**KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY**

**KUMASI**

# THE EFFECTIVENESS OF ACCOUNTING CONTROLS OF LISTED COMPANIES ON THE GHANA STOCK EXCHANGE

**BY**


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**Bsc. Administration (Accounting)**


**A THESIS SUBMITTED TO THE ACCOUNTING AND FINANCE DEPARTMENT, KNUST IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF MASTER OF BUSINESS ADMINISTRATION (ACCOUNTING)**

**AUGUST, 2015**

## DECLARATION

I hereby declare that this submission is my own work towards the Master of Business Administration (Accounting option) Degree and that, to the best of my knowledge, it contains no material previously published by another person nor material which has been accepted for the reward of any other degree of the University, except where due acknowledgement has been made in the report.

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## ABSTRACT

The study examines the effectiveness of accounting controls of listed companies on the Ghana stock exchange. Recent international financial reporting scandals have caused regulators to place premium on accounting control systems as the choice that could improve the quality of reporting. The study measures control environment, risk assessment, control activities, information and communication, monitoring and evaluation. Ernst &Young and KPMG models are broken down into 28 checklist of control principles. The checklist relating to all the categories stated above examines the disclosure of accounting controls in the annual reports of listed companies. A sample of 33 companies across different industries is selected. Overall accounting control system shows an average of effectiveness in this study, which implies an overall low level of effectiveness. Out of the five categories assessed under accounting control system, monitoring and risk assessment show a higher level of effectiveness. Control environment, control activities, information and communication show a lower level of effectiveness. Our results suggest that significant amount of control weaknesses exist which adversely impacts the overall effectiveness of accounting controls of listed companies. The study makes contribution to the academic research activities relating to accounting controls in Ghana. Pervasive in the measurement process is a margin of error due to the use of subjective judgement for some principles used in assessing accounting control effectiveness. Annual review of IT policies and procedures to align with strategic plans for efficiency should be ensured. Listed companies should increase the evaluation of issues on process flows, policies, risks and controls for action. Develop and implement company-wide risk management plan. Organograms should be reviewed for proper delegation of authorities. Succession plan should be developed and implemented with the training needs in mind. **Keywords:** Accounting control system (ACS), financial reporting, effectiveness, Ghana stock exchange.

## DEDICATION

I sincerely wish to dedicate this work to the Almighty God for seeing me through this work. I also dedicate this work to my wife, Adwoa Adomaa Dankwah Endurance and child, Kofi Opoku Dankwah for their constant love, prayers and support. Finally to my dedicated friend, Ataribanam Samuel and lecturers, who made the journey with me and never failed to show me the arbiter of perfection.

## ACKNOWLEDGEMENT

My profound gratitude is to the omnipotent, omnipresent and the almighty God, whose divine mercy provided me with the wisdom, strength and knowledge to produce this project work. I also wish to acknowledge my uncle, who having understood the essence of education provided me the platform of support decades ago as needful to complete this programme of study in the university. My special thanks to my supervisor Dr. Kingsley O. Appiah for his review comments.

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# CHAPTER ONE

# INTRODUCTION

## 1.0 Background of the study

Decades of investment slumps, the investor community have realised the importance of approving the provision of major sources of funding to businesses (Watson & Head 2010). It has become prevalent pursuing the need behind the inherent business risks which is considered the punishment for rewarding the appropriate returns and available restrictions to business owners (Stokes & Wilson 2006).

Regardless of investors' stance, owners reminisce back on the investment journey by evaluating the exposures of risk in ways that is considered attributing to subtle miss-outs and inconsistencies. It is the motivation behind the sound and healthy business environment for trust and guarantee of best practice by which management is mandated to integrate accounting checks and balances as the solution to bolster the confidence of investors (Watchorn & Levy 2008).

In consideration to the knowledge ahead and predisposing for accountable inflection in corporate governance, investors are aggressively lobbying for sacred conviction and practices, central to Directors and asserting that any least opportunity provided them it will be abused by virtue of agency theory. Entrusted and existing between management and Directors for income smoothing, management perks, short-termism and demand for management bonuses (Spira & Gowthrope 2008) and against this background, is the hinge of the study.

The increasing demand for high-quality financial reporting promotes the overarching interest of regulators to develop the mechanisms that helps improve the quality of business reporting standards. Critical for consideration is the activities identified by regulators, being mindful of the firms' accounting control system are important (ACS).

(COSO 1992) states that accounting control systems is the process documenting and implementing the designed objectives. It provides the reasonable assurance that the set objectives have been achieved. They include effectiveness and efficiency of operations, reliability of financial and compliance with applicable laws and regulations. The belief is that effective ACS enhances and promoting the quality of financial reporting for value addition.

Increasingly, the interest has consequently been generated with focus on the effectiveness of ACS in the operating processes of business entities. From the regulatory perspective, highlevel of disclosure on ACS is a requirement for listed companies in the developed countries than the developing countries such as the United States of America and Ghana respectively (COSO 1992).

In Ghana, there are fewer restrictions in the regulatory requirements for listed firms ensuring responsibilities for disclosing the state of activities. On this ground, the researcher uses the platform to identify, examine and investigate the gaps on level of accounting control effectiveness.

(COSO 2011) states that in larger organisations, stakeholders are provided with roles and responsibilities to perform functions, especially related to accounting control systems for the attention of management, the Board of Directors, the internal audit team and other related personnel. Effective accounting control requires financial and non-financial imperatives including standard operating procedures, ethical values, and risk management systems

Material weaknesses are the potential adverse situations associated with companies' performances (DeFond et al. 1998). The guarantee for reporting incorrectness by employees involved is significant to reporting accounting control system with the requirements of audit processes in mind (Krishnan 2005).

Business operating losses for more than 10 years amounting to billions of dollars are identified and wrongly treated with the judgement of management for write-off as opinionated decision, the case of Enron (Hermanson et al. 2007).

The prevention of recurrence scandal requires companies to ensure integrated financial reporting processes with accounting controls for effectiveness, efficiency and compliance with applicable regulations. As a requirement of stock market listings, attention to accounting regulations across international boundaries has become the thrust for corporate governance (Trimisiu 2013).

In openness and accountability, (Laudon & Laudon 2013) postulates that it is important for every organisation to place premium on management processes and systems influencing the laid down procedures for decision and trends because they are always relied on. Accounting control system should be ingrained to ensure sustainable business development (Temkin 2009).

On the contrary, business environment are weak in accounting controls and become susceptible to different forms of risks. These uncertainties of events occur in everyday uncertainties. This can have the tendency of adversely impacting the achievement of business objectives (IIA 2012).

Industries in Ghana demonstrate low concentration for the defined functional areas of transactions focusing on revenue, expenses, petty cash management, payroll, inventories, fixed assets. Others include the payment of allowances with the high level of exposure peculiar to risks associated with businesses.

Many wide spread international companies use accounting control systems over financial reporting for identification of transaction, application of principles, processing of information. Others include revision of standard operating procedures, influencing preparation of reports for informed judgement (CPE online.com).

Paul affirms that in Britain, Nick Leeson accumulated profit for Barings from low-risk, arbitraging opportunities between the derivatives contracts on the Singapore Mercantile Exchange and Japan's Osaka Exchange. Irregularity has become evident and ensued when Leeson perpetrated $1.4 billion black hole dealings in Barings' balance sheet due to the illegitimate derivatives speculation, causing the 233-year-old bank's plunge surprisingly (Thompson Reuters).

## 1.1 Problem statement

(Cairns 1997) intimates that the International Federation of Accountants (IFAC) has understudied auditors claiming that financial statements comply with accounting control procedures. Management violations should have little impact and being documented into laid down accounting control system checks. However, in practice the understanding of accounting controls and standard procedures demonstrate the credibility behind these financial reports being prepared.

It can be established that the evidence of non-compliance with international standards is becoming less serious than it deserves (Street & Gray 2001). In these discoveries, the activities for effectiveness of accounting control system demonstrates the best practice is less valued for promoting international accounting and auditing standards, realising their level of compliance has been greeted with ill-remarks (Glaum & Street 2003).

Reminiscing from ahead declares that there are visible gaps between the assertion to follow the designed accounting controls and GAAP, with interest in providing concrete level of compliance exercising the oversight of companies. Since 2005 about 90 countries around the world including Ghana have declared their commitment to the compliances of international standards, risk management, ethical values and corporate governance code mandating effective accounting control systems (ROSC 2004).

Paul demonstrates that in United States of America, Enron an Energy dominated supplier with revenue base of nearly $101 billion experienced a sharp drop in share value from over US$90 to less than $50 in the year 2000. The submergence occurred after revelations that large quantum of Enron's profits and revenues resulting in business transactions with special purpose entities. Enron's explicit debts and losses suffered by the subsidiary product were found as deeply rooted in improper accounting practices and disclosures in the books of Enron (Thompson Reuters).
In Ghana, cases of unsound management controls have been noticed and companies like Juapong Textiles Ltd, Bonte Gold Mines, Divine Sea Foods Limited, Ghana Cooperative Bank Ltd, Bank for Housing & Construction Ltd and the likes have collapsed, weighing down the importance of accounting controls and leading to the introduction of different minds for corporate effectiveness (Appiah 2011).

Ghana's position asserts it has lately adopted accounting and auditing standards since 2007, revealing the magnitude of necessity to ensure compliances with financial reporting and accounting control systems. In the opposite sense, companies can have the opportunity to compromise these historical events. Noticeably, there have been major gaps between the expected compliance standards of accounting controls and the actual ACS standards being complied.

## 1.2 Research objective

The associated objectives of this study are:

1. To determine the effectiveness of information and communication of accounting control system.
2. To establish the effectiveness of monitoring and evaluation system
3. To identify the healthiness of risk assessment process adopted by listed firms
4. To measure the soundness of operational control activities of listed firms
5. To determine the soundness of control environment of listed firms

## 1.3 Research questions

In the researcher's effort to achieve the research objectives, the researcher seeks to obtain answers to the following questions:

1. What does information and communication system help achieve firms objectives?
2. Do the monitoring and evaluation procedures over accounting control work effectively?
3. Are the existing risk assessment processes of listed firms effective?
4. What level of soundness are the control activities of listed firms?
5. How measurable is the control environment of listed companies

### 1.4 Significance of the study

As indicated, research has demonstrated that companies asserting for expected and wider integration of existing business processes with effective accounting controls are considered operationally healthy for guaranteed asset management, profit management and fund management. However, the financial statements of listed companies have been evaluated and found as marginal for the wider level of compliance. This denounces the gravity of soundness afforded them by the core practices of financial reporting and disclosure functions that are crucial to satisfying the standard of companies' regulatory compliances when they are rooted in the contemporary and traditional accounting control processes.

The researcher finds it important to determine whether the revelation is different from the cases pertaining to Ghana and specialising in walking through the listed companies by utilising the consolidated financial statements of subsidiaries, and where applicable, the group. The study will further add up to the body of repository and shared knowledge associated with accounting controls over operational activities in Ghana. Moreover, it will set insightful platform for reasoning and it will contribute to the betterment of the researcher's knowledge.

The compliance with systemic business controls over the sustainability of companies in Ghana has not adequately evident detailed research. The recognised and identified concerns have translated into bottlenecks and have then become the basis for further studies into accounting controls with its interlinking dimensions to financial reporting and corporate compliances of listed companies in Ghana by the researcher. Finally, this work is understood to fulfil the academic requirement of researcher.

## 1.5 Brief Methodology

The researcher's study is premised on the population of thirty five (35) listed companies on Ghana stock exchange for data collection. Thirty three (33) companies have been selected from the Ghana stock exchange and with the annual reports randomly collated from 2008 to 2014.

A walkthrough for effective compliance is ensured with the major thematic areas specified by the COSO framework model and assessing the 28 principles with each company is the focus of concentration. Non-probability sampling of listed companies is chosen from the industries in Ghana focusing on how specialised and time conscious in obtaining the related data with cost constrained for consideration. In measuring the effectiveness of accounting control systems, Ernest and Young (2003) model is adopted and modified to evaluate the health of companies using control checklist that has been pinned down to the sub-headings on control environment, risk assessment, information and communication, control activities, monitoring and evaluation.

Descriptive statistics as a technique is adopted with each of the identified principles and they are further scaled on a continuum of four score points using the ordinal approach. The sampling technique is not compromised in the research for biases and social desirability that can discredit the objectivity of the research. The research design primarily considers structured evaluation for data collection and the subsequent analysis. In achieving the precept, the onerous approach that the researcher considers is the use of secondary data in the data collection.

Design of the research is better positioned by utilising and analysing the data collected with SPSS expert system in order to derive the expected predictions and attitudes. Ad hoc reviews of the secondary data before its adoption for suitability of information that the researcher is important and preventing the potential constrains for valid and reliable source for effective measurement.

### 1.6 Scope of the study

The study is time scaled and it considers various industrial companies listed on the Ghana stock exchange from 2008 to 2014. The coverage is thirty three companies, the insight of effective integration of accounting control systems with financial reporting is assessed indepth. Specificity and finality of accounting control themes including risk assessment, control environment, monitoring and evaluation, control activities, information and communication dynamics of listed companies are the significant areas of concentration.

This requires the consideration of reflecting how meaningful the themes hold together in providing the expected support for the research. Data is drawn and collected principally from the listed industries regarding the annual reports, publications, industrial accounting manuals, journals. Limitation of scope provides the edge to ensure relevant and more detailed analysis of data within the frame of work. It should not however, be considered and understood as a critical shortfall of the study.

### 1.7 Limitation of the study

The observations of this study are limited to the generalisation of accounting controls in the Ghanaian listed companies. In reasonable sense, the study is specifically prepared to consider the integration of accounting controls and the financial reporting processes, signifying the set of layered building blocks of corporate governance in the Ghanaian industries.

