# THE EFFECT OF INTERNAL CONTROL SYSTEM ON FINANCIAL PERFORMANCE IN NIGERIA FEDERAL PARASTATALS WITH EMPHASIS ON THE EDUCATIONAL INSTITUTIONS IN NIGERIA


**DANJUMA JIBRIN ISA**

**PG/SU/MSC/17/101001**


**A RESEARCH THESIS SUBMITTED TO**

**COLLEGE OF MANAGEMENT AND SOCIAL SCIENCES,**

**SALEM UNIVERSITY, LOKOJA, KOGI STATE**

**IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE**

**AWARD OF MASTER OF SCIENCE DEGREE (ACCOUNTING OPTION)**

**SUPERVISOR: ASSOCIATE PROF. DAVID OYEYEMI OLOPADE**

**FEBRUARY, 2020**

# DECLARATION

I, **Danjuma Jibrin Isa**, hereby declare that this research paper is my original work based on my findings and discussion of data collected, under the supervision of Ass. Prof. D. O. Olopade and that it has not been published or submitted for any other degree award to any other university before. Where the views and ideas of other authors/researchers have been expressed, they have been duly acknowledged.

**Signed**………………………………… **Date**…………………………………….

**DANJUMA JIBRIN ISA**

**PG/SU/MSC/17/101001**

## CERTIFICATION

This thesis, entitled "The Effect of Internal Control System on Financial Performance in Nigeria Federal Parastatals". **DANJUMA JIBRIN ISA** has met the regulations governing the award of Master of Science (M.Sc.) Accounting, Department of Management Sciences of Salem University, Lokoja.

| | | |
|---|---|---|
| ............................................ | .................................. | .............................. |
| Ass. Prof. D. O. Olopade<br>Supervisor | Signature | Date |
| ............................................ | .................................. | .............................. |
| Ass. Prof. Hassana Oseilve Ali<br>Coordinator | Signature | Date |
| ............................................ | .................................. | .............................. |
| Dr. Otache Innocent<br>Head of Department | Signature | Date |
| ............................................ | .................................. | .............................. |
| Ass. Prof. Alewo J. Akubo<br>Dean, College of Management<br>and Social Sciences | Signature | Date |
| ............................................ | .................................. | .............................. |
| Prof. (Mrs.) Dorcas Oluwade<br>Dean, School of Postgraduate Studies | Signature | Date |
| ............................................ | .................................. | .............................. |
| Prof. S. A. Adediran<br>External Supervisor | Signature | Date |

## DEDICATION

This research project is first and foremost dedicated to the Almighty God for the knowledge, wisdom and understating granted me during the course of the programme and to my lovely wife, children, father, mother and siblings.

## ACKNOWLEDGEMENTS

All thanks be to God Almighty the Maker of heaven and earth, the Giver and Sustainer of all life, who through His grace made this research work a success. I will forever be grateful.

My immeasurable and unquantifiable gratitude and appreciation go to my supervisor, Associate Prof. David Oyeyemi Olopade for his guidance, support, corrections, advice and constructive criticisms that laid a solid foundation for this study and ensuring the success of this research work, despite his tight schedules.

My immense gratitude goes to all my lecturers, who allowed me to tap from their endowed knowledge, making themselves available whenever I needed assistance.

My earnest appreciation goes to all staff of Salem University Lokoja, Kogi State for their enormous assistance in making the study a success through provision of data.

My sincere thanks go to all my friends and close associates who are too numerous to mention for their prayers, advice and support rendered to me in the course of my study.

My appreciation would not be complete without giving recognition to my dearest wife Onete Danjuma, my children and my entire family for their love and support.

# ABSTRACT

**Abstract**

*The study examined the effect of internal control on financial performance of selected federal parastatals with emphasis on educational institution. The main objective of the study was to establish the effect of internal control systems on financial performance in federal parastatals. The study specific objectives were; to determine the effect of control activities, risk assessment, control environment, information and communication and monitoring on financial performance of the parastatals. The study was anchored on agency theory, stewardship theory, positive accounting theory and attribution theory. The study used a descriptive research design. This study took a sample study approach with its target population being the different categories of staff in different departments of the federal parastatals. It took on a sample of 73 employees. Primary data was collected from sample population using open and closed ended questionnaires. Descriptive statistics was used in the data analysis and information presented in statistical forms. A multiple linear regression was also used to analyze the relationship between the dependent and independent variable. The study realized that the control environment, risk assessment, control activities and information and communication as indicators of internal control systems have a significant influence on the financial performance of the federal parastatals. The variables explained 99.1% of the changes in financial performance of the institutions. The study recommends that internal control systems among the federal parastatals need to be improved and accountability of organizational resources be upheld.*

TABLE OF CONTENTS

**CHAPTER THREE: METHODOLOGY**



**CHAPTER FOUR: DATA PRESENTATION, ANALYSIS AND INTERPRETATION**

# CHAPTER ONE

# INTRODUCTION

## 1.1 Background to the Study

Financial performance is the ability to operate efficiently, profitability, survive, grow and react to the environmental opportunities and threats Sebbowa (2009). For purposes of the study I adopted Ray and Kurt's definition of internal control systems. In as much as Internal control Systems are wide and numerous, for the purpose of this study, Internal control systems will be limited to; the Control Environment, Internal Audit, and Control activities whereas financial performance will be looked at basically from the three perspectives of Liquidity, Accountability and Reporting (Donald and Delno 2009). Organizations have invested heavily in improving the quality of their internal control systems over the past decade arguing that a good internal control yields good business. Many organizations are required to report on the quality of internal control over financial reporting, compelling them to develop specific support for their certifications and assertions. The following five objectives help management in designing effective internal controls: maintaining reliable systems, ensuring timely preparation of reliable information, safeguarding assets, optimizing the use of resources, preventing and detecting error and fraud (Alvin et al, 1993).

The reliability of financial reporting is effective to internal control efficiency to ensure that transactions and bookkeeping are appropriate and properly authorized, valid, correctly recorded, complete, and on time. Moreover, it is very important that organizations have fairly summarized accounting information data disclosure Sebbowa (2009). However, in general, a quality reporting is affected by internal control mechanism. There is a general perception that institution and enforcement of proper internal control systems will always lead to improved financial performance. It is also a general belief that properly instituted systems of internal control improve the reporting process and also give rise to reliable reports which enhances the accountability function of management of an entity. According to Dixon et al (1990), appropriate performance measures are those which enable organizations to direct their actions towards achieving their strategic objectives.

Internal control ensures effectiveness and efficiency of operations, reliability of financial reporting and compliance with applicable laws and regulations to which the company is subject.

According to Mawanda (2008), a sound internal control system helps the firm to prevent frauds, errors and minimize wastage. The increase of business units has encouraged the use of internal control as it ensures orderly and efficient conduct of business including adherence to internal policies. The completeness and accuracy of accounting records, timely preparation of financial information, can only be achieved if the proper internal control system is in place. The institution's ability to maximize its profit depends in part on the design and effectiveness of the processes and safeguards it has put in place over accounting and financial reporting (Ndungu, 2013). While no practical control system can absolutely assure financial reports will never contain material errors or misstatements, an effective system of internal control over financial reporting can substantially reduce the risk of such misstatements and inaccuracies in company's financial statements (Kaplan, 2008).

### 1.1.1 Internal Control Systems

Saleemi (2008) defines internal control as the whole system of controls, financial and otherwise established by the management in order to carry the business of the enterprise in an orderly and efficient manner, safeguard the assets and secure as far as possible the completeness and accuracy of the records. The components discussed below must be present and functioning effectively for any internal control system to achieve organizational objectives (COSO 1994).

Control environment is the major aspect of managing an organization. This is because it is a reflection of the attitude and the policies of management in regard with the importance of internal audit in the economic unit, Theofanis, et al (2011). However, it is the foundation for the other components of internal control and providing structure, Sudsomboon and Ussahawanitchakit, (2009). Control environment assist toward reducing the level fraudulent activities within organizational operation also the quality of an entity's internal controls system depend on the function and quality of their control environment, Amudo and Inanga (2009).

Therefore, providing a proper control environment for a public institution is very essential to the effectiveness of their operation.

Risk assessment is the identification and analysis of relevant risks associated with the achievement of the management objectives, Theofanis, et al (2011). Similarly, Sudsomboon & Ussahawanitchakit, (2009) view risk assessment as the process of identifying and analyzing management relevant risks to the preparation of financial statements that would be presented fairly in conformity with General Accepted Accounting Principles. The management must determine the level of risk carefully to be accepted, and should try to maintain such risk within determined levels. Therefore, public institutions are required to frequently assess the level of risk they are experiencing in order to take necessary actions.

Control activities are policies, procedures and mechanisms that ensure management's directives are properly carried out (Aikins, 2011; Rezaee, Elam & Sharbatoghlie, 2001). Proper documentation of policies and procedural guidelines in these aspects help to determine not only how the control activities are to be executed but also provide adequate information for auditors examination of the overall adequacy of control design over financial management practices (Aikins, 2011). These control activities ensure that all necessary actions should be taken with the aim to address risks so that organizational objectives are achieved. Example of control activities include; segregation of duties, daily deposit of cash receipts, bank reconciliations and limiting access to check stock.

Information and communication refers to the process of identifying, capturing, and communicating of relevant information in an appropriate manner and within timeframe in order to accomplish the financial reporting objectives (Aldridre & Colbert, 1994). However, effective communications should occur in a wider sense with information within the various sections of the organization (Theofanis et al, 2011). Most of the recent literature on internal control system frameworks gave concerned on information and communication as one of the internal control system components, because of their importance in influencing the working relationship within the organization at all levels (Amudo & Inanga, 2009). Hence, such information must be communicated throughout the entire organization in order to permit personnel to carry out their responsibilities with regard to objective achievement.

It is usually accepted that internal control systems need to be adequately monitored in order to assess the quality and the effectiveness of the system's performance over time. Monitoring provides assurance that the findings of audits and other reviews are promptly determined. (Theofanis et al, 2011), also notes monitoring of operations ensures effective functioning of internal controls system (Amudo & Inanga, 2009). Hence, monitoring determines whether or not policies and procedures designed and implemented by management are being carried out effectively by employees.

### 1.1.2 Financial Performance

According to Gerrit and Abdolmohammadi, (2010), Organizational performance encompasses accumulated end results of all the organization's work processes and activities. Financial Performance measures in the federal parastatals can be financial or non-financial.

The most effective way to improve financial performance is by reducing the level of irregularity and fraud through improvements in the firm's systems of internal financial control.

Shareholders need to be assured that their resources are being used efficiently and effectively in providing the right service at the least cost.

Donald and Delno (2009) noted that appropriate performance measures are those which enable the parastatals to direct their actions towards achieving their strategic objectives Brennan and Soloman (2008) contends that, performance is measured by either subjective or objective criteria; arguments for subjective measures include difficulties with collecting qualitative performance data from small firms and with reliability of such data arising from differences in accounting methods used by parastatals.

Value for Money is not paying more for a good or service than its quality or availability justifies as well public spending implies a concern with economy (cost minimization), efficiency (output maximization) and effectiveness (full attainment of the intended results. Sustained profitability can simply be seen as a continuous financial benefit that is realized when the amount of revenue gained from a business activity exceeds the expenses, costs and taxes needed to sustain the activity. The most effective way to improve net income is by reducing the level of irregularity and fraud through improvements in the parastatals' systems of internal financial control (Wainaina, 2014). Management should on a regular basis review all aspects of their parastatals and ensure internal controls that will strengthen the parastatals and increase profitability are in place, (Kamau, 2014). Every business decision contains risk; avoiding or mitigating this risk is achieved through strong internal controls. In this study, Return on Assets will be used to measure performance.

### 1.1.3 Internal Control and Financial Performance

Internal control systems including internal audits are intended primarily to enhance the reliability of financial performance, either directly or indirectly by increasing accountability among information providers in an organization (Jenning *et al*., 2008). Internal control therefore has a much broader purpose in the organization level. Internal controls provide an independent appraisal of the quality of managerial performance in carrying out assigned responsibilities for better revenue generation (Donald & Delno, 2009).

According to Ondieki (2013), fraud is a major enemy of profitability. Control measures are structured in place to avert, detect and eliminate fraudulent occurrence thereby creating an atmosphere for profitability. Effective Internal control system support profitability and growth of an organization by protecting the general assets and resources thereby averting cases of loss.

Strong internal control system help to prevent, minimize, transfer or eliminate risks, which may affect a profitable operation (Mugo, 2009)

Effective internal control system prevents waste and inefficiency in the production line and processes of goods and services. Effective internal control systems assist in the formulation and implementation of quality procurement procedures that helps to factor justification for requisition at proper lead-time, quantity and at lowest prices (Ngechu 2004). This will boost profitability than blind ordering which result to loss and waste. It is very important for every section and department of an organization to have an effective internal control system which is involved in blocking the organization's income leakages and loop holes thereby supporting a sustained profitability, growth and other general corporate goals and objectives.

### 1.2 Statement of the problem

According to Kirsty (2008) efficient internal controls creates an organization's confidence in its ability to perform or undertake a particular task and prevents errors and losses through monitoring and enhancing organizational and financial reporting processes as well as ensuring compliance with pertinent laws and regulations. Muio (2012) studied the impact of internal control on the financial performance of private hospitals in Nigeria and established a significant relationship between internal control system and financial performance. Kakucha (2009) evaluated the level of effectiveness of internal controls operating in the parastatals and established that there are deficiencies in the systems of internal controls, with the degree of deficiencies varying from one enterprise to another. Njui (2012) investigated the effectiveness of internal control and audit in promoting good governance in the federal parastatals in Nigeria and found that internal control has the greatest effect on corporate governance within Nigerian government ministries followed by risk management while compliance and consulting had the least effect. Ngugi (2011) survey of internal control systems among the listed private companies and the federal parasttals in Nigeria in which the results indicated that the private sector compared to the federal parastatals had a strong internal control system.

