 2000s and the government had to pump a lump sum of Ghs 1.25m to liquidate the banks (Addo, 2000).

The studies by Collins, (2014) and Mbilla et al., (2020) were all geared towards finding the extend at IC affects Performance. Collins, 2014 employed control environment, control activities and information and communications components of ICS framework while Mbilla et al., 2020 used Information Communication and Monitoring. Interestingly, in the former, all the three variables relate positively with performance but in the latter monitoring, had no significant effect on performance and information and communication had a very weak effect on performance. As advised by COSO, failure to employ all the five variables make both studies not liable for sound decision-making. In addition, both studies by Muraleetharan, 2011 and Widyaningsih, 2014 shown that control activities and monitoring activities have positive influence on performance.

In this study, firstly, the definition, importance, purpose and models of the internal control system are briefly discussed. In addition, the main components of the COSO internal control framework and the literature review elaborated. Furthermore, a questionnaire based on COSO core internal control components and principles used to determine the level of IC effectiveness in the Ghanaian listed banks. More also, analysis of the data conducted and lastly, the study ends with the results, discussion, recommendations and references.

With focus on control environment, risk assessment and monitoring activities components of COSO IC framework, the study deem to evaluate the internal control effectiveness of banks listed the Ghana Stock Exchange (GSE). This study seeks answers on (i) to what extent is the control environment of listed banks on GSE effective?, (ii) to what extent is the risk assessment of listed banks on GSE effective?, and (iii) to what extent is the monitoring activities of listed banks on GSE effective?

Literature review

Conceptual Background

Internal Control (IC)

IC has lack a worldly 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. Basel indicates that IC is "a process affected by the board of directors, senior management and all levels

of personnel" (Basel, 1998). Meanwhile, Mayo & BPP are of the view that internal control is the steps taken by an entity in quest to protect its resources against fraud, inefficiency and waste as well as ensuring transparency in accounting reporting (Mayo & BPP, 1988).

Furthermore, Awe in 2005 defined IC as an implemented organizational structures, procedures and policies to prevent risk and ensure that organizational goals are attained based on management-initiated concerns (Awe, 2005). IC is a complete system established by management to ensure efficiency, adherence in management strategies, safeguarding of business properties and transparency in reports and accuracy in records (Olatunji, 2009). According to Basel (1998), IC is a continuous process operating within all levels in a bank and not a procedure exhibited at a particular time (Basel, 1998).

Models of IC

There are various models of IC developed and used in America, Canada and the United Kingdom and all over the world. Among these are:

COSO: (Committee of Sponsoring Organizations of the Treadway Commission) is the internal control framework developed especially for corporate businesses under five main components

CoCo (Creteria of Control): It portrays internal control as activities that ensures the best outcome for an organization. The Canadian Institute of Chartered Accountants (CICA) introduced it in 1995.

CobiT (Control Objectives for Informatics technology): Developed in 1996 by IT Governance Institute (ITGI) and ISACA to control risks in information technology.

eSAC (Electronic Systems Assurance and Control): was developed in 2001, is directed towards the risks that arise due to the e-business in the computer environment and the use of electronic systems.

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.

The most widely accepted, continuously developed, updated and most comprehensive model is COSO, which developed in the USA to help curb or reduce the level of corporate scandals in the US. Today, COSO integrated internal control model is generally accepted as the gold standard especially for corporate enterprises. COSO stated 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. COSO's internal control approach is based on five main elements: Control environment, Risk assessment, Control activities, Information and communication and Monitoring activities and seventeen principles (COSO, 2011).

COSO internal control components

The main components of internal control, which is vital for business survival and success, include control environment, risk assessment, control activities, information and communication, and monitoring activities.

Control Environment (CE): this is the first component of internal control that needs critical attention in its implementation. It is the structure and discipline, which ensures IC aims are achieved (Whittington and Pany, 2006). It is the pivot, around which the other IC rotate. According to COSO (2013), the dimensions of CE are integrity and ethical values, board oversight, authorities and responsibilities, human resources policies and practices.