Despite the choice for listed companies that are numbering up to thirty five (35), thirty three (33) out of the number of companies on Ghana stock exchange are considered for coverage and for further relevant and interpretative role in the study. There is no absolute provision and wider opinion of the accounting control systems over financial reporting processes in Ghana. The reason is that there are companies which have not been selected for the study due to information asymmetry, time constraint and other reasons beyond the control of the researcher.

The researcher is hard pressed with limited time schedule within which the research is expected to complete and considering the chapters for submission and review. There is anticipation of difficulty in obtaining the absolute data for the study. Companies by their nature of business and practice have prioritised the confidentiality to access of information and do not disclose critical information for which demand has been placed. The study is driven at describing, investigating and exploring for academic purposes. Regardless of the limitations, the researcher will gather enough data to ensure a reliable conclusion.

## 1.8 Organisation of the study

The study is organised into five main chapters with relevant subheadings. Chapter one provides the general overview of the whole study. It starts off with the background of the study connecting down to the purpose of the study and the problem statement as considered in this research. Also, in this chapter the significance for the study and the procedures of this research, in connection with, the structure and organisation of this study has been outlined.

The chapter two will review the significant and literature about the topic, related conceptual framework. The methodology for the study is vividly described in chapter three. Chapter four presents the scientific outcome and the analysis of data that are supportive of the study. Chapter five contains the final chapter, conclusion of the study comprises of the major findings and recommendations.

# CHAPTER TWO

# LITERATURE REVIEW

## 2.0 Introduction

This chapter attempts to review and discuss the literature on the area of accounting controls and its effectiveness. The literature review has been discussed under the following sub headings; background of control systems, accounting control, accounting control systems, regulatory development, accounting controls over financial reporting, COSO, Turnbull, SOX models, components of accounting controls, importance of accounting controls and more.

## 2.1 The background of Control Systems.

In the modern business world, controls are being used for the representation of two fundamental concepts. The control system and control itself. For the successful functioning of business, management has to obtain the mandate for establishing system of controls that prevent and detect fraud. Serving the purpose of the human central system, it is of attention understanding the integrated level of pervasiveness of accounting controls which provide stakeholders the investment confidence required for reasonable investment (COSO 1992).

Corporate governance is known for the effective system of accounting controls. The United States and the European union, after the credit crunch have created the need for the regulations improving companies' controls of approved policies and procedures as used by management for the achievement of effective business management. The unauthorised level of transactions representing the cause of transgressions of controls and the significant impact on financial performance and also competitiveness of businesses have been the major highlights of the study. Bankruptcy and retrenchment costs are honored by shareholders and society. A system of governance have the important role for the establishment of confidence on the market and then protecting of investors based on the experience encountered by the listed companies on the Bucharest Stock Exchange (Dumitrascu & Savulescu 2012).

## 2.2 Accounting controls

Anglo-Saxons internal auditing, accounting controls are the specific tasks of companies controls aiming at the wider scope of assessment, evaluating the adequate operation of accounting control system, translating into the allied functions of controls and making relevant suggestion for improvements where the availability of space and weaknesses are further interrogated for new discoveries (Financial Postman magazine 2004).

Accounting control broadly can be understood with a sum of declaration. (AICPA 1963) states that, system of accounting controls are not limited particularly to consider the issues surrounding the functions of accounting and financial statement, it travels beyond the areas for the provision of complementary and cross-sectional business functions. Additionally, Committee on Basic Auditing Concepts (AAA 1973) states differently that accounting control demonstrates and evaluates the degree of relationship between those established criteria and the actual objectives of businesses resulting by way of following the systematic laid procedure.

Supportive of it (Miller 1990) intimates that attention are to be directed to systematic review and investigation procedures of behavior since verifying it promotes better operation and it can be determined on time by the general public. As in the action stated, achievement of strategic goals can be ensured base on the systematic approach of assessing the effectiveness of accounting controls and also management of risks (IIA 1999). Accounting controls constitute integral part of companies' governance system and the ability to manage risk, which are understandable, reviewed, and actively monitored by those charged with governance, management, and outside personnel in order to take advantage of the opportunities. It reminisce the integral function to counter the threats of achieving the organisation's objectives (IFAC 2012).

In achieving the organisational objectives on compliance and operation issues, it is of management concern to consider the effectiveness of accounting controls for that purpose. For proper integration of controls, the company-wide processes should be well-built to accommodate the critical aspect of management process including planning, organising, directing, and controlling. From this standpoint, accounting control is viewed as central to companies striving for advancement towards the objectives and also achieving of companywide mission and vision statement. Surprises from operations can be minimised, resulting in the way business activities have been streamlined to meet the vision and mission statement is mindful. In promoting the effectiveness and efficiency of operations, reducing the risk of asset loss and ensuring compliance with laws and regulations, ensures the importance to give serious attention to accounting controls. For continuity and reliability of financial reporting, all transactions should be identified, recorded and properly classified on timely basis, they should also be correctly summarised for postings in a way satisfactory to objectives of accounting controls.

The expectation is that accounting controls function ensures reasonable assurance based on the professional judgement of management and auditors without absolute assurance of effective practices. Effective accounting control is suitable for the achievement of organisational objectives. However, it does not guarantee overall organisational success.

Several reasons for which accounting controls have been evaluated as not providing the absolute assurance business objectives that companies seek to achieve are various. Areas of concentration include the cost and benefit analysis, the likelihood of collusion among two employees and external events beyond the control of companies. From COSO perspective, it is supportive of strategic objectives indicating accounting control and representing companies' plans, methods, and procedures available to meet its missions, goals, and objectives. ACS plays the role of first line defense safeguarding assets in order to prevent and detect errors, fraud thereby avoiding wastages and mismanagement.

**2.3 Accounting controls system**

(Cheung 1997) states that management of accounting control system becomes possible at the time the understanding of it has been conceived. This will allow companies to focus on organising the consolidation of functions and procedures within complete system of controls as established by management for achieving the purpose being perceived as effective functioning of business activities. (Meigs 1984) (Papadatou  2005) useful to the initial financial report preparation are the methods and procedures being adopted and followed by management in order to expect maximum cooperation from management for the safeguarding of assets and also prevention. Consequently, it aids the detection of possible control transgressions.

(Cook & Wincle 1976) demonstrate that accounting control system from the perspective of human central nervous system, as the reality of its pervasiveness throughout the fabric of businesses with instructive orders and actions to management. Also, it can flow from management down to the lower ranks of employees in companies. The layers of accounting control system accord the solid connections to organisational structures and rules of conduct of business strategies (Cai 1997).

## 2.4 Accounting Controls and Historical Development

### 2.4.1 Early Development

In the work of Brink, the contention there suggests accounting control as a concept that existed as far back as there have been substantive relationships with human beings and society at large. The understanding was supported demonstrating the origin of life in a form of documenting the track record of livelihood in society and also showing the civilised communities that existed around 5000 B.C.

The governments of empires imposed levies on the community people and then businesses in society. For effective accounting and collection of levies elaborating the system of checks and balances are established. Pinned down to the ancient practices, the establishment of accounting control systems as a design is primarily for mitigating risks and safeguarding of state property from the dishonest levy collectors (Gupta et al. 1991).

Along the lines of accounting control, it can be continued that Mesopotamian civilizations that existed about 3000 B.C, further utilised the factors benefitted by the elaborated systems of accounting controls. In alignment with the snap shot of different transactions that are being identified and complied by stewards who singularly provides the provisional list of revenues and expenditures. Documentation for the period consist of ticks, dots and check-marks show the magnitude of pervasiveness with accounting control and the functioning of auditing in the practices of society during those times.

### 2.4.2 Late Development

The reference guide for managing university and business practices, demonstrating a brief history of accounting controls in the pattern specified herein. In 1985, organisations sponsored the National Commission on fraudulent financial reporting, now known as Treadway Commission as suggested in 1987. In line with that, there was a formation of committees to study accounting controls became a necessity than ordinary. This resulted in the issue of Committee of Sponsoring Organizations (1992 COSO) "Accounting Control Integrated Framework" extending, (Cadbury 2005) analyses and concludes with the history of accounting controls in United Kingdom (UK) based on the outcome herein. In 1992, the Cadbury Code, UK's first corporate governance code 4.5 on "reporting the effectiveness of companies' accounting control systems" attracted the masses to follow.

As rooted in the 1994 Rutteman report, accounting control expands the financial reporting with principle 4.5 specifying the minimum and maximum disclosures of it. However, admittedly the system of control can provide "reasonable and not absolute" assurance against financial misstatements. In 1998, the improvement in the first Combined Code widened and the debate regarding internal financial control to be surrogated by accounting control.

The Turnbull report in 1999 requests that board Directors adopt a risk based approach to establish the sound system of accounting control and making evaluation and also the assessment of its effectiveness. In 2002, the Sarbanes-Oxley Act (SOX) was passed in the United States (US). SOX sub-section 404 mandating management to declare and certify that accounting controls are operating with expected level of effectiveness. All companies including foreign, public, large-sized and small-sized that have listed on the New York stock market is mandated to ensure compliance with SOX 404.

The development and enforcement of sanctions including punishments, penalties and delisting risks against the casualty companies requiring by law are ensured to hold in check the violations that are ingrained for monitoring the seriousness of SOX 2002. In 2003, the Smith report advised the review of roles and responsibilities of audit committees and considering the thrust of smith report, combined code in response reflected both situations and in the Higgs Report. The statutory financial report was issued covering the current and prospective performance and also business strategies in 2005. Information on the primary risks and uncertainties that potentially affect companies' long-term value should be valued. In 2005, the

Turnbull Guidance was reviewed by a team with Douglas Flint, the team leader and Finance Directors of HSBC, "The catching mind-sight was the time that Turnbull's guidance continued to provide appropriate concept for risk management and accounting control.

Relatively, the general focus is considered as the major factor contributing to the successful approach it has been implemented," said Flint, "Only limited changes have been made to the guidance itself, while a new phase has been added to emphasise the need for companies to keep that under review and providing meaningful information in their annual report. (Agyepong et al. 2013)

### 2.5 Trade-off between Corporate governance and Stock Exchange market

Controlling and monitoring of system of financial information can be centric for establishing growth and magnitude of service being provided. The protection surrounding affected businesses intermediating provide the trusted environment for agency problems and corporate failures resulting from information asymmetry caused by insider information for investment. Suitability for taking the best optimum decisions, contributing to greater access to better equity and debt financing thereby promising investors including individuals and institutions the high investment growth and returns. (La Porta, Lopezde-Silanes & Shleifer 2006).

The practice of major operational activities including cancellation of forward contracts, increasing of management perks, income smoothing, short-termism and possible control override of listed companies are the expectations of a system with well-structured and straightforward rules, policies, regulations and directives, reporting lines ensuring effective management to prevent potential financial distress of companies (Appiah 2011).

Effective enforcement demands compliance with the necessities to monitor and administer sanctions. Regulation by the Securities market determines the primacy in ensuring total enforcement of rules. Contrary, there has been critical 360 degrees assessment of effective enforcement of rules and regulation in the presence of available laws on commercials contracts and industrial relation by dispute settlement (Assenso-Okofo & Ahmed 2009).

The regime of strengthened corporate governance structures for controlling and directing the affairs of companies has proven good and bolstered investors' confidence in investment choices. Stringent ethics and appropriate standard of business requirements critical to developing the targeted listed companies of Ghana stock exchange. Propelling the conducts of global standards and ensuring that best practices with the local units by way of integrating the business structures and expectations are significant for adaptation. It is acceptable for the emerging African markets, undergoing the implementation of friendly control systems is required other than using one-size-fit-all ones (Friedman 2006).

The actual concern facing Africans, demonstrates nothing worthy to discuss the presence rules and systems of regulation, the mantra is always skewed towards fulfilling a culture following the tradition of routine authorisation and validation of pervasive accounting controls that are of repute to give utmost balance to financial, operational and compliance professional judgments of corporate institutions. This serves as a discouragement of the regulatory system (Vittas 1998).

**2.6 Accounting controls over financial reporting**

It is noteworthy, that the importance to consider the potential risk of events in every business processes, where it actually demonstrates irregularity, could contribute to failures of accounting control systems over financial reporting. On the contrary, inherent risks of the information and business processes form part of the failures of accounting control system over financial reporting (Heng-Hsieu & Wu 2006).

Providing the value, activities in accounting today across different countries and its legitimacy ensures a set of credible but standardised system of international practices are being followed worldwide in the application of IFRS and GAAP, focusing on effective accounting control for better operation (Tuart & Deming 2005).

The Board of Directors and Audit Committee have the role to facilitate accountability by become greatly recognised as influential in their endeavour of corporate governance (KPMG 2004). The committee has professional primacy to set-up strategies and policies, conforming to generally accepted accounting principles and International Auditing Standards (IAS) for benefits (Atrill & Mclaney 2009).

(Atrill & Mclaney 2009) also consider the financial statements of corporate bodies to be of high importance and serving as the foundation for financial and non-financial information determining the extent to which they have been prepared and arranged in defining the weight of management oversight responsibilities that reports should merit to ensure its representational faithfulness. However, diverse practices of management override for accounting control systems do exist from the global perspective (COSO 1992).

Every corporate body has its own peculiar set of accounting control systems as functions which perform the auditing role of activities for the financial reporting system. The lack of robust accounting control functions across board and has become the potential for breeding unethical accounting practices including income smoothing and this brings the associated potential of financial reporting irregularities. The investor group in effect self-experiment the outcome that are found as considerable to discourage and delay the potential desire for investment in both local and foreign business opportunities. Accounting control system is concerned with the process which has been developed by the principal shareholders within the business ensuring that the intention of providing reasonable assurance for the achievement of safeguarding the business assets. This promotes integrity and reliability of financial and operational information in order to determine the extent of compliance with rules and regulations (Cascarino & Van Esch 2007).