In Nigeria, a number of important trends have recently emerged within the manufacturing sector. It is worth noting that manufacturing sector is a major contributor to the economic development of the country. According to the Economic Survey 2015, Nigeria National Bureau of Statistics established that manufacturing sector contribution to Gross.

Effectiveness of internal control on financial performance is very important in every organization, because the task of internal cotnrol is to prevent and detect fraud in the organization. Internal controls help in achieving efficiency and effectiveness of operations.

Several studies have been carried out on internal controls globally, regionally and locally on the effect on internal control system on profitability of diverse firms. For example; globally studies by Abu-Musa (2004); Chunlan (2009); Wittayapoom (2011); and regionally Kakucha (2009) and Nyakundi & Nyamita (2014) have established there exist a relationship between effective internal control and financial performance of the firm. However, majority of these studies have concentrated on different industries, while others have concentrated on a mix of listed firms in their localities. In addition, the studies employed different methodologies hence such studies may not be generalized to the study context.

Locally, a study conducted by Simiyu (2011) on effectiveness of internal control system in some banking sectors clearly indicate that quiet a number of challenges like struggles with liquidity problems, financial reports are not made timely, accountability for the financial resources is still wanting, frauds and misuse of institutional resources. It is for this reason that this study sought to investigate the effects of internal controls on financial performance of federal parastatals with emphasis on educational institution. Therefore, this study sought to investigate the relationship between internal control systems and financial performance of federal parastatals with emphasis on educational institution in Nigeria.

Mohammed, (2003) researched on effect of the internal control system of Nigerian Railway on financial performance (Esmailjee, 1993). Chira (2009) researched on the analysis of internal controls systems in financial institution. The findings were that though various internal controls systems do exist in the banking industry more weight had been given to operational controls compared to other types of controls. There has been no research done on effects of internal control on performance of the federal parastatals. This study therefore sought to answer the question “what is the effect of internal control system on financial performance of federal parastatals with emphasis on educational institution?

**1.3 Research Questions**

This study sought to answer the following research questions in view of the specific objectives

(i) What is the effect of control activities on financial performance of the educational institution?

(ii) What is the effect of risk assessment on financial performance of the educational institution?

(iii) What is the effect of control environment on financial performance of the educational institution?

(iv) What is the effect of information and communication on financial performance of the educational institution?

(v) What is the effect of monitoring on financial performance of the educational institution?

**1.4 Objectives of the Study**

**1.4.1 General Objective**

The main objective of the study was to establish the effect of Internal Control Systems on Financial Performance of federal parastatals with emphasis on educational institution.

### 1.4.2 Specific Objectives

The specific objectives is to;

(i) determine the effect of control activities on financial performance of the educational institutions.

(ii) establish the effect of risk assessment on financial performance of the educational institutions.

(iii) evaluate the effect of control environment on financial performance of the educational institutions.

(iv) establish the effect of information and communication on financial performance of the educational institutions.

(v) establish the effect of monitoring on financial performance of the educational institutions.

## 1.5 Research Hypothesis

This study is undertaken on the basis of the following hypothesis in the null form of which were tested and results analysed.

$H_{o1}$: There is no significant relationship between the effect of control activities on financial performance of the educational institution.

$H_{o2}$: There is no significant relationship between the effect of risk assessment on financial performance of the educational institution.

$H_{o3}$: There is no significant relationship between the effect of control environment on financial performance of the educational institution.

$H_{o4}$: There is no significant relationship between the effect of information and communication on financial performance of the educational institutions.

$H_{o5}$: There is no significant relationship between the effect of monitoring on financial performance of the educational institutions.

**1.6 Significance of Study**

This study is of importance to the following classes of beneficiaries.

**Internal Auditors**

This study is of significant importance to the internal and external auditors at both federal and state government in Nigeria. It shall help to urge them (the auditors) to provide a better way to render their professional duties despite the challenges they might be facing in carrying their basic auditing functions.

**Government Agencies**

Another important significance of this study is that government agencies who are responsible for overseeing the activities of public or government institutions can make use of the outcome of this type of work for policy formulation purposes.

**Non-Governmental Organisations (NGOs) and Pressure Groups**

Non Governmental Organisation (NGOs) as well as Pressure Groups like Nigerian Labour Congress (NLC) are not exempted from benefiting from the findings of this type of study. The NGOs may find the outcome of the study useful for their researches on national development while the pressure groups (particularly those government workers at the parastatals studied) on the other hand can be brought to the light of the statutory duties of different types of auditors so that their expectations will not continue to be misconstrued with auditors' mere declaration of the true and fair view of the parastatals' financial statements.

**Researchers**

Researchers cannot but benefit from the outcome of this proposed study especially those authors whose studies shall be improved upon as well as those in academic who may wish to carry out similar study in the future.

**Management**

Finally, it is also the researcher's belief that invaluable benefits to management and those charged with governance in federal parastatals will emerge on how to streamline the systems of internal controls thus ensuring improved financial performance and ultimately ensure attainment of the institutional objectives.

## 1.7 Scope of the Study

### 1.7.1 Time Scope

The study related to information within a period of five years (2015-2020), the time period provides enough time for the researcher to acquire sufficient data about how financial performance has been done in the last five years in four parastatals.

### 1.7.2 Geographical Scope

In terms of capacity and the extent of coverage in this study, four federal parastatals in the education sector were covered with their headquarters in Abuja; and these include: The Joint Admission and Matriculation Board (JAMB), the National University Commission (NUC), the National Mathematical Centre (NMC) and West African Examination Council (WAEC). The study will be conducted in four parastatals located in Abuja district.

### 1.7.3 Content Scope

This study will provide insights on the effect of internal control systems on financial performance in federal parastatals with emphasis on educational institution, this topic will be supplemented by the following objectives, to establish the effect of internal control systems on financial performance of the educational institution, to determine the effect of control activities on financial performance of the educational institutions, to establish the effect of risk assessment on financial performance of educational institution, to evaluate the effect of control environment to financial performance of the educational institution, to establish the effect of information and communication on financial performance of the educational institutions and to establish the effect of monitoring on financial performance of the educational institutions.

The study exclusively reviewed many related extant journal publications so as to identify the gaps to be filled for the purpose of contributing to knowledge. All the research activities in terms of the pre-study survey, the actual survey – data collection, sorting and analysis and reporting were all managed within the forecast duration. The study covered a period of five years, thus from the year 2015 to 2020. The justification for selecting these four federal parastatals is due to their proximity within Abuja and their contribution to education.

## 1.8 Limitation of the Study

The respondents approached were reluctant in giving information fearing that the information sought would be used to intimidate them or print a negative image about them or their enterprises. Some even turned down the request to fill questionnaires. The study had an introduction letter from the University and assured them that the information they gave was to be treated confidentially and it was to be used purely for academic purposes.

The researcher also encountered problems in eliciting information from the respondents as the information required was subject to areas of feelings, emotions, attitudes and perceptions, which could not be accurately quantified and/or verified objectively. The researcher encouraged the respondents to participate without holding back the information they had since the research instruments would not bear their names. Other limitations are time and limited resources.

### 1.9 Organization of the study

This research project comprised of five chapters. Chapter one involved background of the study, statement to the problem, purpose of the study, objectives of the study, research questions, and significance of the study, limitation of the study, assumptions of the study and organization of the study. Chapter two reviews literature which include theoretical review, empirical review, research gaps and the conceptual framework. Chapter three dealt with methodology adopted, which explained the research design, target population, sampling design, and rationale for sample selection, data collection instruments, questionnaires, validity of the research instrument, reliability, data analysis and ethical considerations. Chapter four outlined the results, presentation of findings and discussion while chapter five shows the summary of the findings, conclusion and recommendation of the study.

### 1.10 Justification

Internal auditing in financial performance is one area that is given a lot of importance all over the world, it has been broadly researched. A lot of literature has been written on financial performance, and external auditors normally place a lot of emphasis on internal controls as measure to ensure sustainable and improved financial performance, however, it is the perception of the researcher that there are still gaps in the research so far done. This study will therefore, try to establish the linkage between internal controls and improved financial performance as measured by liquidity, accountability and financial reporting.

### 1.11 Operational Definition of Terms

| | |
|---|---|
| **Communication** | This is the transmission or exchange of information between two or more persons. The message emanates from the source to the receiver and back to the source as feedback. |
| **Decision making** | Relates to the act of making up your mind about a position or opinion or judgment reached after consideration. |
| **Financial Performance** | Is a subjective measure of how well a firm can use assets from its primary mode of business and generate revenues. |
| **Internal control** | Refers to the measures instituted by an organization so as to ensure attainment of the entity's objectives, goals and missions |
| **Internal Control Systems** | Is a process for assuring achievement of an organization's objectives in operational effectiveness and efficiency, reliable financial reporting, and compliance with laws, regulations and policies. |
| **Management** | This is the process of planning, controlling, directing, coordinating and evaluating ideas, activities and programmes in order to achieve the aims and objectives of an organization. |
| **Monitoring** | This is a process that assesses the efficiency and effectiveness of internal controls over time. |

**Planning** This is the process of setting goals, developing strategies, and outlining tasks and schedules to accomplish the goals.

**Productivity** This is the output-input ratio within a time period with due consideration for quality.

**Parastatal** This is any government-owned corporation. In Nigeria, the Joint Admission and Matriculation Board (JAMB), National Mathematical Centre (NMC), National University Commission (NUC) and West African Examination Council (WAEC) which are institutions proposed to be studied here in this study are all federal government parastatals.

# CHAPTER TWO

# REVIEW OF RELATED LITERATURE

## 2.1 Introduction

Internal control plays a vital role in how management meets its stewardship or agency responsibility; to maintain controls that provide reasonable assurance that those adequate controls exist over the entity's assets and records. Proper internal control does not only ensure that assets and records are safeguarded but also create an environment in which efficiency and effectiveness are encouraged and monitored (Messier, *et al.,* 2008).

According to Ricchiute (2000), the success of every organization be it private or public, profit or non-profit oriented is influenced by Internal Controls as it seeks to make efficient use of its resources. This implies that resources must be safeguarded to ensure that they are not employed to serve personal interests of workers. Organizations must ensure that a reliable Internal Control System is put in place to prevent the occurrences of any tragedy.

Internal Controls are policies, procedures, practices and organizational structures implemented to provide reasonable assurance that an organization's business objectives will be achieved and undesired risk events will be prevented or detected and corrected, based on either compliance or management initiated concerns (Awe, 2005).

Arens and Loebbecke (1997) defined Internal Control as the plan of organization and all of the coordinate method adopted within a business to safeguard its assets, check the accuracy and reliability of its accounting data, promote operational efficiency, and encourage adherence to prescribed managerial policies. Kloot and Sandercock (1982) defined Internal Control as "all methods used by a business to guard against errors, waste and fraud, to promote compliance with all company policies".

The Institute of Chartered Accountants of England and Wales (ICAEW), defined internal control as the whole system of controls, financial or otherwise, established by management in order to carry on the business of an enterprise in an orderly and efficient manner, ensure adherence to management policies, safeguard the assets and secure as far as possible, the completeness and accuracy of the records. According to McNamara (2004), Internal Controls are the measures taken by an organization for the purpose of protecting its resources against wastes, fraud, inefficiency; ensuring accuracy and reliability in accounting and operating data; Securing compliance with organization policies and evaluating the level of performances in all divisions of the organizations.

### 2.1.1 Classifications of Internal Controls

The Institute of Chartered Accountants of England and Wales (ICAEW), has classified Internal Control System under three main categories which are as follows;

i. **Preventive controls:** These are controls that predict potential problems before they occur and make adjustments. They also prevent an error, omission or malicious act from occurring. Examples of preventive controls includes: Using well-designed documents to prevent errors and establishing suitable procedures for authorization of transactions.

ii. **Detective controls:** These controls are designed to detect and report the occurrence of an omission, an error or a malicious act. Examples of detective controls includes: duplicate checking of calculations, periodic performance reporting with variance error message over tape labels and hash totals counter cheques post-due account reports.

iii. **Corrective controls:** These controls help to minimize the impact of a threat, identify the cause of a problem, correct errors arising from the problem. They also correct problems discovered by detective controls and modify the processing system (s) to minimize future occurrence of the problem. Examples of corrective controls are: contingency planning back up procedures and rerun procedures.

### 2.1.2 Elements of Internal Control System

All systems of internal control have certain features in common; these are checklist, principle or rules, concept of internal control. The elements of internal control are discussed below (Awe, 2005):

1. **Supervision**: Any system of internal control should include the supervision by responsible officials of day –to-day transactions and recording. Thus managers and directors should ensure employees work under their guidance and also ensure that workers are held responsible for their actions effectively and efficiently.
2. **Physical safeguards**: These are concerned mainly with the custody of asset and involve procedures and security measures designed to ensure that access to asset is limited to authorized personnel. Thus management should ensure that organizations asset such as computers and its accessories, vehicles etc. are safeguarded against theft, misuse, accident etc.
3. **Management control and management information system**: These are control exercised by management outside the day-to-day activities of the business systems. This includes the overall supervisory control by management. Thus management should ensure that they acquire information systems which will ensure that work and operations run smoothly and effectively.
4. **Segregation of Duties**: An individual should not be responsible for the recording and processing of a complete transaction. Segregation of duties help to reduces the risk of intentional manipulation or errors and increases the element of checking. The functions which are separate include authorization, execution, custody and recording in the case of

computer based accounting systems, systems development and daily operations. Thus managers should ensure that duties of employees are shared for more than one individual in one single task to prevent fraud and error.