Risk Assessment (RA): RA is the method employ by management to determine and examine risk that pose threat to the attainment of organization's goals. RA dimensions are Specifying goals, risk recognition and classification, change management and risk return (COSO, 2013).

*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. Dimensions of control activities, per the study of Arwing (2012), include preventive, detective or both. COSO (2013) stipulates the dimensions of control activities as strategies and procedures, selection and expansion of control activities.

Information and communication (IC): It ensures the effective flow of important directives and policies between the hierarchies of an organization. For IC frameworks to be successfully 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 in question for proper judgement (Amissah, 2017).

Monitoring activities (MA): It ensures the flow of the entire process of IC. 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).

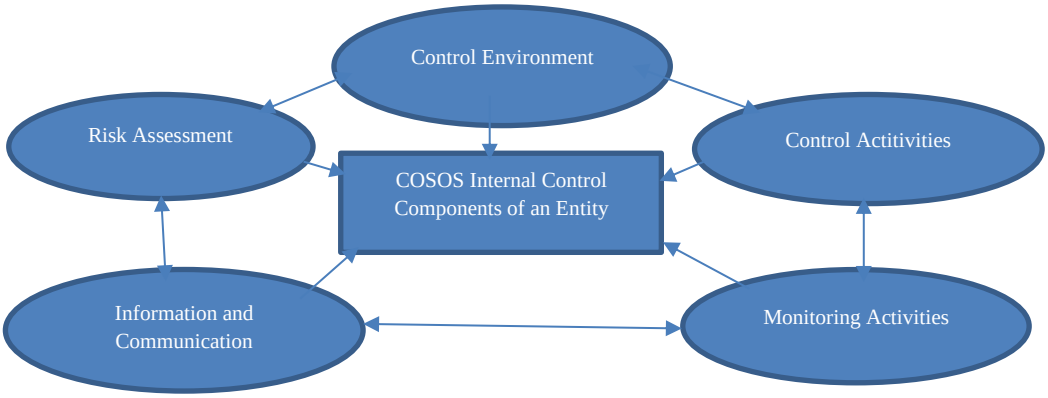

Figure 1: IC Framework; *Source:* Sketch based on COSO framework by researchers

The five components of internal control and related fundamental principles are shown at the table below.

Table 1: The five components of internal control and related 17 principles

Control environment	Risk assessment	Control activities	Information and communication	Monitoring activities
The organization demonstrates a commitment to integrity and ethical values. The board of directors demonstrates independence from management and exercises oversight of the development and performance of internal control. Management establishes–with board oversight–structures, reporting lines, and appropriate authorities and responsibilities in the pursuit of objectives. The organization demonstrates a commitment to attract, develop, and retain competent individuals in alignment with objectives. The organization holds individuals accountable for their internal control responsibilities in the pursuit of objectives	The organization specifies objectives with sufficient clarity to enable the identification and assessment of risks relating to objectives. The organization identifies risks to the achievement of its objectives across the entity and analyzes risks as a basis for determining how the risks should be managed. The organization considers the potential for fraud in assessing risks to the achievement of objectives. The organization identifies and assesses changes that could significantly impact the system of internal control.	The organization selects and develops control activities that contribute to the mitigation of risks to the achievement of objectives to acceptable levels. The organization selects and develops general control activities over technology to support the achievement of objectives. The organization deploys control activities through policies that establish what is expected and procedures that put policies into action.	The organization obtains or generates and uses relevant, quality information to support the functioning of internal control. The organization internally communicates information, including objectives and responsibilities for internal control, necessary to support the functioning of internal control. The organization communicates with external parties regarding matters affecting the functioning of internal control.	The organization selects, develops, and performs ongoing and/or separate evaluations to ascertain whether the components of internal control are present and functioning. 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.