Business processes and activities of financial reporting allow management in determining the effect of accounting controls not operating effectively as designed (SOX 2002). In considering the extent of sufficiency, those controls are effective depending on the source for identifying and also managing the risk of material misstatement associated with the financial statements that are statistically collated as being working for businesses. In Romania, some financial investment companies are blacklisted for the preparation of misleading financial information. It is emphasised that those incorrectness are subject to testing the companies listed on the regulated stock exchange market (Bucharest Stock Exchange).

The reality of Enron and WorldCom provide investors with the diversity of important issues and the impact they stand to have on financial statements as compare to the practice of misappropriation of assets, bringing into perspective the fundamental parameters for investment decision making process. The trend demonstrated by ISA 240, financial statements application and other explanatory material (par. A2-A4), misleading financial reporting also pining down to the intentions of misstatements including omissions of significant amounts and improper disclosures in financial statements, all against the expected level of representational faithfulness by users and investors looking for profitability and sustainability.

Unsupportive of foreign accounting practices and inadequacy of fair and transparent disclosure are considered as discouraging to investors as per the consistent financial desires to increase their investment globally with all the expected levels of confidence (Beasley et al. 2009). Furthermore, the weaknesses of accounting controls over financial reporting across countries have been assessed as a hindrance to the bid for stock market and securities offers (Gomes et al. 2007). The times of Jeff Skilling promoted, listing advancement and the first time quotation of Enron in the New York Times. For the category of financial accounting control systems, the level weaknesses were disclosed in the major product lines in U.S and beyond for visibility.

(Schwieger & Rittenberg 2005) add that those advancing the cause for misleading financial reporting are bent on taking advantage of any possibility of fluctuations on the market prices of securities markets and the corresponding increase in pay out dividend and also capital gain from investment. This approach is understood differently from the position of community investors, observing the stronghold in respect of several but constrict factors in significant situations bringing about the uncertainty of misleading financial reporting concerns.

(Whittington & Pany 2008) indicate that the tendency of immediate investment surrounding the convertible process of stock market may contribute to the risk of financial malfeasance, which could happen with complex system of accounting for effective management of companies can be high. In that discovery, the system of financial reporting identified less stringent and pervasive accounting control issues which could increase the risk of investment decisions by stakeholders making it not considerable the way satisfactorily to the expectations of accounting controls.

(Omane-antwi 2009) adds that financial reporting misstatement may be contributed by other relevant inherent risk factors. Among those factors are improper dispensations of various valuation methods for which the practice of misrepresenting accounting events may come about normally, inadequacy in the use of experience and insufficiency in the knowledge surrounding the basis for measuring the financial reporting requirements that most times are assessed and also monitored for the effective operation of accounting functions. The control environment deepening by COSO sets the tone at the top management of the companies, influencing the awareness culture of the entire company (COSO 1992).

Most significantly, there have been obvious factors which directly connect to the probability of producing misleading financial reports. This vividly caters for the integrity, ethical authority and framework of business conducts (Beasley et al. 2009). The pre-requisite knowledge for understanding the factors associated with the control environmental can be important establishing the effective audit of investment area of concentration for actions, promoting the auditor to make meaningful projections and also performing procedures of controls by way of substantive testing. Effectively in the form of trusted practices of financial statement audit, reducing the risk of material misstatements (ISA 300).

Business transactions incurred over time giving the attention needed for proper vouching and batching to be completed. The authority and responsibility for those transactions are assigned to process owners who ensure that regular fulfilment of proper functioning is ensured (Boynton & Johnson 2006). Regardless, it is preferable that investors obtain positive performance for significant merger and acquisition decisions and the effective management of related issues including major holdings and disposals of business assets for proper accountability. From experience perspective, investors' opinion recommends the platform for committee including audit committee and remuneration committee instead of a single person's responsibility for performing the whole control function.

Admittedly, the audit committee as the body of persons appointed to ensure administration can be balanced and resourced with persons of (i) unquestioned integrity (ii) who possess the adequate knowledge and skills required for ensuring proper financial transactions (iii) realising the importance of observing all the prescribed control procedures (iv) providing other allied services to management for making first-time decisions and also frequent assessments of risks associated with business processes (IIA 2012)

**2.7 Procedural audit assurances and accounting controls**

It is stated that there are diversity of financial assets depending on the size of the asset base and the amount of investment activity in the companies with larger asset stake including global companies. This aids the valuation of importance that the auditor has understood following the approach to assess the implemented level of accounting controls formally evaluated and also test of controls that are performed in order to set control risk below the maximum rate in the audit plan (Messier et al. 2008).

Positioned by this, it can be noticed in alignment with accounting controls for business investment to monitor and assess of regulatory compliance. And in accordance with international financial reporting standards and generally accepted accounting principles (AICPA). Regardless, it is important to require effective controls ensuring there is management authorisation on transactions by following the delegation of authority implemented for the purposes of record keeping including segregation of duties, independent stock valuation and reliable asset accounting (Arens et al. 2008).

Any circumstances which may be determined as not worthy to provide management with the reliance on strategy has to be encouraged in times of performing audit testing. The independent auditor convinces by the procedure and ensures substantive testing of evidences obtained involving level of control risk that is higher and more extensive audit procedures for obtaining audit evidences associated with account balances, classes of transactions, disclosure and also presentation in the financial statements.

Effective accounting controls contribute to the reduction of business risk to acceptable level. However, due to the widespread of inherent risk they do not get eliminated absolutely, the risk of material misstatement with reduction in tests of controls procedure are sensitive to avoid and also this can only be done alongside the substantive procedure approach. (Omaneantwi 2009).

**2.8 Delegation of authority and asset accountability**

Noteworthy of emphasising, is the relevant relationship between accounting control objectives, types of control activities and audit procedures promoting best practices to ensure accountability for financial assets. Control Objectives, types of control activities and audit procedures including identification of significant transactions, authorisation and execution of business events can be done in considerable manner transgressing the boundaries of existing policies and regulations of companies. They consist of unauthorised routine adjustments and wrong postings of journal entries consequently causing misstatements in the financial statement.

Periodic review of reporting risk specified in the policies for identifying and approving transactions that are of importance to determine the accounting controls implemented for the mitigation of those actual risks. It requires that specific authorisation of adjustments by means of posting the details into sub-ledgers including inaccurate, incomplete, irrelevant, and not objective. Other assertions resulting including the misstatement of account balances, class of transactions and disclosures are also considered. Frequent review of transactions being processed and recorded in accordance with what the procedures for review proposed by the board members ought to regularly be checked for wider compliance with how their nature impact the financial statement.

Management effort granting unauthorised access to outsiders can contribute to the loss of business assets; the possibility of assets been stolen or disposed-off through diversion can result in the reporting of inaccurate carrying values and also misleading account balances in the trial balance. Financial reporting incompetencies and unprofessional behaviors could be used in identifying transactions and misclassifying revenue including non-accounting for cash proceeds from the sale of assets, wrong assets verification, difference in individual accounts and trial balances.

More importantly, there requires the need to analyse the diversity of business activities and redefining them for the responsibility of different independent employees for performance. Setting of authority limits regarding transactions provide the reporting functions with more effective and efficient segregation of duties between the approval of transactions, accounting and disclosure. Based on the practice that listed firms undertake on frequent basis a significant number of widespread business activities becomes the motivation for the implementation and monitoring of adequate segregation of duties system (Ricchiute 2010).

**2.9 Enterprise-wide oversight duties and responsibilities**

SOX Act 2002 emphasises, it is important for delegation of authority to be compiled in the way and order the layers of companies' organisational structure mandating the duties and responsibilities can flow easily. It requires that effective organisational structure is set up with approval lines that enhance segregation of duties between the related processes and activity owners. Executive management, board of directors and departmental heads must place under their care to authorise the initial entry and close-off transactions of businesses all the time.

Purchases of inventories and the procedures associated are administered by audit committee. The purchased inventories are then received into stores for the custody of the stores department, maintenance of records for stores purchases by accounting and stores officers for the purpose of ensuring there is effective control over disclosure of inventories in the statement of financial position is guaranteed. In Contrast, (Louwers et al. 2007) concede that the times management can authorise, execute, and control activities of transactions cannot be exchanged for anything. It is not absolute restricting segregation of functional responsibilities due to the managements' proactive effort to closing all control activities. For such reason, there happens a control problem and it is expected of companies to implement system of compensating control procedures requiring the involvement of two or more persons in every area of importance to companies' functional responsibility.

From this perspective, the compensating control exist in the form of periodic reports to the board of directors, oversight by the audit committee of the board, and internal audit participation in making periodic reconciliation of account balances, class of transaction and disclosures of amounts with descriptions also recorded in the books.

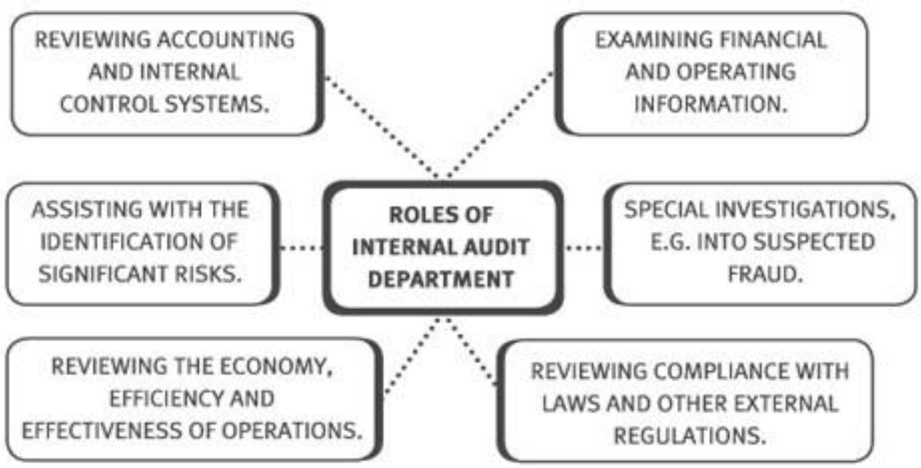
### 2.10 Auditing and accounting control systems

Businesses face wider level of risks that management need to manage and control. The existing processes of control activities adopting what the auditors can be hired to test the implemented accounting control systems are working according to plan and also in correspondence with business risk assertions being mitigated to the level acceptable as normal.

Internal audit has widespread function with management control of activities. Despite the inherent level of audit risk, it is expected of management, undertaking a periodic review to ensure the effectiveness of accounting controls within businesses. Dimensional to the functioning of auditing practices are best ensured for the consideration of the following key areas. Auditing forms part of the holistic control systems of companies, the aim of ensuring that controls are working effectively. Despite different regimes, it becomes a statutory requirement to have audit department undertaking assigned audit responsibilities. In other respect, the codes of corporate governance strongly suggest that oversight responsibility of internal audit department is a necessity. The work of internal audit is varied from reviewing of financial controls through to the checking of compliance with regulatory requirements. However, aggressive attention to accounting control systems in the management process is evaluated as another weak material spot of the traditional accounting control system concept. The dimension from which material misstatements can be mitigated is the attention that industries provide to the risk component of business objectives. Risks in the management processes are highly critical for fair presentation (AICPA).

The audit unit is always categorised under the control of Senior Audit Manager who reports independently to the highest level of the organisational structure and audit committee. The wider integration of accounting controls and internal audit function are as shown below.

**Figure 1: The weight of accounting controls in auditing functions**



## 2.11 COSO, COCO, Turnbull and SOX

### 2.11.1 COSO

In 1985, COSO was formed in order to provide sponsorship to the national commission on fraudulent reporting. Membership of the 'sponsoring organisations' comprises the American Accounting Association (AAA) and the American Institute of Certified Public Accountants (AICPA). COSO currently provides guidance on the implementation of accounting controls in both large and small companies. For COSO, accounting control is applicable to the three major aspects of businesses:

(1) Effectiveness and efficiency of operations, focusing COSO on the basis of business operating objectives consisting of performance goals and safeguarding resources.

(2) Reliability of financial reporting, concentrating on the identification of transactions for preparation of published financial information subject to the consistency, understandability, comparability and the logic behind the requirement of accounting concepts and conventions.

(3) Compliance with the applicable laws and regulations subjecting companies to provide self-assessment of actions being taken and specific actions expected of management in times of comparison with standards.

The consideration of the risk assessment of organisation activities, designed to achieve control objectives in three categories mentioned above including operation category including good business reputation, return on investment, market share, new product introduction, business strategy and tactics. Financial reporting category including publishing reliable annual financial statements, interim financial reporting, safeguarding assets from unauthorised use to avoid embezzlement, theft, damage and unauthorised purchase and disposal of assets and preparation of financial statement in line with GAAP. The compliance category including compliance with laws and regulations that affect the entity, which is the broad control objective

COSO explains that accounting controls must be provided the reasonable assurance though not absolute control objectives have to be allowed to work for its purpose. The reason is, controls are operated by human being and human errors, deliberate circumvention, management override and improper collusion among people who are supposed to act independently may cause failure to achieve the control objectives. The three control objectives ahead are expected to be supportive of the five elements related to each of them, for which COSO report expects management of each organisation to establish accordingly (Siyanbola 2013). The five intertwined components of accounting controls are expanded on the next page.

### 2.11.2 COCO

The COCO framework was founded by the Canadian Institute of Charted Accountants in 1995. From the (Department of National Treasury 2009), accounting controls and governance in organisations provide the main thrust of COCO's agenda for improving the development of it. Most importantly, it serves to provide the basis upon which judgments on the level of effectiveness of existing accounting controls could be made. It was resolved that COCO builtup on COSO's five accounting control framework perceived as ensuring proactive and organisational friendliness.

