EFFECT OF ACCOUNTING CONTROL SYSTEM ON PAYROLL FRAUD DETECTION IN NIGERIAN PUBLIC SECTOR

BY

YEPWI JOSEPH

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DECLARATION

I hereby declare that this was written by me and it is a report of my research work. To best of knowledge, it has not been presented in any previous degree. All quotation are indicated and sources of information specifically acknowledge by mean of references

Signature........................... Date.....................

YEPWI JOSEPH

NSU/GDM/FAA/031/16/17

CERTIFICATION

This dissertation titled **EFFECT OF ACCOUNTING CONTROL SYSTEM ON PAYROLL FRAUD DETECTION IN NIGERIAN PUBLIC SECTOR** meets the requirements governing the award of Master of Science (M.Sc.) in Forensic Accounting and Audit, of the School of Postgraduate Studies of Nasarawa State University, Keffi for its contribution to knowledge and literary presentation.

Dr. Abdul Adamu
Chairman, Supervisory Committee

21/6/21
Date

Dr. Abdul Adamu
Coordinator

21/6/21
Date

Dr. S.M Aza
Internal Supervisor

21/6/21
Date

Prof. A. E. Zamani
Head of Department

21/06/21
Date

Prof. U. M. Ofili
External Examiner

11/06/21
Date

Prof. J. M. Ayuba
Dean, Postgraduate School

21/06/21
Date

DEDICATION

This work is dedicated to Almighty God for knowledge and understanding to undergo this study and my wife for her support and encouragement

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Abstract

The complexity of government activities has encouraged the increased rate of fraud while the sound operations of accounting systems as well as adherence to its principles have remained an issue. It is evident that failure of the accounting control system of operation as designed has led to financial resources loss which has adversely affected the overall performance of the ministries. Given the significance of the problem of payroll fraud to the economy, this study investigated the effect of accounting controls on financial fraud detection in the Nigerian public sector. Descriptive survey research design was employed for the study. The population consisted of 446 accounting staff across five different federal ministries in Abuja. This number was considered holistically as the sample size for the study while anchoring on the fraud diamond theory. Primary sources of data through a four point likert scale questionnaire was .used to elicit the opinion of respondents. The reliability of the instrument was tested using Cronbach Alpha. The study adopted the use of multiple regression to analyze the data after all regression pre-diagnostic tests were conducted. The result of the study showed that internal check, internal audit and computerized accounting have statistically shown positive significant effect on payroll fraud detection in the Nigerian public sector. It was also, found that budgetary controls have no significant effect on payroll fraud detection in the Nigerian public sector. The study concluded that accounting control systems are good measures for controlling the existence of payroll fraud in Nigeria. Based on the findings and conclusion, it is recommended that government should strengthen the accounting controls through measures such as internal checks, internal audit and computerized accounting systems to mitigate against the challenges of payroll fraud in the Nigerian public sector.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Payroll fraud includes the stealing of cash from government institutions through the preparations of the establishment's payroll. Some prominent examples of payroll fraud are: Pay cheque diversions, Kickbacks, and Ghost workers. Like other forms of crimes, payroll fraud is a type of crime prevalent at all levels of government in Nigeria. It has been observed, that as a type of corruption, it continues because the society and the environment we live in today support material accomplishment. This represents attempt to safeguard wealth or power at government expense by government employees. Payroll fraud thrives because of greed on the part of public officers to divert government funds to personal accounts to make quick money. Fraudster and other perpetrators see it as the quickest means to "get rich quick". Jaja (2012) observed that, passion for worldly things, pressure for a shortcut to wealth, exaltation, and approbation of illicit riches among others account for the increased rate of crime in Nigeria. The regrettable yard stick of measuring good life in Nigeria is ostentatious living and wealth (Olaleye, 2008).

It therefore shows that the unending desires for riches by whatever feasible means contribute to fraud in public sector. According to Babalobi (2008), corruption in the public service is encouraged by weak government institutions, poor pay incentive, lack of openness, transparency and weaknesses in the accounting systems. In his view, the payroll fraud apparently becomes a means to making up with the meager pay incentives. Obinna (2013) noted that, there is collaboration within the system that enhances the operation of payroll fraud. He further observed the insider influence as a means that tends to obstruct possible anxiety and arraignment of offenders. It has not been easy for the government to get to the source of the problem which is fueled by employees' corruption.