Source: https://chapters.theiia.org, 2020

The main types of control activities can be summarized as detective controls, corrective controls, preventive controls and compensating controls.

Detective control - as the term implies, this is the means through which delusions are detected in an organization. This means the fallacies existed but not yet realized.

Corrective controls put errors in shape after being detected. It ensures that fallacies addressed not to occur again.

Preventive control- clearly stipulated by its name, ensures that previously occurred delusions do not occur again in the future. It gives management the clear vision put the right directives and measures in place to combat any possible future repetition of fallacies in the organization.

Compensating controls are designed 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.

In a study by Al- Hanini (2015), the reliability of the internal control methods on the computerized information systems in Jordanian banks was analysed. Data was collected from the employees of computer unit, branch managers as well as managers of the banks in Jordan using questionnaire. SPSS was used to analyse 50 responds were the study found the existence of reliability in the IC of Jordanian banks. The suggestions stipulated by Al-Hanini was that, banks should create the awareness of employees on the importance of control processes pre to its application.

Ayşe Hayali, Yusuf Dinç, Seçil Dizman Arzu and Aysel Gündoğdu in 2012 prepared a doctoral dissertation on the heading "Importance of internal control system in banking sector: Evidence from Turkey". In the dissertation, 18 financial institutions (15 Turkish banks and 3 international banks) were evaluated and compared. Qualitative research methods applied in the research. The year-end 2012 reports of the banks were the source of secondary data used in analysis. Results found: Internal Control activities are observed to the international standards among Turkish banks.

In 2010, Karagiorgos, Drogalas, & Dimou measured the effectiveness of ICS of the banking sector of Greek. The aim was to find out the role a well-organised IC plays in ensuring the stability of banking systems and the activities of credit institutions. Results: internal audits components play great role in the survival and success of business and internal audit effectiveness (Karagiorgos et al., 2010).

In Nigeria, a study carried out by Olatunji in 2009 investigated the impact ICS has on the banking sector of Nigeria. Aim of the study was to find out whether effective and efficient ICS is the best control tool for fraud detection and prevention. Results of the study was that, ICS is very important in the prevention and detection of frauds in the banking sector of Nigeria (Olatunji, 2009).

Koutoupis and Tsamis (2009) concentrated their studies on risk and internal auditing in Greek banks using a case study. The research based on the relevant literatures, author's experience on risk assessment, audit planning and risk based internal audit (RBIA). Using the Basel ERM, requirements and standards for professional practice of internal auditing were used to evaluate critically the RBIA of three big Greek banks. The study found out that, the level of risk is capable of being reduced through international regulations. A doctorate dissertation by Saleh, Khalid Mohammed and Ahmed Mohammed was on the role ICS play in reducing the risks related to auditing in the Sudanese banking sector. In the study, the perspective of the auditors was adopted which resulted as; the higher the risk resulting from ICS, the higher the risk concerning audit (Saleh et al., 2010).

Spira and Page based their studies on the role IC plays in changing internal audit and risk management. The study applied sociological perspective with the focus of the study being 'in the light of corporate governance, risk and its conceptualization in IC and the management of risk'. Results found suggests that advancement in corporate governance produces opportunities for the allotment of risk and its management by interested groups (Spira and Page, 2003).

To find out how effective internal audit is in Ethiopian public sector was study field of interest for Mihret and Yismaw in 2007. Aim of the study was to ascertain the factors that have sway on the internal audit services effectiveness. Case study carried on an Ethiopian high education institution produced results displaying that, the quality of internal have impact on the effectiveness of internal audit (Mihret and Yismaw, 2007).

Methodology

Primary data used in the analysis, gathered by administering structured questionnaire to Internal Control and Internal audit personnel of the banks. IC and internal audit departments were the only units considered because they generally make decisions when it comes to the implementation of ICS. The questionnaire was in four sections: first section requested for basic information of the banks such as name, total number of employees, frequency of board meetings, availability of organizational chat and the number of years the banks has been in operations. The rest of the three sections (second, third and fourth) represented the three (3) components of COSO framework respectively which were considered for this research.