However, no evidence in the field of research confirming companies making use of COCO as accounting control framework in order to evaluate the existence of accounting controls. From COCO's perspective, the mobilisation of resources, systems, processes, culture, structure and specific tasks assignment constitute the fundamental elements of accounting controls. Collaboratively, existing business processes have proven to support management in achieving business objectives (Department of National Treasury 2009).

Accounting controls in respect of organisational purpose, commitment, capability, monitoring are learning criteria as COCO proposed to be valued as a set of qualitative benchmarks evaluating the existing accounting controls (IFAC 2006).

### 2.11.3 Turnbull

The Turnbull committee established sometime after the publication of the 1998 Combined Code in the UK mandating the provision of advisory services to listed companies on how better ways of implementing the accounting control principles must be practiced by the code.

The overriding requirement of their report was that, directors expectantly followed including (a) implementation of sound system of internal controls (b) Routine checking and monitoring of the system should be ensured. The requirements of Turnbull Report are:

(a) Internal controls should be established using risk-based approach. The approach specifically demands companies to ensure the:

1.0 Establishment of business objectives.

2.0 Identification of the associated key risks.

3.0 Decision upon the controls to address the risks.

4.0 Implementation of the required controls including continuous improvement and regular feedback.

(b) Systemic review of controls should be ensured on regular basis. In the UK Corporate Governance Code (Lockwood et al. 2010) it entrenches that directors are obligated at least to annually, conduct a review of the effectiveness of accounting control system for the group and further report to shareholders what has been done according to, the needful. The review covers all controls including financial, operational and compliance controls and the risk management in correspondence (Kaplan)

### 2.11.4 Sarbanes Oxley (SOX)

Sarbanes-Oxley Act of 2002 SOX, wide-ranging landmark legislation designed to enhance corporate governance, making the public companies more transparent in their financial reporting. It is the most sweeping securities legislation since the securities Acts of 1933 and 1934. It calls for sweeping corporate accounting reforms expanding requirements in relation to how public companies capture, manage and report their financial information and also make disclosures. It places restrictions on how public companies, the boards and officers operating the new legal and ethical standards for compliance and auditors. Financial statements must fairly present the condition and operations of businesses (sec. 401). The Security and Exchange Commission of US in ensuring oversight responsibility over listed companies has enacted and passed into legislation the SOX Act making mandatory, all NYSE listed companies for compliance with GAAP and IAS (SOX 2002).

In the middle of 2005 and 2006, about 800 countries have asserted they have adopted, overhauling the existing business processes to adopt the SOX implementation methodology in future (PCAOB). In Ghana, the Stock Exchange also has adopted the disclosure of and presentation for measures to meet those objectives advocated by SOX in customised manner. This development requires that all public entities including banks, insurance companies, listed companies and government agencies) have to comply with IFRS effective since 2009 and forming part of the SECs robust accounting controls, it measures the level of compliance by these companies.

Chief Executives and Chief Financial Officers must take personal responsibility for accuracy and completeness of corporate financial statements (Sec. 302). Non audit services performed by external auditors should be restricted preventing real and perceived conflicts of interest (Secs.201, 202 and 205). Companies need independent and knowledgeable board of directors and audit committees (Sec. 301 and 305). Companies must articulate and demonstrate ethical culture from the top down (Sec. 406).

A strong system of accounting controls is necessary to stem fraud and abuse (Sec. 404). Sec.404 contains only 173 words seem straightforward on the front end, these reforms have been broadly accepted and the spirit has come to stay. Complying with these new strict standards is not a matter of choice, it is the law surrounding doing business in the new age of compliance. However, no one really knows how to comply and scrambling to figure out what to do, and as all aspects are explored, it opens a 'Pandora's Box'. Sec. 404 applies equally to all public companies regardless of size.

Sound internal controls are relevant to both small and large companies. The current state of affairs is justified but there is possibility, there can be some hope. In September 2004, Alan Deller the SEC corporation finance division director, testified before the House of Financial service sub-committee that regulation are looking at ways they might recalibrate regulations for the smaller companies. SEC officials insist they are sensitive to concerns that small firms may have harder time complying with the new requirements than large companies. Beller testified 'we have looked at and are continuing to look at ways to help small business issuers.' Beller also testifies that the SEC has asked the COSO providing alternative method for small businesses to evaluate the internal controls since the right kinds of controls could be different for them. COSO has released a draft of internal control framework 'Guidance for Smaller Public

Companies Reporting on internal Control over Financial Reporting' and this has changed how we do business (Rombach 2002)

SOX requirements are as follows;

- Document and present business processes and controls over all major activities.
- Establish a process for updating control systems and documentation continuously
- Establish a process for monitoring and testing internal control effectiveness
- Ability to demonstrate performance of internal control effectiveness assessment
- Responsibility for establishing and maintaining internal controls over financial reporting (SEC 2004)

**2.12 Components of Accounting Control System**

As stated in ISA 315, it is important to let the greater extent of suitability for the five model of COSO framework hold together. They include risk assessment, control environment, communication and information, monitoring and evaluation, control activities.

The understanding to a well-shaped foundation and structure, the model should be maintained to provide the platform for evaluating, developing and continuously improve the core accounting controls of organisations. It is believed that, these components lie at the heart of consistency and efficiency in the running of businesses.

COSO framework has been landmarked and selected to function as the accounting control guideline recognising by the fact that it plays double roles by academic philosophers (Jokipii 2006) (Stringer & Carey 2002) and as adopted widely by public governance structures and private bodies including Price Water Coopers (PwC), Ernst and young (E&Y) across the US, Europe and Africa continents (IIA 2012). More especially in the US, the application of COSO framework has been greeted significantly with the mass adoption after the passage of SOX Act

2002, this is due to what the SOX legislation expressly declared COSO as the appropriate evaluation toolbox for public and private companies in accounting controls (Gupta & Thomson 2006).

Moreover, COSO is evidenced to mainly acknowledge the listed companies with definite regulatory and compliance level of activities, where these listed firms operate the most. A precedent thesis study, conducted among listed companies in 2008 for Ghana before the credit crunch pointed out about half of the 35 listed companies on the Ghana Stock Exchange utilised COSO in effort to effectively assess the accounting control of firms (Rautio 2012).

The objective of COSO is presenting framework that enables common understanding of accounting control (COSO 1992). Report issued by COSO specifies control criteria and suggests tools to assist management in the business sector for evaluating and improving accounting control systems. The COSO report emphasises the importance of management's involvement in understanding accounting control functions and establishing adequate and effective controls (Jokipii 2006). The necessary oversight and governance for the process must be provided by the board of directors. COSO perceives internal control as the function of five interrelated components (SOX 2002). The COSO approach to accounting controls is well demonstrated by the sub-headings below, which in turn represents the building blocks of accounting control.

**2.12.1 Risk assessment**

(COSO) indicates that industries are exposed to operational, reporting and compliance risk, represented in the form of profitability risk, liquidity risk, foreign currency risks, interest rate risk and market price fluctuations (Kirk 2005) which impact the choice of effective accounting control systems.

In responding to significant risks of businesses, companies have prioritised the essence of determining and also sustaining their activities for which success can be guaranteed. Effective management and early warning systems to safeguard profitability regardless of the availability of external factors that companies may become vulnerable to when they are exposed are considered. Management of the likelihood of impact that can happen consequently in the upstream and downstream activities of such firms should also come to mind (Martin 2010).

The surfacing of these risks in business environment, demonstrates the consciousness of how going concern of business is overseen and it makes challenging for different minds to fairly determine the right choices (Watson & Head 2010). Risk is pervasive in business entities and it functions as weakness in accounting control systems, translating into irregularities. These irregularities are dotted in all aspect of job responsibilities including violation of law, duty and moral principle (Ukpere et al. 2014). Accounting controls are subject to violations including company policies, mission statements, code of ethics, and labor agreements. Transgressions that occur in a compromised way, disturbs the operational efficiency by resisting rights for wrongs in business processes. The confidence in business activities can therefore be dissipated (Skærbæk 2010).

Company-wide risks assessments with major attention to external and internal impacts of business diversities and dimensions have been considered in their magnitude at which they confront entities as critical. The ability of entities to perform the assessment of documented business risks is important in order to satisfy the expectations of stakeholders. In the COSO model, risk assessment rates as another component of accounting controls and also it discloses the grey areas where there is the need for establishing and implementing the actual control activities. For effective risk assessment, it is important to consider some pre-set of objectives.

They include (i) the need to identify and prioritise risks when achieving business objectives (ii) the need to determine parallel actions to address the risks (English et al. 2004)

As part of the internal control process, COSO fundamentally places greater emphasis on the need to set objectives, despite its less consideration in business process and control documentation, it is viewed as a must have for further control build-up. However, it only constitutes a minute step of the various significant steps of a wider management process. Regardless, it advises that management must set the context firmly to establish business objectives, some intervals prior to the identification of risks with the possibility to weigh down their expectations. COSO considers entity's objectives to exist on two different levels and are then categorised under three different areas (i) Entity-level objectives (ii) Activitylevel objectives including operations objectives, financial reporting objectives and compliance objectives.

Entity-level objectives are more widespread including the monopoly in terms of market share whereas activity-level objectives consider the more specific business processes. The focus of this research combines the importance of the two and for which purpose the need to evaluate the entire and specific accounting control system of the listed company on the stock exchange is of paramount. For example, the actual objective of a company's authorisation process that is an activity to ensure effective approval of business transactions on entire goods/services that the company undertakes with stakeholders (Ahokas 2012).

The series of sub-objectives that could be identified as some steps into the authorisation process may be grouped under operational, financial reporting or compliance objectives.

(COSO 1992), what surrounds it are unavoidable facts that influence the existence and the application of these objective groupings, for certainty that their contributions help address diversity of needs. Risks of internal control over financial reporting in the transaction authorisation process are tied to acceptable representation of financial statement figures and financial reporting assertions (Rittenberg et al. 2012). Some notable assertions are as follows;

• Occurrence — all authorisations should actually be occurred and relate to the entity

• Completeness — all transactions have to be authorised except otherwise

• Accuracy — transactions should be accurately approved

• Valuation — fair prices of transactions have to be authorised and recorded

• Cut off — authorised transactions have to be made in the correct accounting period

• Classification — Proper authorisation of transactions for recording in their right accounts

Subsequent to the setting of entity's objectives are its responsibilities to identify the risks in the specific form as we have noted in the assertions above. The achievement of those objectives demands that entities perform overall analysis in order to develop effective ways to ensure sustainable risk management (Ramos 2004).

In practice, it is evident that to identify risks there must be the need to consider that the identification process as a never-ending cycle. For the suitability of it, the accounting system should be ingrained in the short and long-term forecasting for strategic analysis (COSO 1992). Important to these activities is the consideration to periodically review factors potential to impact the economic and industry positions of businesses in everyday decisions. The future outlook of entities could be assessed through senior management conferences on businessplanning and the review comments of industry analysts (COSO 1992).

Despite, the direction of which could much be seen at the entity-level where strategic risk of businesses are identified. For identification of the activity-level risks, it is requested that more specific procedures have to be undertaken with limitation to the oversight of the top management resulting in providing little attention to complete the coverage of it.

### 2.12.2 Control environment

The various controls which management is mandatory to establish and implement may be toned in the control environment. It is emphasised in accounting literature reviews of different organisations that importantly considers those grouping as central to the effective control of businesses (Stringer & Carey 2002) (COSO 1992)(Simmons 1997) and this aspect also forms part of the first component of COSO framework.

Organisational tone is always set at the top considering the principles of control environment in order to illicit the cultural behavior of control by its management (COSO 1992). For concrete discipline and structure, control environment provides the building block for all dimensions of accounting control (IFAC 2010a). Its integration is widespread thereby impacting the most significant components of accounting control. This focuses on the details of control activities and the extent to monitor those controls.

(Hooks et al. 1994) considers the environment of controls as key to organisational culture. (COSO 1992) identifies the following principles as the component of internal control at the entity-level 1.Integrity and ethical values 2.Commitment to competence 3.Board of directors and Audit Committee 4. Management's philosophy and operating style 5.Organisational structure 6.Assignment of authority and responsibility 7. Human resource policies and practices

From the above, it can be stressed that management integrity is central to the detection of fraud when establishing effective control environment. This presents the degree of compromise with

CEO and CFO in fraud cases including Enron, Tyco, WorldCom and others. The integrity and ethical values of people who create, administer and monitor accounting controls must be seen as parallel to the degree of their effectiveness demonstrated by the frequency of performance (COSO 1992). Management policies are the specification of management expectations to happen and what actually happens to the rules which are obeyed or ignored constituting what must happen as corporate culture (Sawyer 2003)

Fraudulent and questionable financial reporting practices happen due to the existence of some organisational factors affecting management decisions (Merchant 1987). Ethical behavior to some extent is affected by those organisational factors. The motivations for ensuring unethical practices as identified by (Merchant 1987) are the following 1. Pressure to meet unrealistic performance targets in short-term 2. High performance-related rewards 3. Upper and lower cut-offs on bonus plans. Additionally, causes of unacceptable practices may include 1. Deficiency of accounting controls concerning poor segregation of duties in sensitive areas which in turn breaches the tendency to steal 2. No high level of control over the activities of lower employees by top management due to the system of decentralisation which further reduces the possibility of detecting transgressions. 3. Lack of well-resourced internal audit function promotes the inability to detect and report improper findings. 4. Board room failures that do not allow the top management to ensure complete oversight responsibilities. 5. No stringent punitive measures for violations that do serve as deterrents adversely affect the repetition of the improper acts so committed. A few academics have also added their bit to the concentration of control environment.

(Stringer & Carey 2002) suggest that business process re-engineering of accounting controls become necessary with special attention to the newness of technology, change management strategies, structural improvement and the dictates of external factors presented in the economy.

An instance of which can be a change strategy resulting from organisational hierarchies on management restructuring exercises.