5. **Authorizations and Approval**: All transaction should require authorization or approval by an appropriate responsible person or authority. Thus managers and directors should ensure that all cheques and other important documents are authorized and approved by them to ensure credibility and validity.

This chapter is divided into three main parts: the theoretical frameworks, empirical reviews and conceptual frameworks. The chapter has provided a summary and critique of literature received with aim of bringing out the research gaps to be addressed by the proposed study and clearly shows the relationships among the research variables.

### 2.2 Theoretical Frameworks

A theory is a set of statements or principles devised to explain a group of facts or phenomena, especially one that has been repeatedly tested or is widely accepted and can be used to make predictions about natural phenomena (Creswell,2006). This study used four theories to explain the influence of the independent variables on the dependent variable. The theories are the Agency theory, Stewardship theory, Positive Accounting Theory and the Attribution Theory.

#### 2.2.1 Agency theory

Agency theory was developed in 1976 by Jensen and Meckling. This theory is an agency relationship as a contract under which one or more persons (the principal(s)) engage another person (the agent) to perform some service on their behalf which involves delegating some decision-making authority to the agent. Agency theory analyses the relationship between two parties: investors and managers. The agent (manager) undertakes to perform certain duties for the principal (investors) and the principal undertakes to reward the agent. According to the agency theory, a firm consists of a nexus of contracts between the owners of economic resources (the principals) and managers (the agents) who are charged with using and controlling those resources. The theory posits that agents have more information than principals and that this information asymmetry adversely affects the principals ability to monitor whether or not their interests are being properly served by agents.

As such, the theory describes firms as necessary structures to maintain contracts, and through firms, it is possible to exercise control which minimizes opportunistic behavior of agents (Mwangi, 2012). According to the theory, in order to harmonize the interests of the agent and the principal, a comprehensive contract is written to address the interest of both the agent and the principal. The agent-principal relationship is strengthened more by the principal employing an expert and systems (auditors and control systems) to monitor the agent (Jussi & Petri, 2004).

Further the theory recognizes that any incomplete information about the relationship, interests or work performance of the agent described could be adverse and a moral hazard. Moral hazard and adverse selection impact on the output of the agent in two ways; not possessing the requisite knowledge about what should be done and not doing exactly what the agent is appointed to do.

The agency theory therefore works on the assumption that principals and agents act rationally and use contracting to maximize their wealth (Jensen & Meckling, 1976). This theory is applicable to this study simply because internal control is one of many mechanisms used in business to address the agency problem by reducing agency costs that affects the overall performance of the relationship as well as the benefits of the principal (Payne, 2003; Abdel-

Khalik, 1993). Internal control enhances the provision of additional information to the principal (shareholder) about the behavior of the agent (management) reduces information asymmetry and lowers investor risk and low revenue.

This theory is applicable to this study simply because internal control is one of many mechanisms used in business to address the agency problem by reducing agency costs that affects the overall performance of the relationship as well as the benefits of the principal (Payne, 2003; Abdel-Khalik, 1993). Internal control enhances the provision of additional information to the principal (shareholder) about the behavior of the agent (management) reduces information asymmetry and lowers investor risk and low revenue.

### 2.2.2 Stewardship Theory

Stewardship theory has its roots from psychology and sociology and is defined by Davis, Schoorman and Donaldson (1997) as "a steward protects and maximizes shareholders wealth through firm performance, because by so doing, the steward's utility functions are maximized".

Unlike agency theory, stewardship theory stresses not on the perspective of individualism (Donaldson & Davis, 1991), but rather on the role of top management being as stewards, integrating their goals as part of the organization. The stewardship perspective suggests that stewards are satisfied and motivated when organizational success is attained. Argyris (1973) argues that while agency theory looks at an employee or people as an economic being, which suppresses an individual's own aspirations, on the other hand Donaldson and Davis (1991) argue that stewardship theory recognizes the importance of structures that empower the steward and offers maximum autonomy built on trust. It stresses on the position of employees or executives to act more autonomously so that the shareholders returns are maximized. Indeed, Fama (1980) contend that executives and directors are also managing their careers in order to be seen as effective stewards of their organization, whilst, Shleifer, Andlei and Vishny (1997) claims that managers return finance to investors to establish a good reputation so that they can re-enter the market for future finance.

Meckling and Jensen (1994) further state the cost incurred to curb agency problems (reducing information asymmetries and accompanying moral hazards) is less when owners directly participate in the management of the firm as there is a natural alignment of owner managers' interest with growth opportunities and risk. It follows from the above that stewardship theory unlike agency theory is a complete contrast and doesn't emphasize on the need to incur monitoring or agency cost which includes establishing an internal audit function. Nevertheless Donaldson and Davis (1991) further note that returns are improved by having both of these theories combined rather than separated which implies that management must strike a balance. In this study the steward theory supports the study by the fact that managers of institutions of higher learning act as stewards of shareholders, suppliers, creditors, consumers and employees of these institutions.

### 2.2.3 Positive Accounting Theory

In accounting research, it is labeled as either positive research or normative research. Research that tends to predict and find explanations for particular phenomena is categorized as positive research. Theories that are related to such research are called positive theories (Deegan and Unerman, 2006). These kinds of theories are typically based on observations, which can empirically be tested and improved through further observations. Unlike positive theories, other theories are not based upon observations. These kind of theories are normative and grounded upon the beliefs of the researcher. Normative research theories are aimed to provide a prescription of how a particular practice should be undertaken, Deegan and Unerman, (2006).

This research departs from a positive theory, because this research uses empirical data to explain corporate sustainability practices.

The positive accounting theory itself was developed by Watts and Zimmerman (1986), who states that positive accounting theory is concerned with explaining accounting practice. It is designed to explain and predict which firms will and which firms will not use a particular accounting method but says nothing about which method a firm should use." The theory is based on "the assumption that all individual actions is driven by self-interest and that individuals will always act in an opportunistic manner to the extent that the actions will increase their wealth" (Deegan and Unerman, (2006). From this perspective, the positive accounting theory predicts that organizations will seek to put mechanisms in place to limit actions that are driven by selfinterest.

This is needed to align the interest of managers of the firm (agents) with that off the owners of the firm (the principles). The costs of dealing with problems concerning the agency relationship and installing appropriate mechanisms are referred to as 'monitoring cost'.

### 2.2.4 Attribution Theory

Attribution theory is a social psychology theory that explores how people interpret events and behaviors and how they ascribe causes to the events and behaviors. According to Schroth and Shah (2000), studies using attribution theory examine the use of information in the social environment to explain events and behaviors. Reffett (2007) asserts that when evaluators believe comparable persons would have acted differently in a given circumstance, they (evaluators) tend to attribute responsibility for an outcome to the person. On the other hand, when evaluators believe comparable persons would have acted similarly, the evaluators tend to attribute responsibility for the outcome to the situation. According to Wilks and

Zimbelman (2004), the first case refers to internal or dispositional attributions while the second one refers to external or situational attributions.

Earlier literature shows that people are inclined to attribute others behavior to dispositional tendencies and to attribute their own behavior to situational circumstances (Wilks and Zimbelman, 2004; Schroth and Shah, 2000). Often, this is when the observed behavior is negative. Consequently, evaluators are expected to infer the failure to detect internal control on revenue generation as a dispositional tendency on the auditor's part which concludes that auditors are negligent. Bonner et al. (1998) found that auditors are more likely to be sued when they fail to detect common misappropriations that would result to decreased revenues, and the evaluators believe that the fraud could have been detected by other auditors. The auditor's accountability for detecting fraud is extended by Reffett's (2007) study which predicted that auditors are more likely to be held accountable by evaluators when the auditors fail to detect fraud after they had identified the fraud occurrence as a fraud risk. The result of Reffett's study shows an increase in auditors‟ liability when an audit fails, after the auditors had identified the perpetrated fraud as a fraud risk and performed procedures to investigate the identified fraud risk. The findings support Reffett's prediction.

Attribution theory thus advocates for auditors to report on the effectiveness of firms‟ internal control. Auditors are therefore expected to gain a better understanding of the internal controls in place, assess the design and implementation of the internal controls, and test the operating effectiveness of the internal controls. This is deemed necessary for the auditors' reliance and possibly scaling back of other substantive audit procedures for the required revenue generation.

According to Bonner et al. (1998), evaluators can use the audit processes as a basis to determine negligence if auditors fail to detect internal control related fraud that may occur.

This theory is relevant to the study in that it suggests that when fraud occurs, identified parties should be held accountable and auditors, being the "public watch dogs" are most likely to be held accountable if evaluators determine substandard audit services were provided.

## 2.3 Empirical Review

### 2.3.1 Internal Control System and Financial Performance in Federal Parastatals

Ndiwa (2014) studied the assessment of Internal Control System on Financial Performance in tertiary training institutions in Nigeria. Many federal parastatals in Nigeria are faced with poor financial performance which in extreme cases has led to the closure of some of them, despite having the necessary resources to run them. The study, therefore, endeavoured to investigate the persistent poor financial performance from the perspective of internal controls which had hitherto been ignored. The general objective of the study was to establish the relationship between internal control and financial performance in federal parastatals with emphasis on educational institutions. The study was limited to the African Institute of Research and Development Studies. The findings indicated that most respondents were of the view that indeed there was a relationship between internal control and financial management.

In this light, therefore, the federal parastatals that had entrenched prudent internal control strategies were most likely to manage their finances better hence meeting their financial and other pertinent obligations almost seamlessly. The study concludes that most federal parastatals had an internal audit department which was largely understaffed. The researcher concluded that staffing of the internal audit department determined financial performance of the parastatals in question. Ndifon (2014) sought to establish the relationship between internal control activities and financial performance in federal parastatals in Nigeria. The study area is JAMB, NUC, NMC, WAEC. The study revealed that all activities of the parastatals are initiated by the top management. Regarding control activities, the study found that there is clear separation of role in the parastatals' finance and accounts department and that superior officer in the parastatals supervised regularly work done by their subordinate.

Also, the Ndifon (2014) study found that the institution financial statements are audited annually by external auditors. The study results further show that there is no significant relationship between internal control activities and financial performance of the federal parastatals. The investigation recommends proper checks and balances in all financial transactions. There should be effective and efficient security network to reduce frequent theft, threat to life and property. The study also recommends that management of the institution should organize regular training for staff on control mechanism.

Whittington & Pany (2001), talk about the comprehensiveness of internal controls in addressing the achievement of objectives in the areas of financial reporting, operations and compliance with laws and regulations. They further note that internal control also includes the program for preparing, verifying and distributing to the various levels of management those current reports and analyses that enable executives to maintain control over the variety of activities and functions that are performed in a large organization. They mention internal control devices to include; use of budgetary techniques, production standards, inspection laboratories, employee training and time & motion studies among others. According Bakibinga (2001), corporate law requires a divorce between ownership and management of an entity. Owners normally entrust their resources in the hands of managers. Managers are required to use the resources entrusted to them in the furtherance of the entity's objectives. Managers normally report to the owners on the results of their stewardship for the resources entrusted to them through a medium called financial statements. It is these financial statements that reveal the financial performance of an entity. John J. Morris (2011) believes that Enterprise Resource Planning systems provide a mechanism to deliver fast, accurate financial reporting with built-in controls that are designed to ensure the accuracy and reliability of the financial information being reported to shareholders.

Mwakimasinde, Odhiambo and Byaruhanga (2014) analyzed the effect of internal control systems on the financial performance of sugarcane out grower companies in Nigeria. The specific objective of the study was to determine the effect of internal control system components on the financial performance of the sugarcane out grower companies. Internal control system was characterized by control environment, risk assessment process, information system and control activities while financial performance was characterized by cost per unit, goal attainment and profitability or surplus. The regression results also show that internal control system helps increase financial performance of sugarcane out grower companies percent. Based on the findings and conclusions of the study, the following recommendations were made; Internal control system has been found to have a statistically positive effect on performance of sugarcane out grower companies hence there is need for the sugarcane out grower companies to improve on their internal control system. Despite the fact that the study produced meaningful results it was subject to some limitations which provide avenues for further research.

Kinyua (2015) studied the Effect of Internal Control Environment on the Financial Performance of Companies quoted in the Nigeria Securities Exchange. The objective of the study was to establish the effect of internal control environment on financial performance of companies quoted in Nigeria Securities Exchange. The findings indicated that there is a positive significant relationship between internal control environment and financial performance, which corroborates with the findings of Mawanda (2008), states that institution which have enforcement of proper internal control systems will always lead to improved financial performance. The study, therefore, recommends that internal control environment should be enhanced to further improve the financial performance of companies quoted in Nigeria securities exchange.

Kamau, (2014) investigated the effect of internal controls on the financial performance of manufacturing firms in Nigeria. The findings revealed that most manufacturing firms had a control environment as one of the functionality of internal controls of the organization that greatly impacts on the financial performance of the firms. The results also revealed that the staffs were trained to implement the accounting and financial management systems, the security system identified and safeguarded organizational assets. The statistical result from the regression analysis shows that there is a positive relationship between internal control and financial performance of manufacturing firms in Nigeria. The study recommends that both internal and external auditor should be constantly updated and well-grounded on international financial reporting standards (IFRS) and principles in order to enhance their knowledge and skills in application of accounting practices and to keep them updated on the contemporary issues.