A Likert scale with five dimensions was used varying from strongly agree (SA) to strongly disagree (SD) coded as 5 and 1 respectively. Likert scale is easy to read and analyse and was used to access the level of knowledge of the respondents about ICS effectiveness of banks. Version 25 of SPSS used for the analysis of the data and results given in the form of means and standard deviations for each questions in section two, three and four.

Reliability test of data

Reliability estimates both consistency and stability of data utilizing using Cronbach's Alpha (Nantambelele, 2018). Cronbach's Alpha coefficient is the broadly utilized device in testing the reliability of data. Cronbach's Alpha is a record of reliability connected with the variety represented by the correct score of the constructs being referred to (Santos, 1999). Construct is the hypothetical variable that is being estimated (Hatcher, 1994). The coefficient of Cronbach's Alpha varies for 0 to 1, the closer to 1, the reliable it is (Sekaran & Bougie, 2016). Nunnaly (1978) and Pallant (2010) are of the view that a 0.7 coefficient is recommended for a reliable scale analysis but lower thresholds are sometimes used in literature (Santos, 1999).

In our study, the Cronbach's alpha of the variables varies from 0.87 to 0.93 meaning they are all reliable for the study. The Cronbach's alpha for the three components are presented in table two below.

Table 2: Reliability test, Cronbach's Alpha

Variables	Cronbach's Alpha	Cronbach's Alpha Based On Standardized Items	N Of Items	Internal Consistency
Control Environment	.932	.933	18	Very good
Risk Assessment	.932	.934	15	Very good
Monitoring activities	.869	.870	6	Good

Source: Survey data by researchers.

Test of normality

Normality test in other words termed as probability plot correlation is a consonance scattering through which numeric data can be plotted as a bell shaped. It is carried out to rectify whether the variables (data collected using questionnaire) 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 (1965), t-test, Kormogorov-Smirov test, or Wilcoxon-Mann-Whitney test but the commonly used one is Shapiro-Wilk test (1965) (Nantambelele &Gopal, 2018). Normality test is the basic supposition carried out in statistics (Thode, 2002). If the results of Kormogorov-Smirov and Shapiro-Wilk tests are less than 0.05 it means the data used is normally distributed and the null hypothesis is rejected for alternative hypothesis to be accepted (Elliot et al., 2007).

However, violation of the assumptions of normality should not be an alarm for concern if the sample size is above 30 (Pallant, 2010). Our test results reveals that the entire data is normally distributed since they are all less than 0.05 as can be seen from table 3 below.

Table 3: Tests of Normality

	Kolmogorov-Smirnova			***Shapiro-Wilk***		
	Statistic	***df***	***Sig.***	***Statistic***	***df***	***Sig.***
Q1	.353	30	.000	.718	30	.000
Q2	.331	30	.000	.741	30	.000
Q3	.326	30	.000	.751	30	.000
Q4	.285	30	.000	.759	30	.000
Q5	.310	30	.000	.720	30	.000
Q6	.315	30	.000	.804	30	.000
Q7	.265	30	.000	.820	30	.000
Q8	.261	30	.000	.800	30	.000
Q9	.258	30	.000	.769	30	.000
Q10	.263	30	.000	.800	30	.000
Q11	.335	30	.000	.732	30	.000
Q12	.372	30	.000	.632	30	.000
Q13	.208	30	.002	.848	30	.001