In downsizing several redundant layers considered as “gatekeepers” are eliminated and leaving the most significant layers of control activities to operate, effectively, it gives organisations the opportunity to demonstrate with greater dependence on accountability and integrity of the leftover employees. Outcome of the studies on traditional controls (Ezzamel et al. 1997) states that in the UK culture, interviews were conducted with a sample of local companies it was revealed that control integrated into organisational processes reduce the importance of disapproving management controls.

(Cohen et al. 2002) observes different auditors and stated that the tone of attitude of senior management is influential to effective accounting control, thereby affecting the basis of interpretation by those auditors. Discoveries have suggested that control environment is relevant to both management scope of control and auditors.

### 2.12.3 Control activities

(English et al. 2004) indicates that the achievement of management goals and risk reduction strategies require organisations’ to follow statement of facts, step by step stages and customs ensuring those management objectives properly carried out. This is termed as control activities. It is important component of internal control as defined by the COSO cube.

From best practice perspective, these activities are considered as accounting controls. They are further categorised under three control objectives; (i) Operations (ii) Financial (iii) reporting 3.Compliance. Control activities are of two elements: policy and procedure (COSO 1992). (Coyle 2004) affirms that effective dispensation of measures to ensure reliability in financial information is important when control structures are set by management in order to prevent and detect fraud or errors, also to ensure the accuracy and completeness of accounting recordings as the basis for safeguarding the assets of businesses. (COSO 1992) identifies control activities as follows:

1. Senior management reviews of actual performance with budgets, forecasts, prior periods, competitors and other review pointers.
2. Functional and activity management
3. Information processing of variety of controls that are performed to check accuracy, completeness and authorisation of transactions. For instance, a supplier's invoice is submitted and approved before payment is ensured.
4. Physical controls of company assets including equipment, inventories, securities and cash. Assets are also secured physically, verified and periodically counted and compared with amounts shown on the control records.
5. Key performance indicators (KPIs) relating to different sets of operating, financial and compliance data, investigative and corrective actions, play the role of control activities.
6. Segregated among different employees in order to reduce the risk of misstatements or inappropriate actions is done. For instance, authorisation of transactions, recording and handling of related assets are demarcated and undertaken in a specific person's job designation.

COSO emphasises physical controls and segregation of duties as informal internal accounting controls, being cross-checked as authorisation and verification. These are particularly stated in details of COSO's control activities. (Stringer & Carey 2002) suggest that control activities which are dependent on the series of layers of management supervision could help reduce its impact by the existence of simple and improved state of the art business environments. Contrary to this position, studies have stressed the contribution of control activities to the accounting control systems of companies manually.

The observation that control activities of COSO have more dependency for concrete analysis and evaluation of significant account balances, class of transactions, presentation and disclosures by auditors. Others include accounting professionals and business demonstrating as consultants in their conducted survey of 374 American. Relatively, it is of benefits to accounting professionals that control activities are fundamentally valued as central to reliable financial reporting environment (Gupta & Thomson 2006).

Disclosures of accounting control deficiencies of Rhode Island, governmental agencies for the fiscal year, saw the classification of specific control deficiencies in line with SAS 783's five internal component models. The 107 of 349 reported issues representing 30% of accounting control deficiencies are in relation to control activities, which are smaller unit of the whole score indicating that control activities are ill-considered in today's accounting control and it also provides high interest to internal with maximum attention by professionals. (Geiger et al. 2004) On the contrary, observations could reflect the opinions of auditors have on all control activities depending on past events of control assessments, they may be well discerned and ready to detect various types of control deficiencies or they are better positioned to recognise control deficiencies surrounding different process activities.

The suggestion of Gupta & Thomson in the survey that the protracted functionalities of control activities component could not be underrated for the benefits of control environment component of COSO despite the accorded attention it receives in today's business. From total contribution perspective, it is indispensable to recognise the advantages of the two components as of material and complementary to each other in the achievement of defined business objectives. Introspectively, what becomes supportive of the urge for addressing accounting control dependencies is as researched by (Ivancevich 2012).

It was revealed that of the 190 companies examined in line with COSO control components, there reported significant number of companies falling within the boundaries of significant deficiencies in accounting controls on business loans and accounts receivables years beyond the passing into law the SOX Act in the United states. Enlistment of the major affected companies was put up to recognise the most common pitfalls in accounting controls over financial reporting transactions including account receivables and bank loans which presents to stakeholders, the credible means of fixing the number of issues identified. A total of 698 weaknesses reported by auditors was categorised into six different themes: people, basic controls, valuation, technical transactions, accounting and review.

The largest category of commonly cited material weaknesses in controls, 243 instances was particularly related to those themes apart from the personnel or expertise to perform the work effectively. Material weaknesses in relation to the basic controls were the second largest category with 222 recorded instances representing the mean revenues of $222 million and mean assets of $674 million. It suggests that from statistics the basic controls must not belittled as the imagination of the size regarding the revenue and asset base facilitate the knowledge and resources of implementing those controls. Most importantly, it serves as the basis for remediating those deficiencies it require to fix material weaknesses affecting the controls on loans and receivables as reported in those companies by way of proper documentation, layers of review, separation of duties, securing data and authorizations (Ivancevich 2012).

### 2.12.4 Monitoring and Evaluation

As a closure note of the accounting control cycle, it is important that the monitoring and evaluation part of the COSO component of controls obtain the needed attention. Despite the reputational weight being pulled by the control environment for effective detection of fraud and errors, the consideration of it as foundation to company-wide control process has been tested as critical to achieve the definite objectives of organisations.

In tracking the existence of other components, the essence of monitoring aims to provide continuous improvement to those processes, risks and business documented controls. Monitoring can be periodically undertaken by virtue of control systems considerable for expiration due to process changes over internal development in many times, thereby rendering their validity in operation as deteriorating. This may be the reasons that anytime organisation experiences the engagement of new employees, structural changes including business reorganisation or process re-engineering, diversity of training and supervision effectiveness, time and resource constraints and changes in the design of risk. Critical of management is the importance of establishing the sustainability of accounting controls system for relevance in times of new development and the present suitability of its intended objectives.

(COSO 1992) states the process of assessment involves the frequency in the monitoring of the initial design and operations of key controls and providing the required actions for continuous improvement. The monitoring component in the form control self-assessment requires that accounting control systems are featured in management meetings as measures to monitor both the ones seen as on-going and those considered as ad hoc for periodic analysis where the essence of it has to be maintained the controls should be conducted in effective sense (Jokipii 2006). The mandate of those charged with governance in the organisation to monitor the on-going procedures for build up into the DNA of structures of companies by way of integrating routine cross-checking of satisfactory actions and behaviors into the normal and recurring operating activities of organisations.

For better demonstration, it has the significance of becoming ingrained in business processes with regular management and supervisory sessions for comparisons and consistency in the routine actions (COSO 1992). In finality, on-going monitoring should be designed and positioned as centrespread to major control activities in order to keep track of their anticipated level of effectiveness. Evaluation of significant deficiencies is pivoted to the institution of wider detailed of methods for achieving that purpose, the organisations should make critical investigation of the key accounting controls with special focus on specificity of the risk drivers.

The achievement of acceptable control and compliance culture could be the time that the frequency of monitoring and evaluation exercise have effectively been integrated at a greater the degree of consciousness (COSO 1992). These provide companies, the predictable platform to determine the necessary area for coverage in the form of risk assessment and monitoring processes for which reason the control is effectiveness for independent evaluations (Jokipii 2006). Following this, small and medium sized organisations monitor the controls and ensure that on ad hoc basis the involvement of the CEO and other key process owners are engaged for both hot and cold review in the overall operational activities, determining the possible control surprises arising out of those activities that organisations undertake for the achievement of set objectives (COSO 1992).

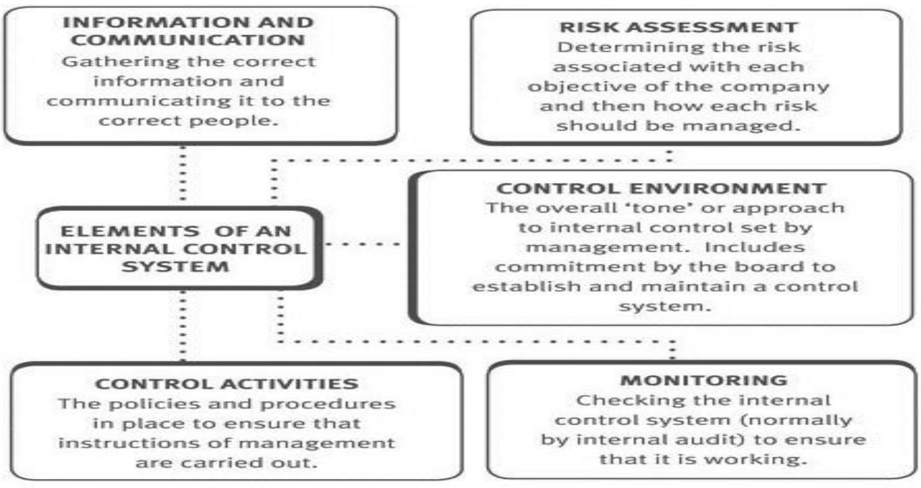
**2.12.5 Information and Communication**

Top management have the control over responsibilities and they have authority to effectively obtain disseminating information to all the employees that it is intended for playing a pivotal role regarding accounting controls. Aggressive actions are demanded from the activity owners.

In comprehensive, information should be identified and collated from unquestionable sources within and beyond the boundaries of organisations. For sufficiency and appropriateness of it, qualities of their usefulness are evaluated for determining the timeliness, relevance, reliability and accessibility. It is highly demanding of management by auditors to communicate the issues that makes the findings after critical examination of the accounting controls for new discoveries and management timely response.

Communication of information in small and medium sized organisation have the likelihood of being informal as compare to that of larger organisations, thereby making it more succinct to conclude that appropriate information could assist effective accounting controls system in organisations when made formal as it becomes the necessity to be carried out on a wider scale and in all times (Siyanbola 2013).

**Figure 2: Summary of the five components of COSO framework**



### 2.13 Importance of Accounting controls in business operations

#### 2.13.1 Profitability and Growth

In determining the survival of every organisation it is the strength of profitability which provides businesses with anticipated financial benefits most often realised during the times which operating expenditures occurs compare to the revenue base for profit or loss. Deductibles including costs and taxes are considered as fully catered. In achieving the objective above, businesses depend strongly on effective accounting controls system.

Control implementation requires the accounting system of entity's board of directors, management, auditors and personnel that afforded the researcher, the oversight responsibilities to accord the reasonable assurance which is congruent to the entity's objectives and concentrating on the effectiveness and efficiency of operations, reliability of financial reporting and compliance with applicable laws and regulations (Doyle & MacVay 2006)

#### 2.13.2 Prevention of fraud and safeguarding of assets

Accounting control system has significance in preventing, detecting, and correcting of potential fraud concerns. The possibility of entities for maximum profitability can be impacted by the perpetration of fraud which could siphon profit without realisation. It also has the tendency to crumble most organisations. Structural measures have to be accepted in place to avert, detect and eliminate fraudulent occurrence thereby creating an atmosphere for profitability. Budgetary system of organisations allows the essential benefits of activities for planning, reviewing, controlling and monitoring of budgeting stages as an intervention of fraud prevention and asset safeguarding.

In alignment, resorting to management tool box of ideas leading orgnisations to continuously revise and maintain the overall organisational objectives in line with strategic Plan. Supportive of entity's objectives are the readiness of management to protect the companywide assets and resources thereby averting cases of losses. Minimisation of losses associated with organisation's assets, properties and resources. These losses can be forestalled whereby safety measures, assets and properties handling procedures and policies are prepared, implemented and enforced for compliance (Spatacean 2012).

### 2.13.3 Risk management and proper accountability

Accounting control system has in consideration the need for identifying the potential risks by way of assessing, measuring and managing them for acceptability as organisations may become susceptible to their impact. External and internal factors including financial, political, environmental and natural risks that have the potential of impairing the operations of companies for effective management of risks is important (Stephen, McNally, Vincent & Tophoff 2014) Control system with solid practice of segregation of duties, initialisation, authorisation and approval. Others include supervision of transactions, physical protection of cash and cash equivalents of organisations as the precursor for theft and assets mismanagement thereby making critical and aiding profitability when it is rightly undertaken.

Risk of account receivable balances could be evaluated as irrecoverable debts where it remains unchecked and becomes critical threat to business growth. These are checked for minimal recurrence and also harnessing the instance of reconciliation and debts recovery schemes that are performed due to the availability of accounting control system. (Kolk 2008)

### 2.13.4 Operational excellence and compliance

Tightening of control policies and procedures for accurate calculation is also important. The speed and the flair of staff in job deliveries are ensured in accordance with the relevant legislation and specific requirements best initiated by effective accounting system. Wastes and inefficiencies in the production lines of goods and services could be reduced. This demonstrates downward production trend and consequently reducing profit or incurring of loss.

Policy formulation and implementation help factor in the justification for purchase requisitions at proper lead time, quantity supplies and moderate prices. It boosts the profitability than blind ordering that could result in losses and wastages in the end (www.linkedin.com/pulse 2014). International accounting and auditing standards of procedures identified at the instance of checks and balances illicit the quality of goods and services thereby satisfying the heart needs of stakeholders. Timely compliance with regulations and statutory provisions and also paying little attention to critical non-compliance have the tendency of threatening the profitability and sustainability in the form of penalties and closure (Damianides 2006).

## CHAPTER THREE

## METHODOLOGY

### 3.0 Introduction

This chapter describes the method of design and techniques that are utilised for data collection by the researcher in the study. It reviews the ways, in which the research is undertaken, the ways the research population is identified. The adopted approach that the study uses and also how the sample size can be obtained. This explains the reason behind the chosen population. The scope of this study is significantly on the premise of the following; population, sample size and sample techniques, mode of data collection and method of data analysis of the study.