A study carried out by Palfi and Muresan (2009) examined the importance of a well-organized system of internal control in regards to the banking sector, thus credit institutions of Nigeria. The analysis of the survey answers revealed that the continuous collaboration, based on periodical meetings, between all structures of bank, characterizes an effective internal audit department. The Abu Musa (2010) study investigated the existence and adequacy of implemented security controls of computerized accounting information systems in the Saudi banking sector. The results of study revealed that the vast majority of Saudi banks have adequate security controls in place. The results also enable bank managers and practitioners to better secure their computerized accounting information systems and to champion the security of information technology for the success of their banks (Simiyu, 2011).

## 2.4 Summary of Literature and Research gaps

The reviewed literate showed mixed results on the relationship between the internal control systems and financial performance of organizations. Most of the researches done on internal controls are case studies and focus on specific institutions/companies that exhibit particular characteristics or material weakness in the internal control systems. Since most of the studies failed to show the contribution of control activities, control environment and monitoring, therefore this research address to fill those gaps.

## 2.5 Conceptual framework

A conceptual framework is a theoretical structure of assumptions, principles, and rules that holds together the ideas comprising a broad concept (Huberman, 1994). A conceptual framework is a basic structure that consists of certain abstract blocks which represent the observational, the experiential and the analytical/ synthetic aspects of a process or system being conceived. It is a set of broad ideas and principles taken from relevant fields of enquiry and used to structure a subsequent presentation. The interconnection of independent and dependent variables completes the framework for certain expected outcomes.

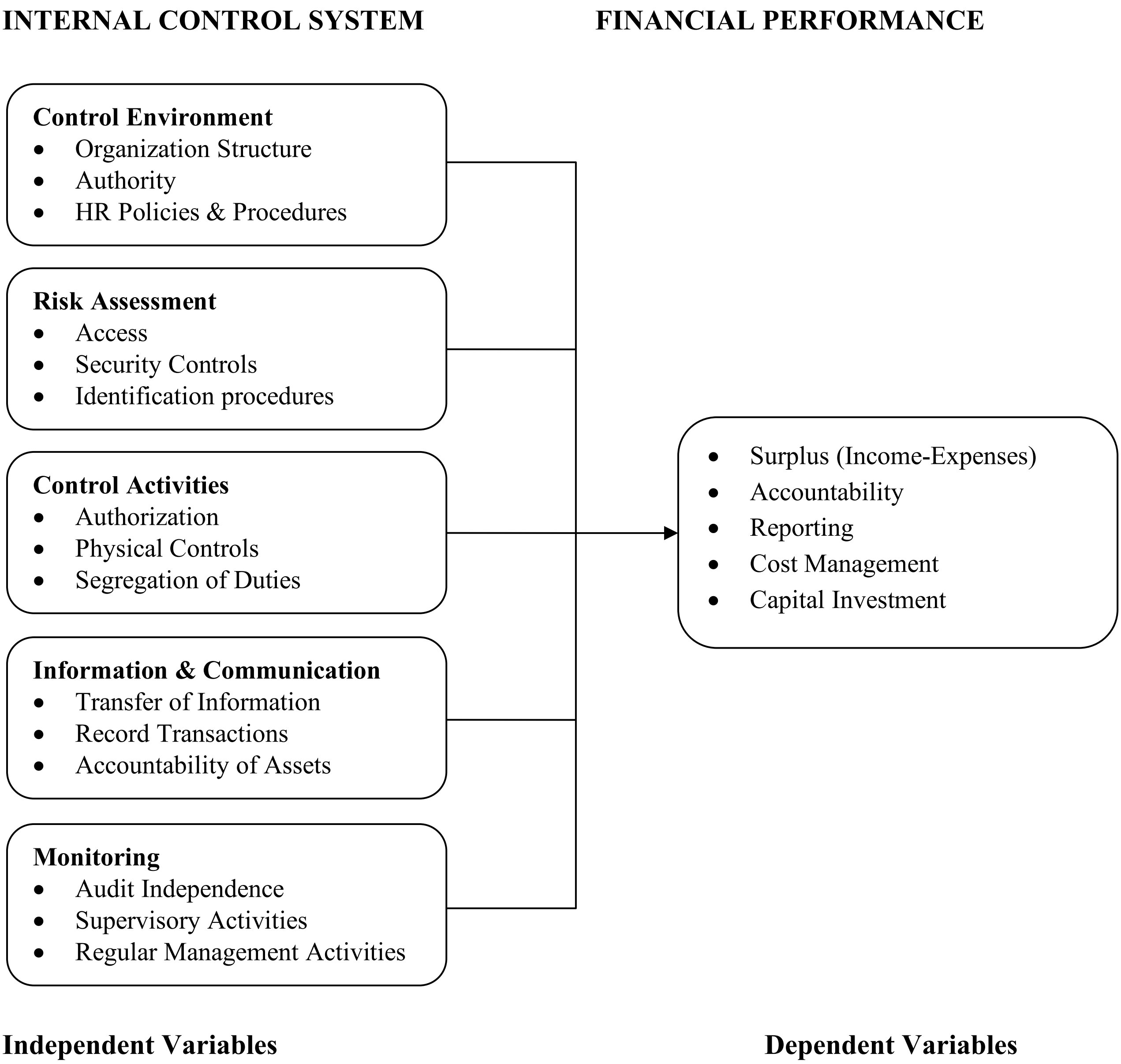


**Figure 2.1 Conceptual Framework**

**Source: Researcher (2020)**

### 2.5.1 Control Environment

The control environment is the overall control consciousness of an organization effected by management through policies, ethical standards, procedures, and monitoring processes. This reflects the board of directors and management decision to internal control in federal parastatals. The control environment includes; management philosophy seen in its vision and mission for the organization in their struggle to ensure proper accountability of funds. The control environment is the attitude towards internal control and control consciousness established and maintained by management and staff of federal parastatals. (Havesi, 2005).

Anthony, (2004) noted that control environment sets the tone for the organization, influencing the consciousness of its people. It is the foundation for all the other components of internal controls. The control environment is the consciousness of the organization, thus, the atmosphere that compels organizational members to conduct their activities and responsibilities as per the laid down control objectives. According to Lower, (1998), an effective control environment is where competent people understand their responsibilities, the limits to their authority, and are knowledgeable, mindful, and committed to doing what is right and doing it the right way. Jenny & Pamela, (2006) assert that "a governing board and management enhance an organization's control environment when they establish and effectively communicate written policies and procedures, a code of ethics, and standards of conduct". They also enhance the control environment when they behave in an ethical manner - creating a positive tone at the top – and when they require that same standard of conduct from everyone in the organization.

The institute of Internal Auditors looks at control environment as one that dictates upon organizational members a feeling of consciousness that their continued stay at an organization is assured by demonstration of their expected level of competence as well as their comprehension of authority and responsibility limits. In this respect, organizational members feel and realize that they are accountable to the organization (Dublin, 1999). Okwach, (2000) disclosed that under such an environment, the organizational members utilize the available resources efficiently and effectively hence, achieving the expected organizational performance.

Okwach, (2000) views control environment as an enable of execution of tasks by organizational members as set by the board members and departmental managers through attitudes and actions that encourage the highest level of integrity, appropriate leadership philosophy, operating style and personal and professional standards, thereby leading to reasonable compliance and operational efficiency levels. The control environment makes organizational members aware of the job requirements and efficiency expected of them to carry out tasks that translate in the overall organizational performance. Spillane & Reimer, (2000) subscribed to the view that control environment exists when the responsibility to execute assigned task is not directed by anyone but rather consciously dictated upon organizational members, and also when members find themselves obeying, observing and responding to the desired organizational culture, operations and activities as efficiently and effectively declared.

### 2.5.2 Risk assessment

This is the process the organization goes through to identify and analyze relevant risks which may affect the organizations' ability to achieve its major objectives. Risk assessment in federal parastatals involves using professional judgment carefully in identifying and evaluating factors, which can reflect the organization adversely and result in possible losses both financially and non-financially.

COSO (2004) considers risk assessment as the process used to identify and analyze risks to achieve the entity's objectives and determine appropriate response. It includes risk identification from external and internal factors, at the entity and the activity levels, risk evaluation, assessment of risk appetite of the organization and the developing responses of all the risks in the organization. There are four types of responses to risk which must be considered; transfer, tolerance, treatment, or termination. The appropriate controls can be either preventive or detective. According to Jenny & Pamela (2006), risk assessment refers to the identification and analyzing of relevant risks to the achievement of objectives, forming a basis for how the risks should be managed.

During the high levels, goals and objectives should be presented in a strategic plan that includes a mission statement and broadly defined strategic initiatives. In a similar view, Gleiling (2005) noted that at the departmental level, goals and objectives should be classified in the following categories; operational, financial, and compliance objectives. A clear set of goals and objectives is fundamental to the success of an organization. Specifically, a department or work unit should have a mission statement, written goals and objectives for each significant activity (Manasseh, 2000). Furthermore, goals and objectives should be expressed in terms that allow meaningful performance measurement (Gleiling, 2005). In this regard, there are certain activities which are significant for all organizations such as; budgeting, purchasing goods and services, hiring employees, evaluating employees, and safeguarding property and equipment.

Cochran (2000) considers the identification of risks as important for the achievement of the organization objectives because an effective internal control system, no matter how well conceived, and operated, can provide only reasonable- not absolute-assurance to management about the achievement of an entity’s objectives. He says that managers should determine what can go wrong, what areas have the most risk, what asset are at risk, and who is in a position of risk . The risks may include; public scandal, misuse of revenues, assets and personnel, and also the use of unreliable information for decision making. Alternatively, Smith, (2005) considers identification of risks as a challenge to some organizations.

### 2.5.3 Control Activities

There are policies and procedures that help ensure that management effectiveness is carried out correctly and in a timely fashion. These involve control activities such as performance reviews, information procession, physical controls, and segregation of duties. These activities are implemented to ensure that the objectives of federal parastatals are accomplished (Lamoya, 2005). Control activities are the instructions, rules, methods, and decisions established over various activities by management to prevent or reduce risks that affect federal parastatals in providing proper financial performance (DiNapoli, 1999). Walker (1999) argues that, control activities occur at all levels and functions of the entity. They include a wide range of activities such as approvals, authorizations, verifications, reconciliations, performing reviews, maintenance of security and the creation and maintenance of related records which reflect financial performance in institutions.

Control activities are the administrative and supervisory actions that management engages into keep the organization focused and cautious in addition to keeping members effective and efficient at task execution. Dublin (1999) considers control activities as activities that provide evidence that a loss has occurred. They include; analysis, reconciliations, and reviews. He emphasized the importance of authorizations in the form of expenditures as a result of an approved budget as a control activity. Approval of budget expenditure should involve questioning of unusual items, justification of the transaction and review of source documents (Van Horne, 2002). Control activities are actions supported by internal control objectives, procedures and policies that enable managers to address risk timely, effectively and efficiently (Steeves, 2004). He further categorized the activities as preventive and detective. Managerial and administrative measures that are pro-active in nature and prevent undesirable events from occurring are what he referred to as preventive controls. They comprise; proper authorization, segregation of duties, sufficient documentation, and physical control of assets.

COSO (2004) considers control activities as policies and procedures established to address risks and to achieve the entity's objectives. To be effective, control activities must be appropriate, function consistently according to plan throughout the period, and be cost effective, comprehensive, reasonable, and directly relate to the control objectives. Control activities occur throughout the organization, at all levels and functions. They include a range of preventive and detective activities for example; authorization and approval procedures, segregation of duties (authorizing, processing, procuring recording, receiving), controls over access to resources and records, verifications, reconciliations, reviews of operating performance, reviews of operations and activities, and supervision (assigning, review in and approving, guidance and training), among others. Under reviews of performance, management compares information about current performance to budgets, forecasts, prior periods, or other benchmarks to measure the extent to which goals and objectives are being achieved and to identify unexpected results or unusual conditions that require follow-up.

Pandey, (1998), COSO (1998) & Anthony (2004), assert that control activities comprise of the policies and procedures that help to ensure that management directives are carried out. They contend that activities supported by policies and procedures when carried out properly and in a timely manner, manage or reduce risks. In the same way that managers are responsible for identifying financial and compliance risks for their operations, they also have line responsibility for designing, implementing and monitoring their internal control systems.

### 2.5.4 Information Communication

This is an internal control system that involves the procedure of identifying; capturing and exchanging information on a timely basis to enable the organizations internal audit accomplish its objective of ensuring proper accountability of funds.  Lamoye (2005) states that, for the control system to be effective and efficient there should be relevant and reliable information, which should be recorded and communicated to management and to the internal audit function. For an internal auditor to carry out internal control and operational duties and responsibilities, the information should be timely and go to the internal auditors in the right form. All personnel do understand their roles relating to others and their accountability through the information and communication.

ACCA (2005) takes information flow as a process by which the organizational members receive the right information at the right time. Here, formal and informal channels information flows are noted. Formal channels comprises of downward or top down, upward or bottom up and horizontal or lateral forms. The informal channels comprises majority grapevine. It is further noted that for information to achieve its intended purpose, it must be identified, captured, processed and communicated in an authentic, useful and timely manner. In addition, the information communicated must be reliable, accurate, complete, specific, understandable, directed to the right people and relevant to the intended users.

Semanda (2005) considers the bottom up channel as a carrier of feedback from subordinates to management involving verbal and non-verbal communication. Stahl (1987) argued that verbal methods constitute management subordinate consultations, face to face discussions, and negotiations while non-verbal methods constitute written reports and suggestion boxes. Such interactions between management and subordinates are pivotal in motivating subordinates towards achievement of expected organizational performance given their democratic nature. According to Suzanne (2005) the top down channel mostly occurs in an impersonal nature leading to information flow ambiguity, clear message delivery failure to subordinates contrary to what is intended by management. However, the bottom up channel supplements the top down to enable management attain desired organizational effectiveness.