Table 3: Cont'd

Q14	.288	30	.000	.750	30	.000
Q15	.277	30	.000	.762	30	.000
Q16	.310	30	.000	.720	30	.000
Q17	.317	30	.000	.776	30	.000
Q18	.292	30	.000	.656	30	.000
Q19	.256	30	.000	.787	30	.000
Q20	.302	30	.000	.785	30	.000
Q21	.293	30	.000	.769	30	.000
Q22	.362	30	.000	.710	30	.000
Q23	.359	30	.000	.735	30	.000
Q24	.328	30	.000	.765	30	.000
Q25	.261	30	.000	.813	30	.000
Q26	.291	30	.000	.774	30	.000
Q27	.256	30	.000	.787	30	.000
Q28	.278	30	.000	.799	30	.000
Q29	.239	30	.000	.810	30	.000
Q30	.342	30	.000	.710	30	.000
Q31	.268	30	.000	.790	30	.000
Q32	.223	30	.001	.836	30	.000
Q33	.234	30	.000	.802	30	.000
Q34	.274	30	.000	.781	30	.000
Q35	.277	30	.000	.771	30	.000
Q36	.277	30	.000	.774	30	.000
Q37	.274	30	.000	.781	30	.000
Q38	.295	30	.000	.764	30	.000
Q39	.292	30	.000	.772	30	.000

Source: Survey data by researchers.

Results and Discussion

Results

There are five components COSO framework and these are control environment, risk assessment, control activities, information and communication and monitoring activities. In this study, three of them (control environment, risk assessment and monitoring activities) are considered. The reason being that we believe banks work under high risk than any other financial institution and in addition, we believe if an institution has full knowledge of its control environment and monitoring activities, effectiveness is automatically guaranteed. Control environment is the pivot of the internal control system of any organization around which the other four components (risk assessment, control activities, information and communication and monitoring activities) rotate. Thus, the effectiveness of the four components depend wholly on the effectiveness of control environment (Ayagre et al., 2014).

Management make assessment of the environment of the organization first before going ahead to assess its risk level and then apply monitoring activities to make sure all is intact. In this 21st century, fraudulent activities in the financial sectors are on the rise that place importance on assessment of risk. One of the ways to have an effective planning in a financial institution is to gather information to assess fraud risk (threat). SWOT analysis is commonly used tool to measure the strength, weakness, opportunities and the threat hence risk facing an organization. Monitoring activities ensures that the entire process of internal control is in flow. An organization is able to figure out and correct any default in its internal control systems on time if a well planned and implemented monitoring activity is in place (Thornton, 2009). Thus, the entire process of internal control system is liquefied smoothly.

A Likert scale with five dimensions was used varying from strongly agree (SA) to strongly disagree (SD) coded as 5 and 1 respectively. Respondents agree to how effective various indicators are implemented by their banks by ticking 5=Strongly Agree; 4=Agree; 3=Neutral; 2=Disagree and 1= Strongly Disagree. Statistical Package of Social Sciences (SPSS) version 25 was used to analyse the data. The results are in the form of means and standard deviations tabulated below:

Control Environment

Table 4: Means, standard deviation for Control environment Component of COSO

Control Environment	**Mean**	**Std. Deviation**
Management expectations translate into organizational values.	4.46	.650
Top management provides support for integrity and ethical values.	4.39	.688
Standards of conduct communicated across entire hierarchy.	4.22	.672
Tool to evaluate the performance of staffs readily available against all odds.	4.24	.925
Commitment to integrity and ethical values. being demonstrated by management effectively.	4.41	.599
Room is made available for members to question and scrutinize management.	4.00	.667
The board of directors possess full knowledge of Internal Control and exhibit.	4.11	.843
Tasks on IC and financial reporting are completed on time and ensures transparency and integrity.	4.08	.759
The board evaluates the performance of the CEO.	4.26	.817
The organizational structure is appropriate for the bank.	4.16	.834
Specific lines of authority and responsibility are established.	4.35	.753
The management/board of the bank comprehends the importance of internal controls.	4.49	.607
Regular employee evaluations are kept and make available to parties periodically.	3.95	.815
Mentoring and training opportunities provided regularly to personnel by the bank.	4.24	.830
All necessary and essential checks of potential new employees are don by the bank.	4.22	.797
Periodic training for employees organized regularly.	4.32	.626
Controls and documentation are in place.	4.03	.833
Disciplinary procedures are compiled periodically and accessible when needed.	4.30	.878
Average	4.24	0.755

Source: Survey data by researchers.