### 3.1 Research Design

The effectiveness of accounting controls of listed companies on the Ghana Stock Exchange. Descriptive and exploratory approaches are adopted in order to determine the magnitude of effectiveness that all listed firms merit from the fact of being listed on the Ghana stock exchange. They are being used, mainly because of the opportunity to secure better description of events that associates with the study. This facilitates the tendency to derive the expected information for answering the research questions and objectives. It is evident that (Stringer & Carey 2002) explore the field of study in the Australian context for eight organisations that were actively evaluating their system of accounting control. In a structured interview and administration of questionnaires they discovered a considerable shift from "traditional" accounting controls including authorisation, reconciliation and verification towards the emphasis on empowerment and accountability was the on-going practices dominating in all those organisations understudied.

Typically, it is of concern that providing the description of the nature and degree, detailing the status of related issues in question. The method is most applied to describe the nature of grey areas that can be identified in the form it exists at the time of the study. This allows us the platform to explore the factors influencing their pattern of occurrence.

### 3.2 Population of the Study

The researcher's population of concentration in the study is made up of all the thirty five listed companies of the Ghana Stock Exchange. From industrial perspective, these companies are categorised under the following; Food and Drugs, Life assurance, Manufacturing, Banking, Mining, Oil and GAS, Beverage, Distributors, Media and Publications, Construction and Engineering.

#### 3.2.1 Sample Size and Sampling Technique

The study considers 33 listed companies on the Ghana Stock Exchange aiding the analysis as the sample. Random sampling technique is utilised in selecting the individual companies from 2008 to 2014 and as specified in the scope for coverage. This is due to the same content of annual reports for each company over the five years. The basis of which they are selected takes into consideration the nature of business that management is performing at a certain level. The choice of companies does not contain any preconceived beliefs for evaluation. Important board expertise and declaration are viewed in line with deriving the insightful information for the study.

### 3.2.2 The list of companies selected

African Champion Ltd, Aluworks Ltd, AngloGold Ashanti Ltd, Ayrton Drug Manufacturing Ltd, Benso Oil Palm Plantation, Cal Bank Ghana Ltd, Camelot Ghana Ltd, Clydestone Ghana Ltd, Cocoa Processing company, Fan Milk Ltd, Ghana commercial Bank Ltd, Ghana Oil company, Gold Star Resources Ltd, Golden Web, Guinness Ghana Brewery Ltd, Ecobank Ltd, HFC Bank Ltd, Enterprise Group Ltd, Mechanical Lloyd Ltd, Pioneer Kitchenware Ltd, Produce Buying Company Ltd, Unilever Ghana Ltd, Sam Wood Ltd, Starwin Ltd, PZ Cussions Ltd, Societe General Ghana Ltd, Standard Chatered Bank Ltd, SIC, Total petroleum Ltd, Trust Bank Ltd and UT Bank Ltd, Tullow Oil Ltd, Transolution Ltd.

### 3.3 Method of Data Collection

A sample of thirty three (33) companies is randomly selected from the Ghana stock exchange based on the accessibility of annual reports from 2008 to 2014. A critical walkthrough for the comprehensive disclosure of compliances and non-compliances are performed focusing on the five major sub-headings of the COSO framework model. These have been fully represented in 28 guiding principles. The sample of listed companies chosen from the industries in Ghana is done with the special focus on timescale of data needed and cost constrained for reasonableness. For the measurement of control effectiveness, (Ernst & Young 2003) model is revised with that of KPMG the results are replicated for Ghana in evaluating the health of listed companies using the checklist of modified principles under the sub-headings of: control environment; risk assessment; information and communication; control activities; monitoring and evaluation. Descriptive statistical technique for data analysis is adopted and each of the identified items is placed on a likert scale from 1 to 4. The basis was 1.Very effective 2. Effective 3.Ineffective and 4.Very ineffective and score points using ordinal approach is used to determine various degrees of attitudes that the researcher considers for each principle (Likert 1932). The sampling technique compromises nothing in the research for social desirability that discredits the objectivity of the research. Following the evaluation approach, the instrument for data collection is mainly secondary data. An ad-hoc review of the secondary data is ensured before the data was adopted and suitably used as information. The researcher is constrained because of time and also the sensitivity of information that is required, proper and reliable source of information is needed for effective measurement.

### 3.4 Method of Data Analysis

The data of the research is analysed using expert system (SPSS) for the counting and running of the data collected.  This is to derive the expected predictions with responses in accordance with research questions and objectives. Quantitative data is used and it is supported by the use of qualitative technique in analysing the extracted information and the collated data from the related annual reports in counting and conversion. Our results are populated statistically and in a tabular format demonstrating how the responses aid data analysis in effective and reasonable sense.

# CHAPTER FOUR

# DATA PRESENTATION, ANALYSIS AND DISCUSSION OF FINDINGS

## 4.1 Introduction

This chapter attempts to analyse the examination of accounting controls of listed companies for its effectiveness on the Stock Exchange market of Ghana, which has been discussed in chapter two. This part is classified into two sections, the descriptive summary statistics and the level of effectiveness.

## 4.2 Descriptive Statistic

The 33 companies are spread across nine industries including bank and insurance, paper converters and information technology, diversified industries, agriculture and agroprocessing, mining and oil, media and photography, beverage and finally the pharmaceutical and biotechnology companies as shown in Table 1. Due to the small number of companies in some of the nine industries it is not possible to compare whether there are industrial differences in the ACS effectiveness.

**Table 1: Summary Measures of Firms**

| Firms (Categories) | Count (N) | Percentage (%) |
|---|---|---|
| Agriculture/Forestry | 3 | 9.091 |
| Automobiles | 2 | 6.061 |
| Banks/Insurance | 10 | 30.303 |
| Beverages & Food Producers | 4 | 12.121 |
| Diversified Industries | 3 | 9.091 |

| | | |
|---|---|---|
| IT/Paper Converter | 2 | 6.061 |
| Media/Photography | 1 | 3.030 |
| Mining/Oil | 6 | 18.181 |
| Pharmaceutical/Biotechnology | 2 | 6.061 |
| Total | 33 | 100 |

**Source: Annual report review, 2008-2014**

### 4.3 Effectiveness of Accounting control system

In evaluating the effectiveness of ACS, an assessment of the components of ACS based on the adapted (Ernst & Young 2003) with KPMG model is performed. A total of 115 points (a maximum of 4 points for each of the 28 items of ACS) are considered in the assessment of effectiveness or otherwise of the ACS of the 33 listed companies.

### 4.4 Control Environment

In the area of control environment, six (6) variables are the researcher's areas of concentration including integrity, ethical values and behaviour, management control consciousness and operating cycle, management's commitment to competence, board of directors and audit committee's participation in governance and oversight, organisational structure and assignment of listed companies have the commitment of top management in creating a sound environment for the overall operations of the entities. The score for control environment records an overall mean of a score of 2.16. Out of the six scores, the minimum is 1 with a maximum value of 4. It signifies the existence of controls in the processes of listed companies. The established distances between the mean values and the standard deviation itself are insignificant representing low degree of risks and the lower the risk the better the behavior of the principles in operation.

**Table 2: Summary Descriptive of Accounting Control: Control Environment**

| Control Environment | Mean | std | min | Max |
|---|---|---|---|---|
| | **summary measures** | | | |
| * Integrity, ethical values and behavior of key Executives | 1.64 | 0.489 | 1 | 2 |
| * Management's control consciousness and operating style | 2.58 | 0.902 | 1 | 4 |
| *Management's commitment to competence, retention and critical skill development | 2.30 | 1.334 | 1 | 4 |
| * Board of directors, audit committee & stakeholder participation in governance & oversight | 1.82 | 0.950 | 1 | 4 |
| * Company-wide accountability for accounting controls by the responsible individual employees | 2.30 | 0.951 | 1 | 4 |
| * Establishment of organisational structures, reporting lines, & appropriate delegation of authorities & responsibilities of objectives | 2.33 | 0.957 | 1 | 4 |
| | Overall mean score = 2.162 | | | |

**Source: Annual report review, 2008-2014**

It reveals that the control environment of listed companies can be described as very effective representing 68.7% of the responded principles under it. This confirms the position of (Onumah et al. 2012) that accounting controls are fairly effective. All the listed companies have instituted the measures and policies within their purview. These provisions are vindicated in (COSO 1992) for nurturing the sacred business environment in favour of the other four elements of ACS, ensuring that proper achievement to their designed purpose is not missed. Some aspect of the six principles, demonstrated how dormant they are, representing 31.3% of the total score. This gives rise to the unsatisfactory and subtle deficiency in the behavior of the related accounting controls of the companies'1. Management retention, critical skills development, competence 2. Management control consciousness 3. Companywide control issues. These bring out, the spirit of effective enforcement and comprehensive disclosure into question and also assessing the existence of best practice. Where it is refused, the companies' activities can become adversely penalised due to the unmitigated control risk exposures.

### 4.4.1 Personal opinion, Organisational perception and General perception

In the opinion of the researcher, the finding on accounting control has been found as key indicator to increase reliability of financial reports and relevance**.** The finding can be perceived to deepen the insight of accounting controls in strategic plans, business plans and succession plans of companies serving as the basis for critical skills development and management control consciousness for employees.

Stakeholders provide the better guarantees that are required of them when control environment of their investment is consistent with their expectations.

### 4.5 Risk assessment

Risk assessment in evaluating the companies shows that most of the listed companies have in place policies and practices for assessing the company wide risks that faces the business activities. All the six principles utilise for assessing the effectiveness of risk assessment records an overall average mean score of 1.96. An examination of the individual components in table 3 suggests that the minimum is 1 with a maximum of 4.

**Table 3: Summary Descriptive of Accounting Control: Risk Assessment**

| Risk Assessment | summary measures Mean | std | Min | Max |
|---|---|---|---|---|
| * Companies identify and assess the changes that could significantly impact the system of accounting control | 1.82 | 0.950 | 1 | 4 |
| * Company-wide objectives & how they are supported by strategic plans, how does the existing process level complement what have been established for communication | 2.94 | 0.899 | 1 | 4 |
| * Processes are in place to identify, evaluate & respond to changes that may have severe impact and wide-spread effect on the company | 1.88 | 0.696 | 1 | 4 |
| * Established financial reporting processes to identify any significant changes in compliance with GAAP, IFRS & IAS for significant changes in accounting control and information of changes in business best practices | 1.15 | 0.364 | 1 | 2 |
| * Companies consider the potential for fraud or errors in the assessment of risks when achieving the overall business objectives | 2.61 | 0.788 | 1 | 4 |
| * A specified and entrenched objectives with adequate clarity for the related risk identification and assessment | 1.36 | 0.603 | 1 | 3 |
| | Overall mean score = 1.960 | | | |

**Source: Annual report review, 2008-2014**

Out of the six principles R3 ( establishment of financial reporting processes to identify any significant changes in compliance with GAAP, IFRS & IAS in accounting control have a widespread effect entities) which obtains the lowest mean score and standard deviation of 1.15

and 0.364 respectively. The fact that all items have a mean score of above 1.1 representing 72.2% suggests that the listed companies demonstrate high organisational capability to assess and manage the risk associated with their operations. However, it is found that 27.7% of companies' risk assessments are weak denying the investors the complete risk free environment.

### 4.5.1 Personal opinion, Organisational perception and General perception

The researcher is of the opinion that, this finding on accounting control reveals the significance by providing stakeholders with problem areas of financial management activities. It is perceived that accounting control in companies operates effectively alongside the credible risk management plan and made conscious of guidance on business decisions.

Stakeholders derive comprehensive understanding from the presence of risk management plan that could be referenced for going concern decisions and risk reduction.

### 4.6 Information and Communication

In the area of information and communication, six principles, as shown in table 4 below are used in assessing the effectiveness of overall system. Most of the listed companies have information and communication systems that facilitate the provision of information to both management and employees. It also helps external parties make a decision. Our results suggest that the companies obtain, generate and use relevant and quality information to support the functioning of accounting controls. This is epitomised in (Laudon & Laudon 2013) with the mean score of 1.82 and standard deviation of 0.683, the dissemination of information across the companies reveals an effective position with 2.28 and 1.350 as the scored mean and standard deviation respectively.

In information storage and data management, companies have backup systems and welltrained IT departments with primary back-up centres for handling IT issues. The overall principles for information and communication record relatively an encouraging value, representing 54.6%. The researcher identifies the need to re-enforce policies and manuals to ensure continuity in line with intention.

**Table 4: Summary Descriptive of Accounting Control: Information and Communication**

| | summary measures | | | |
|---|---|---|---|---|
| **Information and Communication** | **mean** | **Std** | **Min** | **Max** |
| * Management has established a business continuity, disaster recovery plan & backup systems for all primary data centres | 2.55 | 0.506 | 2 | 3 |
| * Management commits the appropriate human and financial resources to develop the necessary information systems, & monitors by ensuring that user involvement in the development (including revisions) & testing of programmes | 2.48 | 0.795 | 2 | 4 |
| * Information systems are developed or revised based on a strategic plan that is interrelated with the entity's overall business strategy, and it is responsive to achieving the company-wide objectives | 3.06 | 0.788 | 2 | 4 |
| * Information systems provide management with necessary report on the entity's performance relative to established objectives, including relevant external & internal information | 3.00 | 0.750 | 2 | 4 |
| * The company obtains or generates and uses relevant, quality information to support the functioning of accounting control | 1.82 | 0.683 | 1 | 3 |
| * The organisation internally communicates information, including objectives & responsibilities for accounting control, necessary to support the functioning of accounting control | 2.28 | 1.350 | 1 | 4 |
| | Overall mean score = 2.532 | | | |

**Source: Annual report review, 2008-2014**

The overall mean for the six principles under information and communication is 2.532 which indicate that there is an effective communication system for listed companies. However, of the six principles a minimum score of 2 which suggests that there are some companies which are not effective at harnessing IT for all business purposes, representing 45.3%.