This was elaborated by Sudha, (1999) who said that organizations using the top down channel tend to suffer information gaps, misunderstandings and consequently performance deficiencies.

Sudha (1999) stated that the lateral information flow is needed to conduct tasks, share information, resolve conflicts and solve problems. In this case, lateral information flow is the communication between groups of people at the same level and thus, information flow between colleagues, departments or units. The author warned that poor lateral communication breeds malicious messages, rumors and confusion that in turn would hurt employees and the overall organizational performance. Byekwaso, (2000) emphasized the need for a two way form of information flow to achieve the desired organizational performance because both information flows facilitate the implementation of planned activities. However, he stressed the need for guidance of this information by internal control objectives.

Internal controls also cover the aspects of information and communication systems or processes that support the identification, capture, and exchange of information in a form and time frame that enables people to carry out their responsibilities (Walker, Shenkir & Burton, 2003). Chen, (2004) said that information systems provide reports containing operational, financial and compliance related information that make it possible to run and control an organization. However, information and communication are essential to effecting control; information about an organization’s plans, control environment, risks, control activities, and performance must be communicated up down and across an organization (Wales, 2005). He emphasized that reliable and relevant information from both internal and external sources must be identified, captured, processed, and communicated to people who need it in a form and time frame that is useful.

### 2.5.5 Monitoring and Evaluation

Monitoring is the process that assesses the quality of internal controls over time. It involves assessment by appropriate personnel on the design and operation of controls on timely basis and taking necessary actions. Monitoring can be done through ongoing activities. Ongoing monitoring procedures are built into normal recurring activities of an organization (Simmons, 1995)

The Institute of Internal Auditors (1995) considers monitoring to encompass activities such as periodical evaluations, internal audits and management self-assessments. COSO (1998), Dublin (1990), Magala (2001) & Lary (2009) view monitoring as needed to ensure that planned administrative, operational and financial tasks and activities are carried out in a timely and proper manner such that set internal control objectives and organizational performance are achieved. Monitoring aims at determining whether organizational members are carrying out or have carried out their tasks efficiently and effectively as required by the organization's policies (Spillane, & Reimer, 2000).

Monitoring processes are used to assess the quality of internal control performance over time. Monitoring is the assessment of internal control performance over time. It is accomplished by on-going monitoring activities and by separate evaluations of internal control such as self-assessments, peer reviews, and internal audits. .According to Anthony, (2004), the purpose of monitoring is to determine whether internal control is adequately designed, properly executed, and effective. Internal control is adequately designed and properly executed if all the five control components (control environment, control activities, risk assessment, information and communication and monitoring) are present and functioning as designed. Internal control is effective if management and interested stake holders have reasonable assurance that they understand the extent to which operational objectives are achieved, published financial statements are being prepared reliably, applicable laws and regulations are being compiled.

# CHAPTER THREE

# METHODOLOGY

## 3.1 Introduction

This chapter provides a description of the research design and methodology that was employed in the study. It looks at the various sources of data for the study, sampling design and its procedures, population and sample size, validity and reliability of data collection. The chapter also included the methods that were used in data collection, the instruments used in data collection and the limitations of the study.

## 3.2 Research design

According to Kothari (2007), research design is defined as a framework that shows how problems under investigation will be solved. This study adopted a cross sectional descriptive survey design because it provides a clear outcome and the characteristics associated with it at a specific point in time. Descriptive design was relevant for this study since it focuses at one point in time and does not require several rounds of monitoring. The descriptive survey attempted to document current conditions to describe what exists at the moment (Mouser and Katton 1989). The study employed both qualitative and quantitative methods of data analysis most of the findings were quantitatively analyzed.

## 3.3 Target Population

Kombo and Tromp (2011) define a population as a group of individuals, objects or items from which samples are taken for measurement. The target population for the study was the employees in accounting/finance, administration and operations departments in the four federal parastatals emphasis on educational institution. The number of staff in the accounts/finance, administration and operations departments in the four federal parastatals as shown in table 3.1 below

**Table 3.1 Staff Population**

| Department | JAMB | NUC | WMC | WAEC | TOTAL |
|---|---|---|---|---|---|
| Accounts/Finance | 5 | 3 | 3 | 4 | 15 |
| Administration | 11 | 10 | 3 | 11 | 35 |
| Operations | 10 | 10 | 11 | 9 | 40 |
| **Grand Total** | **26** | **23** | **17** | **24** | **90** |

*Source: Researcher (2020)*

### 3.4 Sampling Design

According to Mugenda and Mugenda, (2003), a sample of at least 10% to 30% of the entire population is a valid sample size for a considerably small size. A purposive sampling approach was used in this study to allow the research to pick concerned staff especially from the accounts/finance, administration and operations department within the federal parastatals. Therefore the sample was 73 staff of the federal parastatals as shown in the table 3.2.

### 3.5 Sample Size

**Table 3.2 Sample size adopted by Krejcie and Morgan**

| N | S | N | S | N | S |
|---|---|---|---|---|---|
| 10 | 10 | 220 | 140 | 1200 | 291 |
| 15 | 14 | 230 | 144 | 1300 | 297 |
| 20 | 19 | 240 | 148 | 1400 | 302 |
| 25 | 24 | 250 | 152 | 1500 | 306 |
| 30 | 28 | 260 | 155 | 1600 | 310 |
| 35 | 32 | 270 | 159 | 1700 | 313 |
| 40 | 36 | 280 | 162 | 1800 | 317 |
| 45 | 40 | 290 | 165 | 1900 | 320 |
| 50 | 44 | 300 | 169 | 2000 | 322 |
| 55 | 48 | 320 | 175 | 2200 | 327 |
| 60 | 52 | 340 | 181 | 2400 | 331 |
| 65 | 56 | 360 | 186 | 2600 | 335 |
| 70 | 59 | 380 | 191 | 2800 | 338 |
| 75 | 63 | 400 | 196 | 3000 | 341 |
| 80 | 66 | 420 | 201 | 3500 | 346 |
| 85 | 70 | 440 | 205 | 4000 | 351 |
| 90 | 73 | 460 | 210 | 4500 | 354 |
| 95 | 76 | 480 | 214 | 5000 | 357 |
| 100 | 80 | 500 | 217 | 6000 | 361 |
| 110 | 86 | 550 | 226 | 7000 | 364 |
| 120 | 92 | 600 | 234 | 8000 | 367 |
| 130 | 97 | 650 | 242 | 9000 | 368 |
| 140 | 103 | 700 | 248 | 10000 | 370 |
| 150 | 108 | 750 | 254 | 15000 | 375 |
| 160 | 113 | 800 | 260 | 20000 | 377 |
| 170 | 118 | 850 | 265 | 30000 | 379 |
| 180 | 123 | 900 | 269 | 40000 | 380 |
| 190 | 127 | 950 | 274 | 50000 | 381 |
| 200 | 132 | 1000 | 278 | 75000 | 382 |
| 210 | 136 | 1100 | 285 | 1000000 | 384 |

**Note:** N is population Size.    S is Sample Size

*Source: Krejcie & Morgan, 1970*

### 3.6 Data Collection Procedure

The study relied mostly on primary data sources. Primary data was collected using semi structured questionnaires with both close-ended and open-ended questions. Drop and Pick later method of data collection was employed by the researcher to give respondents sufficient time to respond to the questions of the study. Secondary data was obtained from the analysis of company's audited annual reports. This secondary data collected, was used to support the findings on the primary data and provide more information that may have not been captured by the respondents.

### 3.7 Validity and Reliability of Research Instruments

#### 3.7.1 Reliability

To establish the reliability and validity of the research instrument the study sought for opinions of experts in the field of study especially the study's supervisor and director general of business administration and strategic management. This facilitated the necessary revision and modification of the research instrument thereby enhancing validity.

Cronbach's Alpha was applied to measure the co-efficient of internal consistency and therefore reliability of the instrument. In order to check reliability of the results, study used Cronbach's alpha methodology, which is based on internal consistency. Cronbach's alpha measures the average of measurable items and its correlation. SPSS software was used to verify the reliability of collected data. Overall scales' reliability of the present situation and the desirable situation were tested by Cronbach's alpha, which should be above the acceptable level of 0.70 (Hair et al., 1998). The Cronbach's alpha obtained from the instruments used to collect data was 0.886 which indicates that the research instruments were reliable.

### 3.7.2 Validity

Validity is a measure of the degree to which data obtained from the instrument accurately and meaningfully represents the theoretical concept and in particular how the data represents the variables. Where validity has been established, any inferences made from such data was accurate and meaningful (Mugenda & Mugenda, 2003). The validity of a study increases by using various sources of evidence (Yin, 2003).

## 3.8 Data Analysis and Presentation

The process of data analysis involved several stages namely; data clean up, editing and coding. Descriptive statistics (means and standard deviation) and multiple regression analysis were used to analyze the data. Data was then coded and checked for any errors and omissions (Kothari, 2007). Frequency tables, percentages and means were used to present the findings. Responses in the questionnaires were tabulated, coded and processed by the use of a computer Statistical Package for Social Science (SPSS) program to analyze data. The relationship between the dependent variable (Y) and the independent variable (X) was tested using multiple linear regression model captured below.

$Y = \alpha + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \beta_4 x_4 + \beta_5 x_5 + \varepsilon$ where:

Y = Financial Performance

$x_1$ = Control environment

$x_2$ = Risk assessment

$x_3$ = Control Activities

$x_4$ = Information and Communication

$x_5$ = Monitoring

$\alpha$ = Constant

$\varepsilon$ = Error term

### 3.9 Ethical Considerations

Ethical considerations in research are critical. Ethics are the norms or standards for conduct that distinguish between right and wrong. They help to determine the difference between acceptable and unacceptable behaviors. Informed consent was obtained from all those participating in the study. Those not willing to participate in the study were under no obligation to do so. Respondents' names were not indicated anywhere in the data collection tools for confidentiality and information gathered was only used for the purposes of this academic study. The necessary research authorities were consulted and permission granted. The researcher ensured that nothing could be traced back to any of the respondents should the findings of this study be published.

## CHAPTER FOUR

## DATA PRESENTATION, ANALYSIS AND INTERPRETATION

### 4.1 Introduction

This chapter presents the analysis of the collected data, the results and finally the interpretation of the findings. Percentages, frequencies, frequency tables and pie charts are presented to illustrate the analysis and interpretation of the data.

### 4.1.1 Questionnaire Response Rate

As mentioned earlier, out of the selected sample of 73 respondents, 8 (10.96%) did not respond to the questionnaires accordingly, hence only 65 (89.04%) questionnaires were used in the subsequent analysis. This is consistent with Mugenda and Mugenda (2003) recommendation that a response rate of 50% is adequate for analysis and reporting; a rate of 60% is good and a response rate of 70% and over is excellent. This clearly shows that the response rate in this study was excellent.

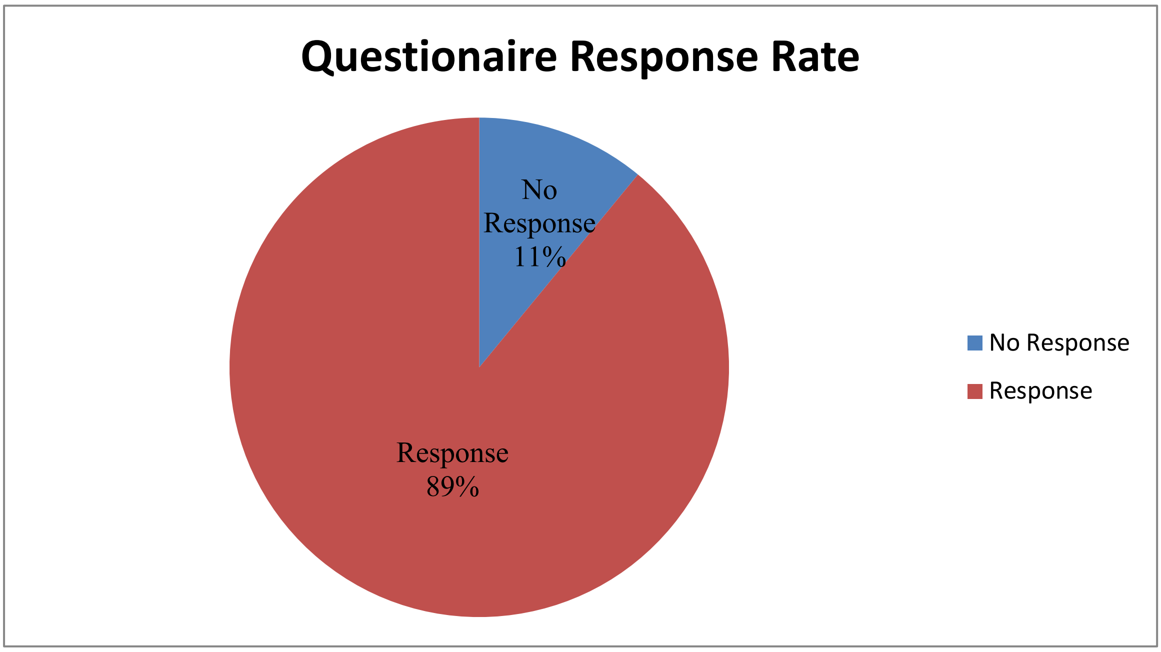


***Figure 4.1 Response rate***

### 4.1.2 Validity and Reliability of Research Instruments

In order to determine the reliability of the research instruments, a pretesting was conducted by the researcher. A Cronbach Alpha was used to determine reliability where a coefficient of 0.7 or more indicated that the research instruments were reliable. The findings are indicated in table 4.1.