To what extent is the control environment of listed banks on GSE effective?

From the results in table 4 above, the constituents, evaluating control environment of IC of Ghanaian listed banks had positive means and standard deviations (SD) varying from 3.95 (SD= .599) to 4.95 (SD) 0.925). In addition, an average mean of 4.24 depicts that, majority of the respondents agree that to a higher extend, the control environment of the banks is effective.

Risk Assessment

Table 5: Means, standard deviation for Risk Assessment Component of COSO

Risk Assessment	**Mean**	**Std. Deviation**
Specification of goals is done by the bank and risk that may course hindrance identified	4.22	.672
Management is reserving resources needed to achieve wanted operational and financial performance.	4.14	.631
Management has established concrete basis for the allocation of resources	4.14	.787
Management put down measures to ensure that recognised risks would not end in material errors.	4.19	.616
The effect of both interior and exterior risk are accessed	4.11	.614
Risk is properly managed by the bank.	4.06	.715
KPIs are developed by the bank and periodically controlled	4.08	.862
Other forms of risk and identified and managed accordingly by the bank.	4.19	.776
The bank frequently performs an assessment of its harm to fraudulent activity.	4.22	.712
Potential harms to scandals and its impacts are frequently accessed.	4.08	.692
The bank's assesses of fraud risks regularly	4.03	.928
Audit personnel or other internal control experts are involved in control related activities or decision making in fight against fraud.	4.42	.604
There are measures in place to identify and react to risks that occur to due changes in regulations, politics or economic by the bank	4.14	.683
The higher risks affecting the bank are always pointed out.	4.00	.862
The bank has controls designed and implemented that mitigate risks associated with each.	4.08	.806
Average	4.14	0.731

Source: Survey data by researchers.

To what extent is the risk assessment of listed banks on GSE effective?

From the results stipulated in table 5 above, the constituents, evaluating risk assessment of internal control of Ghanaian listed banks had positive means from 4.00 and above and standard deviations (SD) varying from 0.604 to 0.928. In addition, an average mean of 4.14 indicates that, to a higher extend, the monitoring activities of internal control of the banks is effective but not as effective as the other two components.

Monitoring Activities

Table 6: Means, standard deviation for Monitoring Component of COSO

Monitoring Activities	Mean	Std. Deviation
The bank periodically measures business proceedings for example cash management.	4.30	.702
Bank frequently audits the branches to determine whether policies and procedures are being applied, as they should be.	4.35	.633
Periodic feedback on monitoring activities and risk is communicated to management.	4.26	.611
There is specific measure that ensures easy report of actual or suspected fraud.	4.25	.770
The banks periodically evaluates internal controls per the Bank of Ghana regulations.	4.25	.770
The bank periodically monitors branches to prevent misallocation of resources and wrong implementation of resources.	4.23	.843
Average	4.27	0.722

Source: Survey data by researchers.

To what extent is the monitoring activities of listed banks on GSE effective?

From the results in table 6 above, the constituents, evaluating monitoring activities of internal control of Ghanaian listed banks had positive means and standard deviations (SD) varying from 4.23 (SD= .611) to 4.35 (.843). In addition, from an average mean of 4.27, it can be concluded that, most of the respondents to a higher extend agree that the monitoring activities of listed banks is effective.

Discussions of Results

From the results in table 3 of the control environment component of internal control, it is observed that banks listed on the Ghana Stock Exchange effectively control their environment. This supported by the fact that, management understands the importance of internal controls (M=4.49, SD= 0.607), the board of directors possess full knowledge of internal control and exhibit it to the fullest (M=4.11, SD= 0.843). In addition, the management and board of directors' expectations translate into an organizational statement (M= 4.46, SD= 0.650). Per the mean of 3.95, regular employee evaluations are documented and made available to employees' access but not very often or there may be some loops but nevertheless, top management of the banks provides support for integrity and ethical value (M= 4.39, SD= 0.688). Employees receive period training and know their duties as well as the disciplinary actions that one will face when he or she flatter a responsibility.