### 4.6.1 Personal opinion, Organisational perception and General perception

The researcher's opinion has it that, accounting control enhances the security and convenience that can be derived from effective IT support services provided to companies.

It is perceived that accounting controls in listed companies' facilitate the platform to increase productivity. Stakeholders oversee business difficulties and realities in simple way especially when IT facilities are present within companies in order to dispense proper accountability and transparency.

### 4.7 Control Activities

All the five principles that are used in assessing the effectiveness of control activities score the average mean of more than 2.298. This indicates that though most companies have created the enabling control environment for the operations of the organisations, representing 69.1% the laid down policies containing some principles were not being effective the way it is desirable with their impact on the overall system of accounting controls also adversely affected.

**Table 5: Summary Descriptive of Accounting Control: Control Activities**

| Control Activities | summary measures mean | Std | min | Max |
|---|---|---|---|---|
| * Policies and procedures are in place for all the company's activities, and the controls addressing the policies are being complied accordingly | 2.39 | 0.704 | 1 | 4 |
| * Management has clarity for goals regarding budgeting, profitability, financial & operating, documentation of these goals are communicated for company-wide oversight | 1.79 | 0.415 | 1 | 2 |
| * Segregation of duties either manually or setting up of IT applications for different employees in reducing risk of fraud or inadvertent actions | 3.00 | 0.935 | 2 | 4 |
| * Establishment of policies for granting authorised access to programmes and data files are functional | 2.70 | 0.770 | 1 | 4 |
| * Allowable system of routine compare and analyse exist in the accounting processes on fixed assets. Significant safeguards retention strategy are implemented to prevent abuse of use or shredding of documents & records in line with document | 1.61 | 0.747 | 1 | 3 |
| | Overall mean score = 2.298 | | | |

**Source: Annual report review, 2008-2014**

On the whole a total score of 2.298 and as recorded clearly, the accounting controls demonstrate that majority of listed companies have control bottlenecks in their control activities, representing 30.9%.

The statistics in table 4 also indicate that there are four principles which have a minimum of 1 and there is one that has a minimum of 2 which suggests that there are some companies which have ineffective control activities pertaining to segregation of duties either manually or setting up of IT applications for different employees or inadvertent actions with other principles revealed as deficient. In Contrast, a maximum of 4 for the three principles indicate that some companies have very effective control activities.

### 4.7.1 Personal opinion, Organisational perception and General perception

As per the finding of the research, the researcher expresses that accounting control demonstrates effective oversight when controls activities are established in existing and new business processes.

In deepening accounting controls in the listed companies, control activities enhance management supervision and promote the increase in delegation of authority for employees. Stakeholders provide the enabling control activities in their companies as accounting control to add value.

### 4.8 Monitoring and evaluation

It can be observed that in the area of monitoring the average score of 1.608 is recorded (table 5). Most of the companies have implemented the five principles and as vindicated in (COSO 1992) and are being operated effectively, representing 86.7%. However, 13.7% of the total monitoring principles are ineffective pertaining specifically to the companies' selection, development and continuous performance. Also separate evaluations to ascertain whether the components of accounting control are present and functioning together should be ensured. All listed companies have active engagement for monitoring, taking cognisance of their accounting controls departments.

**Table 6: Summary Descriptive of Accounting Control: Monitoring and evaluation**

| Monitoring | summary measures mean | Std | Min | Max |
|---|---|---|---|---|
| * Periodic evaluation of accounting controls are made and personnel responsible for carrying out their regular duties, obtain evidence as to whether the system of accounting control continues to function | 1.0 | 0.2 | 1 | 2 |
| * Management (1) implement accounting control recommendation made by internal and independent auditors (2) corrects known deficiencies on a timely basis and (3) responds appropriately to reports and recommendations from regulators | 1.6 | 0.65 | 1 | 3 |
| * There is an internal audit function that management uses to assist the purpose of ensuring (I) their monitoring activities | 1.6 | 0.49 | 1 | 2 |
| * Companies select, develop, and perform on-going and separate evaluations to ascertain whether the components of accounting control are present & functioning together | 2.0 | 0.98 | 1 | 4 |
| * Companies evaluate and communicate accounting control deficiencies in a timely manner to the parties charged with taking corrective action, including senior management, governance managers & the board of directors as appropriate | 1.6 | 0.69 | 1 | 3 |

Overall mean score = 1.608

**Source: Annual report review, 2008-2014**

### 4.8.1 Personal opinion, Organisational perception and General perception

Continuous monitoring offers companies, opportunity of critical watch over the implemented accounting controls for the avoidance of non-compliances. Companies with monitoring and evaluation functions can audit itself for best practice and also recommends contingency plans used as measures for employees. Stakeholders become motivated because of monitoring systems acting as insurance for management alertness.

From these observations, it can be stated that listed companies tend to provide weight on conducting the monitoring and evaluation with the prime focus on risk assessment that have currently gained the attention of listed companies after the credit crunch in 2008. The revelation has been noted that, there is a shift from the focus on control environment and it is considered as subtle reconciling differences between and the researcher's position. Despite the acceptability of the results, inadequate attention to all the five components and the 28 principles at any level less than 100% impacts the achievement of overall effectiveness of accounting controls (Onumah et al. 2012).

**Table 7: Summary of percentage distribution of scores**

| Accounting control element | Very effective | Very ineffective | Total score |
|---|---|---|---|
| Control environment | 68.70% | 31.30% | 100% |
| Risk assessment | 72.20% | 27.70% | 100% |
| Control activities | 69.10% | 30.90% | 100% |
| Monitoring and Evaluation | 56.70% | 13.30% | 100% |
| Information and Communication | 54.60% | 45.30% | 100% |

**Source: Annual report review, 2008-2014**

In considering the evaluation score of all components of accounting control system, the COSO Report is used as the base and ACS of listed companies can be described as not being effective. The reason is that risk assessment and monitoring are functioning properly representing 72.2% and 86.7% respectively in the overall ACS system leaving the remaining three (control environment, controls activities and information technology) scoring between 50% and 69%. Though these other components have a high score, most of the companies have practical challenges in ensuring that the right things were done by the employees of the organisation. However, though ACSs are not wholly effective, listed companies design their ACSs in line with the principles as entrenched in the COSO report.

## CHAPTER FIVE

## SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

### 5.1 Introduction

The study investigated the effectiveness of the ACS of 33 listed Ghanaian companies. This was achieved through the examination of the ACS disclosures in the annual reports. In measuring the effectiveness of the ACS, the researcher adapted the (Ernst and Young 2003) with that of KPMG model which measures the effectiveness of ACS under control environment; risk assessment; information and communication; control activities; monitoring and evaluation to the Ghanaian environment. This provided the research with 28 principles under these thematic areas.

The principles were distributed as follows: control environment (6); risk assessment (6); information and communication (6); control activities (5); and monitoring (5). The disclosure of each of the 28 items was further scored on the scale of 1 (ineffective) to 4 (very effective). The scoring approach was a weight because it took into account the comprehensiveness of the disclosure.

### 5.2 Summary of findings

The results indicate that the total annual reports scored highly on risk assessment (overall percentage 72.2%); monitoring and evaluation (86.7%); control activities (69.1%) However, the companies did not perform better on control environment (68.10%); information and communication (54.6%).

The results show that there is specific gap for improvement in the effectiveness of the ACS especially in the areas of control environment and information and communication due to some major challenges. Most severely, an effective ACS anticipates for the collective functioning of all the elements with their explicit 28 principles. However, all the ACS elements demonstrated percentages of ineffectiveness on risk assessment (27.7%); monitoring and evaluation (13.3%); control activities (30.9%) control environment (31.3%); information and communication (45.3%) signifying that the ACS of listed companies are not very effective on the whole casting a slur on management decisions.

**Information and communication;** insufficient policies developed according to the strategic plan that the companies have for their business directions and how responsive it is to achieve objectives. There was weakness in providing management with the necessary report on the companies' performance according to their objectives for external and internal interest. **Monitoring and evaluation;** inadequate effort of companies to ensure that policies are selected, developed and performed continuous reviews as separate evaluations in order to ascertain a holistic operation of ACS.

**Risk assessment;** inadequate company-wide objectives and how they are supported by strategic plans. There was weakness in the existing procedures with the aspect assisting the established policies for better communication.

**Control activities;** weakness in the established policies for granting authorised accesses to programmes and data files.

**Control environment;** ineffective management retention, critical skills development for competence. Also management consciousness of controls was weak, inadequate companywide control for some listed companies.

## 5.3 Conclusion

This study examines the effectiveness of accounting control systems of listed companies in Ghana. The recent international financial reporting scandals have caused regulators to place maximum attention on accounting control systems as a choice that could help improve the quality of financial reporting.

The study investigated the effectiveness of accounting controls of 33 listed Ghanaian companies. An examination of the control disclosures in the annual reports of listed companies was ensured. For measuring the effectiveness of the ACS, the researcher adapted the (Ernst & Young 2003) with KPMG model evaluating the effectiveness of ACS under control environment, risk assessment, information and communication, control activities, monitoring and evaluation in the Ghanaian business culture. Twenty eight (28) principles relating to these categories were followed. Each disclosure was scored on a scale of 1 (ineffective) to 4 (very effective).

**Information and communication;** weakness in the developed policies as not in line with strategic plans of listed companies, weakness in providing management with the relevant reports aiding operations. **Monitoring and Evaluation;** weakness in performing regular evaluation and review for effective operation

**Risk assessment;** inadequate company-wide objective for risks**. Control activities;** weakness in policies on authorisations and accesses**. Control environment;** weak retention strategies**,** inadequate critical skills development, weak management control consciousness, inadequate company-wide controls.

The presence of accounting controls should not be construed that management oversight responsibilities need not be regular with rapt attention. Stakeholders periodically conduct situational analysis of business activities and management decisions for the detection of transgressions significant to deny the degree of best practices having critical impact on accounting control effectiveness and corporate governance as a whole. Availability of stringent instruments to tighten potential accounting control deficiencies that may slip into business routines for compromisation is important for management attention. It was noted that ACS has aided listed companies contributing to better the growth, transparency and accountability of the stock market.

Some encountered limitations are as follows: First, the study is cross-sectional and does not demonstrate any degree of improvement or not. Second, although it is a requirement for companies to report the effectiveness of ACSs, the likelihood of some companies are not reporting well will be high and those companies may have low scores according to our results yet their ACS is the opposite.

## 5.4 Recommendations

**Annual review of existing policies;** management of listed companies should annually review the existing IT policies and procedures to be in alignment with strategic plans. Companies should improve the efficiency in sharing of internal and external information for business growth. IT shared drive containing the repository of company-wide policies should be created with access right provided to the major policy developers and implementers. Departmental meetings should be scheduled bi-annually to consolidate all risks and developments that render the old policy as obsolete and powerless to address shortcomings. Daily activities should be backed-up on fresh tapes and well-maintained for storage in line with disaster recovery plans and the IT strategic plans available. Accesses should be officially authorised and routed through companies' delegation of duties. Active directories should be reviewed frequently to ensure that all terminations including expired contracts, resignations, national service accesses, retirements and redundancies are not sharing the IT platforms any longer for conflict of interest and transgression issues.

**Establishment of governance department;** listed companies should ensure that corporate governance department has been set up to evaluate and action issues associated with process flows, policies, risks and controls to prevent recurrence. Routine review of authorisations when there has been a change to the existing governance structure should be ensured. Identification of reporting risks and implementation of controls that tie the reporting practices of listed companies. Audit findings and agreed management implementation actions should be scheduled, facilitated, tabled and resolved as small projects for closure. Review fixed assets, accounts payables, receivables, cash management, environmental cash flows, inventory count, human resources rolling into payroll systems, assets disposals, contract approvals, general ledger reconciliations, asset depreciations, asset impairments, exchange rate processes among others for proper oversight. Documentation of audit committee issues on operations for remediation. Review transparency, integrity, fairness, and accountability, openness indicators in a form of checklist for the compliance of management.

**Company-wide risk management plan;** management should develop and implement company-wide risk management plan. Risks associated with revenue, assets, liabilities, disposals, safety, cash, budgeted actuals and forecast, write-offs, advance payment, capital items, projects, talents and skills, retirements, compensations, management salaries, stock options, bonus schemes, recruitment processes, payables, adjudications, commercials frictions, time and attendances, Donations, scholarships, gifts, fuel consumption, accruals, medicals allowances, workmen compensations, community issues, canteen services, receivables, residences of staff, electrical fittings, offices, provisions, IT equipment, servers, CCTV cameras, environmental disturbances, asset verifications, legal cases and others should be mandatory for the affected heads of departments. The end results should be documented and consolidated for monthly management actions taken in mitigating their existence and serving as a precursor to the work of external auditors in their audit plan.

**Mapping of duties and responsibilities;** companies should undertake proper mapping of duties and responsibilities in line with what appointment letters contain. Organograms should be reviewed for proper delegation of authorities. Layers that are considered to be gatekeepers should be collapsed into the mainstream functions for better visibility. Overseer codes should be developed and implemented to control the expendables and ensure accountability as stipulated. These would promote authorisations and approvals in a form of sign-offs and validations before transactions are processed into the general ledgers.

**Development of succession plan;** employee succession plan should be developed and implemented with the training needs of companies in mind. This would instil discipline, performance and respect for the existence of accounting controls. Strategic plan, business plan and closure plan can only be effective when companies have got in place a succession plan demonstrating the senior managers and their next in command in a chain like order and down to the rank and file. It would tell about the qualifications, names of employees, years of experience, critical skills, training programmes offered, the notch of employee, due years for succession and others. The plan would serve as a measure to labor turnover, accountability, continuity and ownership of accounting controls, management consciousness and integrity towards financial reporting will be exercised with urgency.