**Table 4.1Validity and Reliability of Research Instruments**

| Variables | No. of Items | Cronbach Alpha |
|---|---|---|
| Control Environment | 5 | 0.898 |
| Risk Assessment | 5 | 0.862 |
| Control Activities | 5 | 0.955 |
| Information & Communication | 5 | 0.827 |
| **Financial Performance of the Federal Parastatals** | **5** | **0.886** |

*Source: Researcher, 2020*

From Table 4.1 above, the Cronbach Alpha for performance is 0.886, control environment is 0.898, risk assessment is 0.862, control activities is 0.955 while for information and communication it was 0.827. All the coefficients of Cronbach Alpha were above 0.7, this indicates that the research instruments were reliable.

## 4.2 Background Information

The study sought to establish the background information on how long the parastatal have been in existence, level of staffing of accounts or/and finance departments, whether training is given to the staff on internal control, effectiveness of the internal control systems and existence of a financial management system among the federal parastatals with emphasis on educational institution.

### 4.2.1 Period of existence of the Parastatals

The study sought to find out how long the sampled parastatals had been in existence. 65% had been in existence over 10 years, 21% for between 6-10 years, 11% were between 1 and 5 years old while only 3% had been in existence for less than one year. This indicates that most of the parastatals had been in existence long enough to implement and have a working internal control system for their accounting and finance departments. This is illustrated in figure 4.2 below;

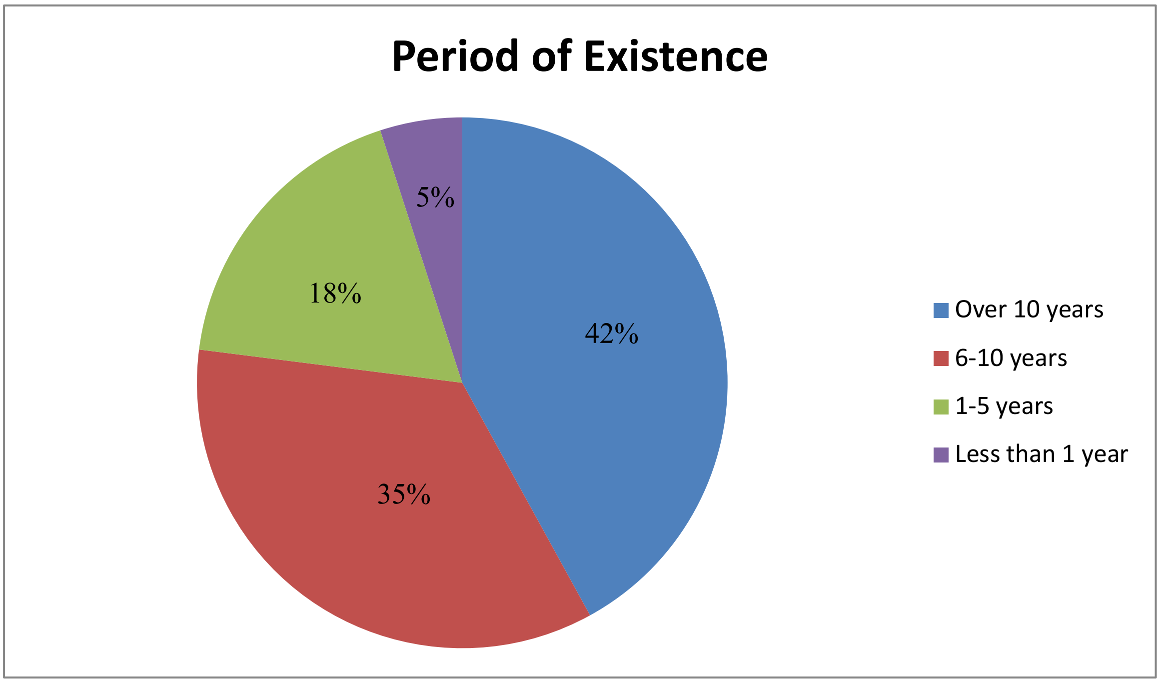


*Figure 4.2 Period of existence of the Institutions*

### 4.2.2 Level of staffing of Accounts/Finance Departments

The study further sought to establish the level of staffing of the accounts/finance departments among the federal parastatals in educational institutions. It was realized that 77% of the parastatals had well trained staff with respect to the accounts/finance department while 23% were not sufficiently trained. This indicates that most of the parastatals have sufficient labour force in the respective department.

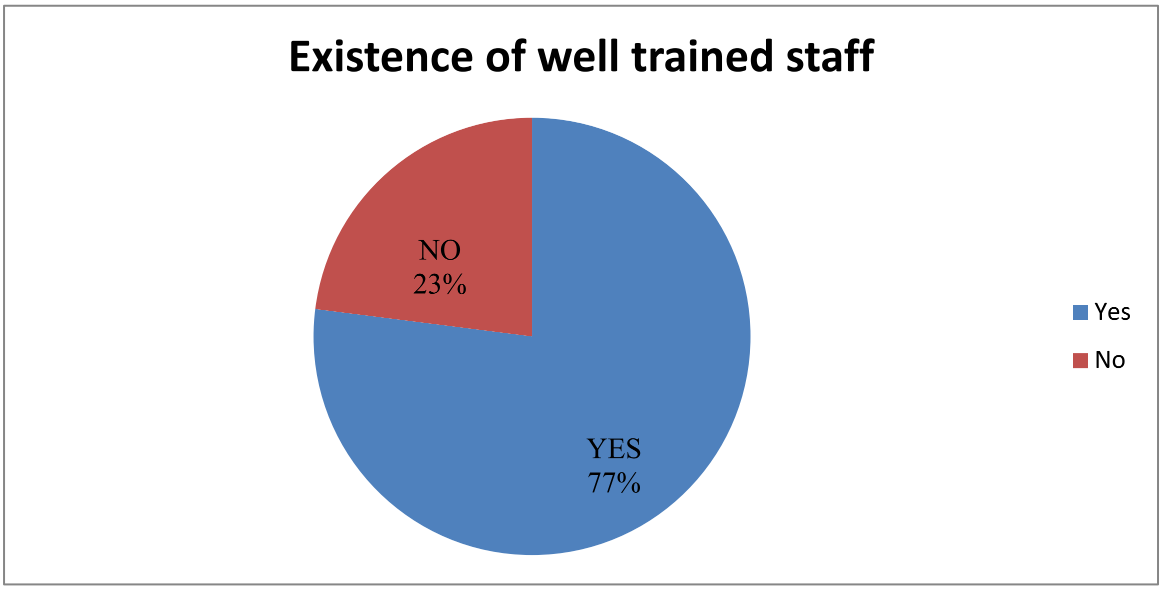


*Figure 4.3: There are well trained staff in the accounts and finance departments*

### 4.2.3 Existence of adequate segregation of duties in the finance and accounts department

The study sought to determine whether there is adequate segregation of duties in the finance and accounts department among the sampled federal parastatals.

The findings were as presented below;

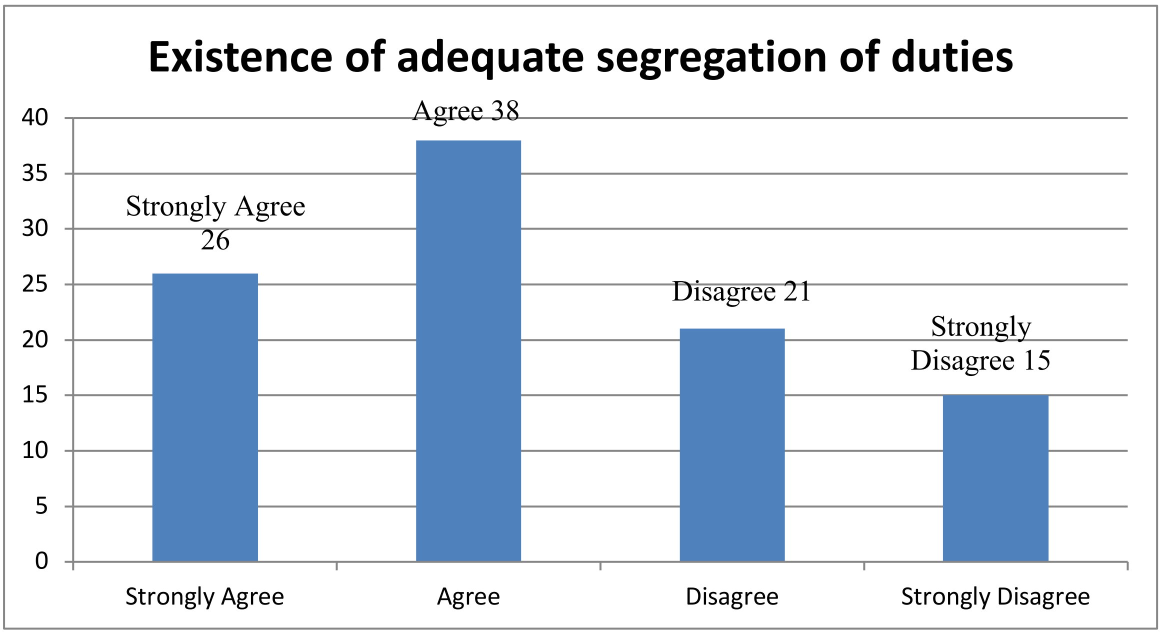


*Figure 4.4: Existence of adequate segregation of duties in the accounts and finance department*

From the figure above, 26% of the respondents strongly agreed that there exist adequate separation and allocation of duties in the department, 38% agreed, 21% disagreed while 15% strongly disagreed to that effect. This indicates that majority of the federal parastatals have adequate segregation of duties although the problem of allocation and description of duties exists.

### 4.2.4 Effectiveness of Internal Control System

The study sought to establish the degree of effectiveness of internal control systems among the sampled federal parastatal with emphasis on education institution. It was realized that 44% of the parastatals have effective internal control systems while 56% of them had porous and weak internal control systems which gave way to wastages, misuse and poor accountability of the federal parastatals.

The study further sought to determine the existence of financial performance systems among the sampled federal parastatals. 91% indicated that their parastatals had a functioning financial performance system while 9% indicated that there weren't a financial performance system in place. This indicates that majority of the federal parastatals had a financial performance system but its effectiveness and efficiency was in question.

## 4.3 Control Environment

The study sought to assess the internal control environment among the federal parastatals with emphasis on educational institutions and how it influenced financial performance of the parastatals. 79% of the respondents indicated that the internal control environment had a significant influence on financial performance of their respective institutions and it was effective while 21% indicated that it had minimal or no influence on the financial performance of the parastatals due to its ineffectiveness.

The respondents were further requested to indicate the extent to which they agreed with the following statement regarding the effect of control environment on financial performance of institutions of higher learning on a scale of 1 – 5 where 5(strongly agree), 4 (agree), 3 (neutral), 2 (disagree) while 1 (strongly disagree) respectively. The findings were as tabulated in table 4.2 below;

**Table 4.2 Influence of control environment on financial performance**

| ELEMENTS | Mean | SDEV |
|---|---|---|
| Control environment has affected the parastatals' revenue for the last five years | 4.12 | 0.855 |
| Control environment has affected the parastatals' operating costs for the last five years | 3.98 | 0.921 |
| Control environment has affected parastatals' fees income on capital for the last five years | 3.55 | 0.877 |

*Source: Field data, 2020*

Table 4.2 above indicates that control environment had greatly affected the institutions of higher learning's revenue, operation costs and fees income on capital for the last five years as indicated by a high mean of 4.12, 3.98 and 3.55 respectively. This indicates that control environment has a significant influence on financial performance of the federal parastatals. Weak and poor control environment negatively affects financial performance and vice versa.

### 4.4 Risk Assessment

The study sought to establish the effect of risk assessment on financial performance of the federal parastatals with emphasis on educational institutions. 61% of the respondents indicated that risk assessment procedures and systems of the parastatals influence significantly its financial performance while 39% indicated otherwise. This is pegged on effectiveness of risk assessment system. 42% indicated that their risk assessment systems were effective while 58% of them indicated that they are ineffective. This has led to poor risk assessment procedures which weaknesses the internal control mechanisms and systems.

To the same effect, the respondents were to rate the degree of agreement to the following statements regarding the effect of risk assessment on financial performance of the federal parastatals on a scale of 1 – 5 where 5 (strongly agree), 4 (agree), 3 (neutral), 2 (disagree) while 1 (strongly disagree) respectively. The findings were as tabulated in table 4.3 below;

**Table 4.3 Influence of Risk assessment on financial performance of institutions of higher learning**

| **ELEMENTS** | **Mean** | **SDEV** |
|---|---|---|
| Risk Assessment has affected the parastatals' revenue for the last five years | 3.62 | 0.881 |
| Risk Assessment has affected the parastatals' operating costs for the last five years | 3.98 | 0.932 |
| Risk Assessment has affected parastatals' fees income on capital for the last five years | 4.11 | 0.801 |

*Source: Field Data, 2020*

Table 4.3 indicates that there is a high and significant influence that risk assessment mechanisms and systems have on financial performance of the federal parastatals. Risk assessment has affected the parastatals' revenue, operating costs and fees income for the last five years greatly as indicated by a mean of 3.62, 3.89 and 4.11 respectively. Strong and effective risk management systems have yield strong internal control mechanisms which have resulted to high parastatals' revenue, low operating costs and high fees income while weak and porous ones have led to poor performance of the parastatals.

### 4.5 Control Activities

The study sought to establish the extent to which control activities have influenced financial performance of the federal parastatals with emphasis on educational institutions. 68% indicated that internal control activities have significantly influenced the financial performance of the parastatals while 32% of them indicated otherwise. It was also indicated that 75% of the institutions' control activities are not effective hence have a negative effect on financial performance while only 25% of them are effective. The control activities were found to affect internal control systems either positively or negatively which in turn influences financial performance of the federal parastatals.