Banks on the GSE undertake risk assessment as can be seen in table 4 above. The findings shows that the banks have specified aims. The banks identify and assess risk that may threaten the achievement of aims both internally and externally. Periodically perform an assessment of fraudulent exposure by involving experts from audit and internal control units in the discussions to prevent or combat fraudulent acts. Management establishes concrete basis for the allocation of resources (M= 4.14 SD= 0.787).

Monitoring activity is effectively implemented by the banks on GSE as stipulate in table 5 above. The management of the banks ensure that procedures and policies of the individual banks are followed by the branches by carrying periodic auditing of the branches (M=4.35 SD= 0.633) as well making sure that funds allotted to branches are spent on the right activity and communicated to the board of directors (M= 4.23 SD= 0.843). There is specific measure that ensures easy report of actual or suspected and other illegal or irregular matters that can affect the reputation or financial position of the banks. In addition, the banks periodically evaluates internal controls per the Bank of Ghana regulations and communicates the results to the board of directors (M= 4.25 SD= 0.770).

Conclusions

This research just like other researches done on this topic seek to contribute to the bunch of knowledge related to the Ghana banking industry's internal control effectiveness and Africa at large. It will be an essential source for future researches by students and researchers in this field. In addition, it will serve as a benchmark for management of banks and or board of directors in decision making regarding internal control systems.

The study considered only three components of COSO internal control framework and was limited to only banks listed on GSE. The study also assumes that there are no other factors to measure effectiveness of internal control of banks, therefore, the results found

from this research are inconclusive and further research can be carried out by considering all the five components of COSO framework as well as other factors that could be used to measure internal control effectiveness of banks. In addition, all banks in Ghana can be considered as well as banks in Africa. Comparison between banks in Africa per effectiveness of internal control can be researched on as well.

The importance of internal control has increased tremendously due to the scandals. Today, internal control is one of the most important safety and assurance valves for all business-related parties, information users and investors, which helps in achieving business goals, reliable financial reporting, and compliance with legal regulations, accuracy, honesty, transparency, accountability, ethics and internal control culture, sustainability and competitiveness. Internal control system is also obviously important for effective administration, corporate governance and CRM of any organization including banks if effectually instigated. Therefore, it is very important to ensure the effectiveness of the internal control system and display a structure compatible with the COSO internal control framework in order to achieve success.

The findings of this study displayed averages of 4.24, 4.14 and 4.27 for Control Environment, Risk Assessment and Monitoring Activities respectively. Hence, internal control systems in Ghanaian listed banks found effective and compatible with the COSO internal control framework and its fundamental principles. All the three components of internal control of those banks are effective. However, risk assessment was the feeblest of the three components. This result is supported by the research conducted by Hermanson, Smith and Stephen on the comparison of inter industry internal controls where control environment was found very effective with a mean of 5.00 out of 7 Likert scale in the US (Hermanson et al., 2012). In addition, a study by Ayagre, Appiah-Gyamerah and Nartey on the effectiveness of Ghanaian banks revealed that control environment and monitoring activities of the banks are very effective. On a Likert scale of 5 points, the two components scored means of 4.72 and 4.66 respectively (Ayagre et al., 2014). Risk Assessment despite scoring average mean of 4.14, which makes it effective, the management and board of directors of the banks are advised to place more emphasis on the risk management and invest more into it. This is because banks operate under high-risk environment than any other financial institution. The banks on the GSE might have learnt lessons from the financial scandals throughout the world, the case of WorldCom and Enron in the USA, HSBC in the UK, Co-operative and Bank for Housing and Construction scandals in Ghana and have taking measures to prevent that. Finally, potential investors are also advised to invest into businesses / banks that have an effective internal control system to guarantee their investment and for good returns.

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