## 5.5 Areas for future research

Firstly, accounting controls do put the activities of companies into shape and they provide investors the promising environment for better returns on their investment. Other internal benefits include operational excellence and compliance, risk management and proper accountability, prevention of fraud and safeguarding of assets, profitability and growth. However, the effectiveness of accounting controls is not the basis for predicting corporate failure. This is because accounting controls may be very effective on a business model that have bottlenecks. It is in this direction that the researcher finds the gap for further research on the impact of accounting controls on business models in Ghana.

Secondly, the effectiveness of accounting controls of listed companies. A comparative analysis between Ghana and Liberia

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## APPENDIX I

## ACCOUNTING CONTROL CHECKLIST

| | EVALUATION OF ACCOUNTING CONTROL | Attitude | | | |
|---|---|---|---|---|---|
| **A** | **CONTROL ENVIRONMENT** | **Very Effective** | **Effective** | **Ineffective** | **Very Ineffective** |
| 1 | Integrity, ethical values and behaviour of key executives Management's control consciousness and operating style | | | | |
| 2 | Management's commitment to competence, retention and critical skill development | | | | |
| | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| 3 | Board of directors, audit committee and stakeholder participation in governance and oversight | | | | |
| 4 | Company-wide accountability for accounting controls by the responsible individual employees. | | | | |
| 5 | Establishment of organisational structures, reporting lines, and appropriate delegation of authorities and responsibilities of objectives. | | | | |
| 6 | | | | | |
| **B** | **RISK ASSESSMENT** | | | | |
| 1 | Companies identify and assess the changes that could significantly impact the system of accounting control. | | | | |
| 2 | Company-wide objectives and how they are supported by strategic plans, how does the existing process/application level complementing what have been established for communication. | | | | |
| 3 | Processes are in place to identify, evaluate and respond to changes that may have severe impact and wide-spread effect on the company. | | | | |
| 4 | Established financial reporting processes to identify any significant changes in compliance with GAAP, IFRS and IAS for significant changes in accounting control and information of changes in business best practices. | | | | |
| 5 | Companies consider the potential for fraud or errors in the assessment of risks when achieving the overall business objectives. | | | | |
| 6 | Specified and entrenched objectives with adequate clarity for the related risk identification and assessment. | | | | |
| | | | | | |
| **C** | **CONTROL ACTIVITIES** | | | | |
| | Policies and procedures are in place for all the company's activities, and the controls addressing the policies are being complied accordingly | | | | |

| | | | | | |
|---|---|---|---|---|---|
| 1 | Management has clarity for goals regarding budgeting, profitability, financial and operating, documentation of these goals are communicated for company-wide oversight. | | | | |
| 2 | Segregation of duties either manually or setting up of IT applications for different employees in reducing risk of fraud or inadvertent actions. | | | | |
| 3 | Establishment of policies for granting authorised access to programmes and data files are functional. | | | | |
| 4 | Allowable system of routine compare and analyse exist in the accounting processes on fixed assets. | | | | |
| 5 | Significant safeguards are implemented to prevent abuse of use or shredding of documents and records in line with document retention strategy. | | | | |
| D | **MONITORING** | | | | |
| 1 | Periodic evaluation of accounting controls is made and personnel responsible for carrying out their regular duties obtain evidence as to whether the system of accounting control continues to function. | | | | |
| 2 | Management (1) implements accounting control recommendations made by internal and independent auditors (2)corrects known deficiencies on a timely basis and (3) responds appropriately to reports and recommendations from regulators. | | | | |
| 3 | There is an internal audit function that management uses to assist the purpose of ensuring (I) their monitoring activities. | | | | |
| 4 | Companies select, develop, and perform on-going and separate evaluations to ascertain whether the components of accounting control are present and functioning together | | | | |
| 5 | Companies evaluate and communicate accounting control deficiencies in a timely manner to the parties charged with taking corrective action, including senior management, governance managers and the board of directors as appropriate. | | | | |
| E | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| 1 | **INFORMATION AND COMMUNICATION**<br>Management has established a business continuity, disaster recovery plan and backup systems for all primary data centres. | | | | |
| 2 | Management commits the appropriate human and financial resources to develop the necessary information systems, and monitors by ensuring that user involvement in the development (including revisions) and testing of programmes. | | | | |
| 3 | Information systems are developed or revised based on a strategic plan that is interrelated with the entity's overall business strategy, and it is responsive to achieving the company-wide objectives. | | | | |
| 4 | Information systems provide management with necessary report on the entity's performance relative to established objectives, including relevant external and internal information. | | | | |
| 5 | The company obtains or generates and uses relevant, quality information to support the functioning of accounting control. | | | | |
| 6 | The organisation internally communicates information, including objectives and responsibilities for accounting control, necessary to support the functioning of accounting control. | | | | |

## APPENDIX II

## FREQUENCY TABLES SHOWING THE PERCENTAGE DISTRIBUTION OF SCORES

**Integrity, ethical values and behaviour of key executives**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | very effective | 12 | 36.4 | 36.4 | 36.4 |
| | effective | 21 | 63.6 | 63.6 | 100.0 |
| | Total | 33 | 100.0 | 100.0 | |

**Management's control consciousness and operating style**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | very effective | 1 | 3.0 | 3.0 | 3.0 |
| | effective | 20 | 60.6 | 60.6 | 63.6 |
| | ineffective | 4 | 12.1 | 12.1 | 75.8 |
| | very ineffective | 8 | 24.2 | 24.2 | 100.0 |
| | Total | 33 | 100.0 | 100.0 | |

**Management's commitment to competence, retention and critical skill development**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | very effective | 14 | 42.4 | 42.4 | 42.4 |
| | effective | 6 | 18.2 | 18.2 | 60.6 |
| | ineffective | 2 | 6.1 | 6.1 | 66.7 |
| | very ineffective | 11 | 33.3 | 33.3 | 100.0 |
| | Total | 33 | 100.0 | 100.0 | |

**Board of directors, audit committe and stakeholder participation in governance and oversight**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | very effective | 17 | 51.5 | 51.5 | 51.5 |
| | effective | 6 | 18.2 | 18.2 | 69.7 |
| | ineffective | 9 | 27.3 | 27.3 | 97.0 |
| | very ineffective | 1 | 3.0 | 3.0 | 100.0 |
| | Total | 33 | 100.0 | 100.0 | |

**Company-wide accountability for accounting controls by the responsible individual employees**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | very effective | 6 | 18.2 | 18.2 | 18.2 |
| | effective | 16 | 48.5 | 48.5 | 66.7 |
| | ineffective | 6 | 18.2 | 18.2 | 84.8 |
| | very ineffective | 5 | 15.2 | 15.2 | 100.0 |
| | Total | 33 | 100.0 | 100.0 | |

**Establishment of organisational structures, reporting lines and appropriate delegation of authorities and responsibilities of objectives**

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | very effective | 8 | 24.2 | 24.2 | 24.2 |
| | effective | 9 | 27.3 | 27.3 | 51.5 |
| | ineffective | 13 | 39.4 | 39.4 | 90.9 |
| | very ineffective | 3 | 9.1 | 9.1 | 100.0 |
| | Total | 33 | 100.0 | 100.0 | |

**riskassess1**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | very effective | 16 | 48.5 | 48.5 | 48.5 |
| | effective | 9 | 27.3 | 27.3 | 75.8 |
| | ineffective | 6 | 18.2 | 18.2 | 93.9 |
| | very ineffective | 2 | 6.1 | 6.1 | 100.0 |
| | Total | 33 | 100.0 | 100.0 | |

**riskassess2**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | very effective | 2 | 6.1 | 6.1 | 6.1 |
| | effective | 8 | 24.2 | 24.2 | 30.3 |
| | ineffective | 13 | 39.4 | 39.4 | 69.7 |
| | very ineffective | 10 | 30.3 | 30.3 | 100.0 |
| | Total | 33 | 100.0 | 100.0 | |

**riskassess3**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | very effective | 8 | 24.2 | 24.2 | 24.2 |
| | effective | 23 | 69.7 | 69.7 | 93.9 |
| | very ineffective | 2 | 6.1 | 6.1 | 100.0 |
| | Total | 33 | 100.0 | 100.0 | |

**riskassess4**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | very effective | 28 | 84.8 | 84.8 | 84.8 |
| | effective | 5 | 15.2 | 15.2 | 100.0 |
| | Total | 33 | 100.0 | 100.0 | |

**riskassess5**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | very effective | 3 | 9.1 | 9.1 | 9.1 |
| | effective | 10 | 30.3 | 30.3 | 39.4 |
| | ineffective | 17 | 51.5 | 51.5 | 90.9 |
| | very ineffective | 3 | 9.1 | 9.1 | 100.0 |
| | Total | 33 | 100.0 | 100.0 | |

**riskassess6**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | very effective | 23 | 69.7 | 69.7 | 69.7 |
| | effective | 8 | 24.2 | 24.2 | 93.9 |
| | ineffective | 2 | 6.1 | 6.1 | 100.0 |
| | Total | 33 | 100.0 | 100.0 | |

**controlactiv1**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | very effective | 2 | 6.1 | 6.1 | 6.1 |
| | effective | 18 | 54.5 | 54.5 | 60.6 |
| | ineffective | 11 | 33.3 | 33.3 | 93.9 |
| | very ineffective | 2 | 6.1 | 6.1 | 100.0 |
| | Total | 33 | 100.0 | 100.0 | |

**controlactiv2**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | very effective | 7 | 21.2 | 21.2 | 21.2 |
| | effective | 26 | 78.8 | 78.8 | 100.0 |
| | Total | 33 | 100.0 | 100.0 | |

**controlactiv3**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | effective | 14 | 42.4 | 42.4 | 42.4 |
| | ineffective | 5 | 15.2 | 15.2 | 57.6 |
| | very ineffective | 14 | 42.4 | 42.4 | 100.0 |
| | Total | 33 | 100.0 | 100.0 | |

**controlactiv4**

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|
| Valid | 1 | 3.0 | 3.0 | 3.0 |

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| | very effective | 13 | 39.4 | 39.4 | 42.4 |
| | effective | 14 | 42.4 | 42.4 | 84.8 |
| | ineffective very ineffective | 5 | 15.2 | 15.2 | 100.0 |
| | Total | 33 | 100.0 | 100.0 | |

**controlactiv5**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | very effective | 18 | 54.5 | 54.5 | 54.5 |
| | effective | 10 | 30.3 | 30.3 | 84.8 |
| | ineffective | 5 | 15.2 | 15.2 | 100.0 |
| | Total | 33 | 100.0 | 100.0 | |

**monitoring1**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | very effective | 31 | 93.9 | 93.9 | 93.9 |
| | effective | 2 | 6.1 | 6.1 | 100.0 |
| | Total | 33 | 100.0 | 100.0 | |

**monitoring2**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | very effective | 15 | 45.5 | 45.5 | 45.5 |
| | effective | 15 | 45.5 | 45.5 | 90.9 |
| | ineffective | 3 | 9.1 | 9.1 | 100.0 |
| | Total | 33 | 100.0 | 100.0 | |

**monitoring3**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | very effective | 13 | 39.4 | 39.4 | 39.4 |
| | effective | 20 | 60.6 | 60.6 | 100.0 |
| | Total | 33 | 100.0 | 100.0 | |

**monitoring4**

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|
| Valid | 13 | 39.4 | 39.4 | 39.4 |

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| | very effective | 5 | 15.2 | 15.2 | 54.5 |
| | effective | 14 | 42.4 | 42.4 | 97.0 |
| | ineffective very ineffective | 1 | 3.0 | 3.0 | 100.0 |
| | Total | 33 | 100.0 | 100.0 | |

**monitoring5**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | very effective | 16 | 48.5 | 48.5 | 48.5 |
| | effective | 13 | 39.4 | 39.4 | 87.9 |
| | ineffective | 4 | 12.1 | 12.1 | 100.0 |
| | Total | 33 | 100.0 | 100.0 | |

**inforcomm1**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | effective | 15 | 45.5 | 45.5 | 45.5 |
| | ineffective | 18 | 54.5 | 54.5 | 100.0 |
| | Total | 33 | 100.0 | 100.0 | |

**inforcomm2**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | effective | 23 | 69.7 | 69.7 | 69.7 |
| | ineffective | 4 | 12.1 | 12.1 | 81.8 |
| | very ineffective | 6 | 18.2 | 18.2 | 100.0 |
| | Total | 33 | 100.0 | 100.0 | |

**inforcomm3**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | effective | 9 | 27.3 | 27.3 | 27.3 |
| | ineffective | 13 | 39.4 | 39.4 | 66.7 |
| | very ineffective | 11 | 33.3 | 33.3 | 100.0 |
| | Total | 33 | 100.0 | 100.0 | |

**inforcomm4**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | effective | 9 | 27.3 | 27.3 | 27.3 |
| | ineffective | 15 | 45.5 | 45.5 | 72.7 |
| | very ineffective | 9 | 27.3 | 27.3 | 100.0 |
| | Total | 33 | 100.0 | 100.0 | |

**inforcomm5**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | very effective | 11 | 33.3 | 33.3 | 33.3 |
| | effective | 17 | 51.5 | 51.5 | 84.8 |
| | ineffective | 5 | 15.2 | 15.2 | 100.0 |
| | Total | 33 | 100.0 | 100.0 | |

**inforcomm6**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | very effective | 14 | 42.4 | 43.8 | 43.8 |
| | effective | 6 | 18.2 | 18.8 | 62.5 |
| | ineffective | 1 | 3.0 | 3.1 | 65.6 |
| | very ineffective | 11 | 33.3 | 34.4 | 100.0 |
| | Total | 32 | 97.0 | 100.0 | |
| Missing | System | 1 | 3.0 | | |
| Total | | 33 | 100.0 | | |