The respondents were further requested to indicate the extent to which they agreed with the following statement regarding the effect of control activities on financial performance of parastatals on a scale of 1 – 5 where 5(strongly agree), 4 (agree), 3 (neutral), 2 (disagree) while 1 (strongly disagree) respectively. The findings were as tabulated in Table 4.4 below;

**Table 4.4 Influence of control activities on financial performance of institutions of higher learning**

| ELEMENTS | Mean | SDEV |
|---|---|---|
| Control activities has affected the parastatals' revenue for the last five years | 3.59 | 0.884 |
| Control activities has affected the parastatals' operating costs for the last five years | 4.08 | 0.791 |
| Control activities has affected parastatals' fees income on capital for the last five years | 3.71 | 0.906 |

*Source: Field Data, 2020*

From the table above, control activities have greatly affected the parastatals' revenue, operation costs and fees income for the last five years as indicated by mean of 3.59, 4.08 and 3.71 respectively. This indicates that control activities have a significant influence on the financial performance of an establishment. Ineffective control activities result in weak internal control systems and poor financial performance and vice versa.

**4.6 Information and Communication**

The study sought to determine whether information and communication systems had a significant influence on the financial performance of the federal parastatals with emphasis on educational institutions. 77% of the respondents indicated that information and communication had a significant influence on the performance of the parastatals while 23% had a dissenting opinion. A further 69% indicated that most of their information and communication systems are ineffective making internal controls weak and hence poor performance. This indicates that an effective information and communication system strengthens internal controls of a firm which leads to prudent use of resources and hence good performance.

The respondents were requested to indicate the extent to which they agreed with the following statement regarding the effect of information and communication on financial performance of the federal parastatals on a scale of 1 – 5 where 5(strongly agree), 4 (agree), 3 (neutral), 2 (disagree) while 1 (strongly disagree) respectively. The findings were as tabulated in Table 4.4 below;

**Table 4.5 Influence of information and communication on financial performance of federal parastatals with emphasis on educational institutions.**

| ELEMENTS | Mean | SDEV |
|---|---|---|
| Information and communication has affected the parastatals' revenue for the last five years | 3.27 | 0.908 |
| Information and communication has affected the parastatals' operating costs for the last five years | 3.88 | 0.791 |
| Information and communication has affected parastatals' income on capital for the last five years | 4.09 | 0.888 |

*Source: Field data, 2020*

From table 4.5 above, information and communication procedures, systems and mechanisms have had a significant influence on the institutions of higher learning's revenue, operating costs and fees income over the last five years as indicated by a high mean of 3.27, 3.88 and 4.09 respectively. This indicates that good information and communication systems lead to high parastatals' revenue, low operating costs and high fees income

**4.7 Financial Performance**

Lastly, the study sought to establish the levels of financial performance of the federal parastatals with emphasis on educational institutions for the last five years ranging from 2015 to 2020 to compare and analyze the trend in revenue, fees income, and expenditure and operation costs. It was realized that the revenue and fees income for the parastatals generally grew by 11% between 2016 and 2018 as expenditure and operation costs remained at a growth rate of 14% however between 2019 and 2020 expenditure and operation costs surpassed revenue and fees income by a general margin of 10%. Revenue and fees income grew at 15% and 19% respectively while expenditure and operation costs went up by 24% and 22% respectively. This generally indicated that the parastatals ended up spending more than they could generate. This indicated a negative financial performance of the parastatals.

**Table 4.6 Change in financial performance between 2015 and 2020**

| **Percentage change (%)** | | | | | |
|---|---|---|---|---|---|
| YEAR | 2016 | 2017 | 2018 | 2019 | 2020 |
| Revenue (from IGR) | 13 | 18 | 24 | 27 | 42 |
| Fees Income | 14 | 21 | 25 | 29 | 48 |
| Expenditure | 9 | 15 | 23 | 28 | 52 |
| Operating Costs | 7 | 13 | 28 | 31 | 43 |

79% of the respondents revealed that the parastatals' accountability had a significant influence on the financial performance of the federal parastatals. Weak and low levels of financial accountability for utilization of organizational resources have led to poor financial performance of the parastatals. Poor cost management has negatively affected financial performance of the parastatals. Federal parastatals are utilized but management and accountability is wanting. This has led to misappropriation of the funds, corruption and misuse of office for personal gains. 68% of the respondents concurred that proper financial reporting among the federal parastatals had a significant influence on the financial performance. Financial reporting that is not fair, a true reflection of the financial status of the parastatals, not open and accountable compromises on the assets, resources and expenditure of the parastatals, leading to poor financial performance due to low levels of accountability. The study further realized that capital investments of the parastatals had a significant influence on their financial performance (72%). Capital investments generate returns regularly and cushion the organization against any financial uncertainties hence making it financially stable.

### 4.8 Regression Analysis

The researcher conducted multiple regression analysis to establish the influence of internal control systems on financial performance of the federal parastatals with emphasis on educational institutions. The findings are indicated in subsequent sections;

**Table 4.7 Model Summary**

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|---|---|---|---|---|
| 1 | 0.991 | 0.971 | 0.921 | 0.785 |

*Source: Field Data, 2020*

The table above indicates the model summary. From the findings, R was 0.991, R square was 0.971 and adjusted R squared was 0.921. An R square of 0.991 implies that 99.1% of changes in financial performance of the federal parastatals with emphasis on educational institutions are explained by the independent variables of the study. There are however other factors that influence performance of the federal parastatals that are not included in the model which account for 0.9%. An R of 0.991 on the other hand signifies strong positive correlation between the variables of the study.

**Table 4.8 ANOVA**

| Model | SS | df | MS | F | Significance |
|---|---|---|---|---|---|
| Regression | 521.04 | 5 | 521.4 | 676.005 | 0.0942 |
| Residual | 261.40 | 312 | 0.950 | | |
| **Total** | **782.44** | **317** | | | |

*Source: Field data, 2020*

From the ANOVA table above, the value of F calculated is 776.005 while F critical is 499.545. Since the value of F calculated is greater than F critical, the overall regression model was significant and therefore a reliable indicator of the study findings. In terms of p values, the study indicated 0.000 which is less than 0.05 and therefore statistically significant.

**Table 4.9 Regression Coefficients**

| **Model** | **Unstandardized coefficients** | | **Standardized Coefficients** | **T** | **Sig** |
|---|---|---|---|---|---|
| | B | Std Error | Beta | | |
| Constant | 7.47 | 0.674 | | 11.08 | 0.000 |
| Control environment | 0.955 | 0.022 | 0.811 | 43.41 | 0.00 |
| Risk assessment | 0.986 | 0.033 | 0.120 | 21.88 | 0.000 |
| Control activities | 0.875 | 0.029 | 0.127 | 30.17 | 0.000 |
| Information and communication | 0.961 | 0.031 | 0.384 | 31.00 | 0.000 |

*Source: Field data, 2020*

The resultant regression equation becomes;

$$\mathbf{Y = 7.47 + 0.955X_1 + 0.986X_2 + 0.875X_3 + 0.961X_4}$$

Where Y is the financial performance of institutions of the federal parastatals with emphasis on the educational institutions; $\beta_0$, $\beta_1$, $\beta_2$, $\beta 3$ and $\beta_4$ are the regression coefficients and $X_1$, $X_2$, $X_3$ and $X_4$ represent control environment, risk assessment, control activities and information and communication respectively.

This implies that when all the variables of the study are held constant, performance of the federal parastatals will be at the intercept which is 7.47. A unit improvement in control environment while all other factors held constant results in 0.955 increase in performance of the parastatals, a unit increase in risk assessment with other factors held constant leads to 0.986 increase in performance of the parastatals. Similarly a unit increase in control activities while other factor held constant, translates to a 0.875 increase in performance of the parstatals while a unit increase in information and communication with other factors held constant leads to a 0.961 improvement in financial performance of the parastatals.

**4.9 Statistical Testing of Hypothesis**

The hypothesis stated in chapter one are hereby evaluated on the basis of the results obtained from regression analysis. Each of the hypothesis will be evaluated on the basis of the T-statistic test criterion. The test were conducted on the 5% level of significance, such that p-value is less than 0.05 indicate statistical significance of the underlying value.

(i) Hypothesis one states that control activities have no significant effect on financial performance of the educational institutions. The T-statistic value estimated for the control activities variable stood at T=43.41, with p-value = 0.000. Since this p-value (0.05) is less than 0.05, we reject the null hypothesis, and conclude that control activities have significant effect on the financial performance of the educational institutions.

(ii) Hypothesis two states that risk assessment has no significant effect on financial performance of the educational institutions. 29.88 is estimated T-statistic value, while its associated p-value = 0.000. Since p-value estimated is less than the level of significance at which the test is conducted (0.000>0.05), we reject the second null hypothesis and conclude that risk assessment has a significant effect on financial performance of the educational institutions.

(iii) Hypothesis three states that control environment has no significant effect on financial performance of the educational institutions. The relevant T-statistic test criterion was estimated at 30.17 with its associated p-value estimated at 0.000. Since the estimated p-value is less than 0.05 (0.000<0.05), we reject the third null hypothesis and conclude that control environment has a significant effect on the performance of the education institutions.

(iv) Hypothesis four states that information and communication have no significance effect on financial performance of the educational institutions. The underlying T-statistic value for this variable was estimated at 31.00, while its associated 0.05 (0.000<0.05), we reject the fourth null hypothesis and conclude that information and communication have some significant effects on the financial performance of the educational institutions.

# CHAPTER FIVE

# SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

## 5.1 Introduction

This chapter presents a summary of the findings of the study, conclusion and suggests some recommendations. At the end of this chapter suggestions for further study and research are suggested. These are areas that in future can be explored to further the knowledge and research on the federal parastatals.

## 5.2 Summary of the Findings

### 5.2.1 Control environment and financial performance

79% of the respondents indicated that the internal control environment had a significant influence on financial performance of their respective parastatals and it was effective while 21% indicated that it had minimal or no influence on the financial performance of the parastatals due to its ineffectiveness. It was revealed that control environment had greatly affected the federal parastatals' revenue, operation costs and fees income on capital for the last five years as indicated by a high mean of 4.12, 3.98 and 3.55 respectively. Control environment was realized to having a significant influence on financial performance of the parastatals. Weak and poor control environment negatively affects financial performance and vice versa.

### 5.2.2 Risk assessment and financial performance

61% of the respondents indicated that risk assessment procedures and systems of parastatals influence significantly its financial performance while 39% indicated otherwise. This is pegged on effectiveness of risk assessment system. 42% indicated that their risk assessment systems were effective while 58% of them indicated that they are ineffective. This has led to poor risk assessment procedures which weaken the internal control mechanisms and systems.

There is a high and significant influence that risk assessment mechanisms and systems have on financial performance of the federal parastatals. Risk assessment has affected the parastatals' revenue, operating costs and fees income for the last five years greatly as indicated by a mean of 3.62, 3.89 and 4.11 respectively. Strong and effective risk management systems have yield strong internal control mechanisms which have resulted to high parastatals revenue, low operating costs and high fees income while weak and porous ones have led to poor performance of the parastatals.

### 5.2.3 Control Activities and financial performance

68% indicated that internal control activities have significantly influenced the financial performance of the parastatals while 32% of them indicated otherwise. It was also indicated that 75% of the parastatals' control activities are not effective hence have a negative effect on financial performance while only 25% of them are effective. The control activities were found to affect internal control systems either positively or negatively which in turn influences financial performance of the federal parastatals.

It was revealed that control activities have greatly affected the parastatals' revenue, operation costs and fees income for the last five years as indicated by mean of 3.59, 4.08 and 3.71 respectively. This indicates that control activities have a significant influence on the financial performance of an establishment. Ineffective control activities result in weak internal control systems and poor financial performance and vice versa.

### 5.2.4 Information and Communication and financial performance

77% of the respondents indicated that information and communication had a significant influence on the performance of the parastatals while 23% had a dissenting opinion. A further 69% indicated that most of their information and communication systems are ineffective making internal controls weak and hence poor performance. This indicates that an effective information and communication system strengthens internal controls of a firm which leads to prudent use of resources and hence good performance.

Information and communication procedures, systems and mechanisms have had a significant influence on the parastatals' revenue, operating costs and fees income over the last five years as indicated by a high mean of 3.27, 3.88 and 4.09 respectively. This indicates that good information and communication systems lead to high institutional revenue, low operating costs and high fees income.

## 5.3 Conclusions

The study concluded that the control environment, risk assessment, control activities and information and communication as indicators of internal control systems have a significant influence on the financial performance of the federal parastatals. The variables explained 99.1% of the changes in financial performance of the parastatals. A unit improvement in the control environment led to a 0.955 increase in financial performance of the parastatals, a unit improvement in risk management practices led to a 0.986 increase in financial performance of the parastatals, a unit improvement in control activities transformed to a 0.875 increase in performance of the parastatals while a unit increase in use of information and communication systems led to a 0.961 increment in their financial performance.

There existed internal control systems, mechanisms and procedures but the environment was not favorable, poor assessment of risks and control activities and also diligent use of information and communication systems to reliably improve accountability and prudent use of organizational resources. This led to poor financial performance of the parastatals despite them having massive resource base.

**5.4 Recommendations**

1. The control environment should be remoulded and strengthened to position the staff in carrying out their duties efficiently and effectively and at the same time evaluated periodically to strengthen its weakness. The management of the parastatals should put in place the level of integrity, ethical values and competence of personnel tasked with creating administering and monitoring the controls and organization structure. Also the internal control system needs to be improved, cultivated and implemented diligently.
2. There is need for the employees responsible for preparation of financial statements and reporting to be transparent and honest and also be held accountable for any misreporting. The organization should improve risk identification, risk evaluation and risk response. There is need to take legal actions for those who have misused organizational funds and recoveries made.
3. The management should put up policies, procedures and mechanisms to ensure management directives are properly carried out. The officers entitled with the authority to incur and approve expenditure need also to be accountable for every resource utilized and the organization gets value for its investments. The parastatals also need to improve their capital expenditure to generate income for them and improve their liquidity.

4. The management of the parastatals should ensure how information is identified, captured, and communicated in the appropriate form and within stipulated time frame, so as to reduce waste.

## 5.5 Suggestions for Further Study

The study recommends that further studies be done in the following areas;

i. The influence of financial reporting on financial performance of educational institutions.
ii. The challenges in effecting organizational internal control systems.
iii. Influence of information and communication technology on internal control systems efficiency among federal parastatals with emphasis on educational institutions.

## REFERENCES


Adams, M. B. (1994), 'Agency theory and the internal audit', *Managerial Auditing Journal.*

Anderson, D., Francis, J. R. & Stokes, D. J. (1993), 'Auditing, directorships and the demand for monitoring', *Journal of Accounting and Public Policy.*

Sebbowa B, (2009), *The role of internal audit function in Organizations.*

Boakye-Bonsu, V., (1997). *Developing internal audit approach*, Vol. 5, No. 6,

Brennan, N. M., and J. Soloman. (2008). *Corporate Governance, Accountability and Mechanisms of Accountability: An overview. Accounting, Auditing & Accountability Journal*

Committee of Sponsoring Organizations (COSO). (1985). *Organization background information.* Available at: http://www.coso.org/

Committee of Sponsoring Organizations of Treadway Commission (COSO) (1992), Internal Control- Integrated Framework, 4 vols. COSO, New York, NY. Control— Integrated Framework, Executive Summary, http://www.coso.org/.

Cooper, D. R and Schindler, P.S. (2003). *Business Research Methods.* New York: Me *Review*, Vol. 28 No.3, pp.371-82.

Curtis C. Verschoor. (1999) *Corporate Performance is closely linked to a strong Ethical* commitment

David M. (2008) "*Auditing"*

DeAngelo, L. (1981), 'Auditor size and audit quality', *Journal of Accounting and Economics, Vol.3*

Dittenhofer, M. (2001). *Internal auditing effectiveness*. *Journal of Accounting and Economics, Vol.5*

Donald K. K & Delno L. A. T (2009) *Proposal and Thesis Writing, An introduction. Pauline* Publications Africa. Nairobi, Kenya.

Ettredge, M. L., L. Sun, and C. Li. (2006). *The Impact of SOX Section 404 internal control quality assessment on audit delay in The SOX Era. Auditing: A Journal of Practice & Theory*

Garcia, B.M. A. (2004). *Audit reports on financial statements of Accounting IASB Standards.* Vol.8.

Gerrit S and Mohammad J. A (2010), Monitoring effects of the internal Audit Function: Agency Theory versus other explanatory variables. *International Journal of Auditing*. Blackwell Publishing Ltd

Goodwin-Stewart, J. & Kent, P. (2006), 'The Use of internal audit by Australian Companies', *Managerial Auditing Journal*

Hayes, DC (1977). The Contingency Theory of Managerial Accounting, *the Accounting Review,* Vol. 52, No. l,pp. 22-39

Haylas, R.E. and Ashton, R.H. (1982) Audit Detection of Financial Statement Errors, *the Accounting Review,* October, Vol. 5, No. 4, pp. 751-765

I. M. Pandey (1996). *Financial Management*. 7th Edition. Vikas Publishing House Pvt Ltd. New Delhi, India.

Internal Control—Integrated Framework: *Executive Summary. The Committee of Sponsoring Organizations of the Treadway Commission.*

Jensen, M. C. & Meckling,W. H. (1976), 'Theory of the firm: Managerial Behaviour, agency costs, and ownership Structure', *Journal of Financial Economics.*

Jensen, M.C. (1998), *Foundations of Organizational Strategy*, Harvard University Press, Cambridge, MA,

Jensen, M.C. (2001), Value maximization, stakeholder theory, and the corporate objective function, *Journal of Applied Corporate Finance*, Vol. 14 No.3, pp.8-21.

Jensen, M.C., Meckling, W.H. (2006), Theory of the firm: managerial behaviour, agency cost and ownership structure , *Journal of Financial Economics*, Vol. 3 pp.305-60.

John J. Morris .2011). *The impact of enterprise resource planning (ERP) Systems on the effectiveness of internal controls over financial reporting.*

Kochan, A. (1993). *Internal Evaluation*: TQM Magazine. Vol. 5.

Krishnan, J. (2005). *Audit committee quality and internal control: An Empirical Analysis. The Accounting Review*

Maitin, T.P. (1994). *Audit Management* (1st ed.). South Asia Publication.

Mautz, RK and White, BJ (1976) Internal Control: A Management View, *Finance Executive,* June, pp. 12-21

Menon, K. & Williams, J. D. (1994). 'The use of audit committees for monitoring', *Journal of Accounting and Public Policy.*

Michael A. H, Robert E. H, Richard A. J, Douglas D. M. (1996). *The Market for corporate control and firm innovation.*

Millichamp, A.H. (1993). *Auditing* (6th Ed.).

Mugenda, O. M and Mugenda A. G (1999). *Research Methods: Quantitative and Qualitative Approaches* Nairobi, Acts Press.

O. Ray Whittington & Kurt Pany (2001). *Principles of auditing and other assurance services.* Irwin/McGraw- Hill. New York

Ogneva, M., K. R. Subramanyam, and K. Raghunandan. (2007). *Internal control weakness and cost of equity: Evidence from SOX Section 404 Disclosures. The Accounting Review.*

Olive M. Mugenda and Abel G. Mugenda. (1999). *Research Methods.* Acts Press. Zaria, Nigeria.

Palfi, C. and Muresan, M. (2009) Survey on weaknesses of banks internal control systems, *Journal of International Finance and Economics,* Vol. 9,

Pandey I.M. (2002). Financial Management Eight Edition, Viskas Publishing House PVT Ltd.

Patton, M. Q. (2002). Qualitative Research and Evaluation Methods, 3rd Edition, Thousand Oaks, CA: Sage Publications.

Piper J.A. (2000). Determinant of Financial Control Systems, for Multiple, Retailers - some Case Study Evidence. *Managerial Finance,* Vol, 6 No. 1 2000. pp 53-63.

Reid, K. & Ashelby, D. (2002). *The Swansea internal quality audit processes quality assurance in education.* Vol. 10,

Rick Hayes et al. (2005). Principles *of auditing* Pearson Education Limited.

SAP. *Enterprise Governance and Sarbanes-Oxley Compliance with SAP ERP Financials 2005.* Available at: http://www.sap.com/usa/solutions/business

Sarens, G. & De Beelde, I. (2006). 'The Relationship between internal audit and senior management: An analysis of expectations and perceptions', *International Journal of Auditing,*

Simiyu O J. (2011). *'Effectiveness of internal control system in Higher Institutions of Learning'* Unpublished MBA Project, University of Abuja.

Stephen E (2007) *Public Financial management – Concepts & Practices* Subramaniam, N. (2006). *International Journal of Auditing.* Vol. 10

The Economic Survey (Kenya)-(2003) vol 3.

The Education for All hand book, (2002) by MOEST vol 4.

The draft Sesional Paper on Education and Training (Nigeria), (2004).

The National Development Plan 2003 – 2008 Government of Nigeria.

Watts, H. (1999). *A Conceptual framework to financial reports and internal audits.* Vol.20, Willis Y O and David Onen. (2008). *A general guide to writing research proposal and report.* Makerere University Printers.

Woolf, E. (1992). *Auditing today* (3rd Ed.). Prentice Hall International (UK) Ltd.

## APPENDIX I

Audit Department,

Federal University Lokoja,

Kogi State.

Dear Respondent,

This questionnaire presented for your completion is exclusively for academic purpose. The essence of this survey is to elicit your opinion on effectiveness of internal control system on financial performance with emphasis on educational institutions. The research is in partial fulfillment of the requirement for the award of Master of Science degree (accounting option).

Please be assured that the information you provide will be used solely for academic purposes and all responses will remain confidential.

Thanks in anticipation of your co-operation.

Yours Faithfully,

**Danjuma Jibrin Isa**

## APPENDIX II: QUESTIONNAIRE

## SECTION A: GENERAL INFORMATION

1. How long has the institution been in existence?

| Less than 1 year | 1 – 5 years | 6 – 10 years | Over 10 years |
|---|---|---|---|
| [ ] | [ ] | [ ] | [ ] |

2. Does your organization have a well staffed Accounts/Finance department? [Y] [N]
3. Staffs are trained to implement the accounting and financial performance. [Y] [N]
4. There is adequate segregation of duties in the parastatals' finance and accounts department.

   Strongly agree [ ] Agree [ ] Disagree [ ] strongly disagree [ ]
5. What is the effectiveness of Internal Control Systems in your parastatal generally?

   ______________________________________________________________
6. Does your organization have financial performance systems? [Y] [N]

**SECTION B: CONTROL ENVIRONMENT**

7. Do you consider that the control environment of your parastatal has a significant influence on financial performance of your parastatal? [Y] [N]
8. Do you consider control environment to be effective in your parastatal? [Y] [N]
9. In your opinion, how has control environment affected financial performance of your parastatal?______________________________________________________________

   ______________________________________________________________
10. Kindly indicate by scoring on a scale of 1 – 5 the extent to which you agree with the statements below relating to effect of control environment.

***(Tick once against each factor as appropriate)***

| **ELEMENTS** | **Strongly Agree** | **Agree** | **Neutral** | **Disagree** | **Strongly Disagree** |
|---|---|---|---|---|---|
| Control environment has affected parastatal's revenue for the last five years | | | | | |
| Control environment has affected parastatal's operating costs for the last five years | | | | | |
| Control environment has affected parastatal's fees income on the capital for the last five years | | | | | |

## SECTION C: RISK ASSESSMENT

11. Do you consider that the risk assessment of your parastatal has a significant influence on financial performance of your institution? [Y] [N]
12. Do you consider risk assessment to be effective in your parastatal? [Y] [N]
13. In your opinion, how has risk assessment affected financial performance of your parastatal?____________________________________________________________

    ______________________________________________________________________
14. To what extent do you agree with the statements below relating to effect of risk assessment

***(Tick once against each factor as appropriate)***

| ELEMENTS | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree |
|---|---|---|---|---|---|
| Risk assessment has affected parastatal's revenue for the last five years | | | | | |
| Risk assessment has affected parastatal's operating costs for the last five years | | | | | |
| Risk assessment has affected parastatal's fees income on the capital for the last five years | | | | | |

## SECTION D: CONTROL ACTIVITIES

15. Do you consider that the control activities of your institution have a significant influence on financial performance of your parastatal? [Y] [N]
16. Do you consider control activities to be effective in your parastatal? [Y] [N]
17. In your opinion, how has control activities affected financial performance of your parastatal?____________________________________________________________

    ______________________________________________________________________
18. To what extent do you agree with the statements below relating to effect of control activities?

*(Tick once against each factor as appropriate)*

| ELEMENTS | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree |
|---|---|---|---|---|---|
| Control activities has affected parastatal's revenue for the last five years | | | | | |
| Control activities has affected parastatal's operating costs for the last five years | | | | | |
| Control activities has affected parastatal's fees income on the capital for the last five years | | | | | |

**SECTION E: INFORMATION AND COMMUNICATION**

19. Do you consider that the information and communication of your parastatal has a significant influence on financial performance of your parastatal? [Y] [N]
20. Do you consider information and communication effective in your parastatal? [Y] [N]
21. In your opinion, how has information and communication affected financial performance of your parastatal?____________________________________________

    __________________________________________________________
22. To what extent do you agree with the statements below relating to effect information and communication?

*(Tick once against each factor as appropriate)*

| ELEMENTS | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree |
|---|---|---|---|---|---|
| Information and communication has affected parastatal's revenue for the last five years | | | | | |
| Information and communication has affected parastatal's operating costs for the last five years | | | | | |
| Information and communication has affected parastatal's fees income on the capital for the last five years | | | | | |

**SECTION F: FINANCIAL PERFOMANCE**

| **NAME OF INSTITUTION** | | | | | |
|---|---|---|---|---|---|
| **YEAR** | **2016** | **2017** | **2018** | **2019** | **2020** |
| Revenue (From (IGR) | | | | | |
| Fees Income | | | | | |
| Expenditure | | | | | |
| Operating Costs | | | | | |

23. Do you consider that accountability of your parastatal has a significant influence on its financial performance? [Y] [N]
24. In your opinion, how has accountability affected financial performance of your parastatal?______________________________________________________________

    _________________________________________________________________________
25. Do you consider that cost management in your parastatal has a significant influence on financial performance of your parastatal? [Y] [N]
26. In your opinion, how has cost management affected financial performance of your parastatal?______________________________________________________________

    _________________________________________________________________________
27. Do you consider that proper financial reporting in your parastatal has a significant influence on its financial performance? [Y] [N]
28. In your opinion, how has financial reporting affected financial performance of your parastatal?______________________________________________________________
29. Do you consider that capital investments of your parastatal have a significant influence on its financial performance? [Y] [N]
30. In your opinion, how have capital investments affected financial performance of your parastatal?______________________________________________________________

    _________________________________________________________________________

*Thank you for taking time to fill the questionnaire.*