On the other, accounting controls comprise primarily the plan of organization and the methods and procedures that are concerned with the safeguarding of assets, prevention and detection of fraud and error, accuracy and completeness of accounting records, and timely preparation of reliable financial information (Eze, 2013). The accounting control system have a direct and significant bearing on payroll fraud. This is because payroll fraud is mostly perpetrated when there are weaknesses in the accounting system. Accounting controls are designed, implemented and maintained to deal with identified risks that threaten the achievement of the entity's objectives of reliable financial reporting; effectiveness and efficiency of operations; compliance to the applicable laws and regulations; and safeguarding of assets (Enofe, Okpako & Abube, 2013). The expectation is that, organization should have appropriate division of functional responsibilities and a system of authorization and record procedures to monitor reasonably the assets, liabilities, revenues and expenses. This is often lacking in the public sector given the bureaucratic nature of their operations. Accounting controls should be incorporated in the accounting system itself so that the work performed by the staff members will be automatically counter checked in the procedure itself. An accounting system is the series of tasks by which transactions are processed to maintain financial records. Such a system should recognize, calculate, classify, analyze, summarize and report operations.

Accounting control systems centres on issues such as internal check, internal audit, budgetary control, computerized accounting systems and general internal control measures for mitigating against fraud in the system. Internal Check is an integral part of accounting control. Onuyefulu and Ofor (2016) posited that internal checks are inbuilt in the system itself and operate concurrently with the execution of the transactions. Internal Check is a system of instituting checks on the day-to-day transactions which operate continuously as a part of routine system whereby the work of a person is proved independently or is complementary to the work of another, the object being prevention and early detection of errors or fraud. The procedures are so designed that no single person is authorized to carry out all the stages involved in a transaction (Obara, Nangil & Agba, 2013). Thus, a fraud cannot take place unless there is collusion between two or more persons.

Also; internal auditing which is integral to the operations of an effective accounting system for purpose of mitigating fraud and other irregularities is an independent appraisal function established within an organization to examine and evaluate its activities, as a service to the organization. The objective of internal auditing is to assist members of the organization in the effective discharge of their responsibilities. To this end, Adetula, Balogun, Uwajeh and Owolabi (2016) avers that internal auditing furnishes the organization with analysis, appraisals, recommendations, counsel, and information concerning the activities reviewed. Internal auditing aims at discovering errors and frauds.

Again, the external periodic examination of the accounting system is expected to be built around the control system to strengthen its effectiveness. This is usually, conducted through independent checks or independent audits. Independent checks are a regular review of functioning of the system which is conducted by independent persons to ascertain whether the control procedures are being performed properly. This involves the work of an internal auditor whose activities are aimed at mitigating against fraud in the system. Meanwhile, Brown and Howard (2009) posits that budgetary control is a system of controlling costs which includes the preparation of budgets, coordinating the department and establishing responsibilities, comparing actual performance with the budgeted and acting upon results to achieve maximum output. This will also, include personnel cost which is susceptible to payroll fraud.

Today's accounting system has been modernized by the use of computers. This technology is the application of science to gathering, recording, processing and communicating of business information by means of electronic media. The most common tool for application is the computer and it involves all the transaction processing, system, management information system, various business support system etc. The computer is a central force in the advancement of various organizations. Computerized accounting is an electronic means of collecting and recording of financial data about an organization whether in the private or in the public sector and analyzing the data so collected to suit the decision that needs to be taken and reporting the relevant information in a summary form to the user in a form that is meaningful to him or her. This is considered fundamental in the accounting control process. The thrust of this study is to ascertain the effect of accounting control system on payroll fraud in the Nigerian public sector.

1.2 Statement of the Problem

The need to have a public sector devoid of all forms of corruption and fraud cannot be overemphasized, this is based on the fact that such acts depletes the resources of a nation thereby stagnating its growth and development. Payroll fraud involves the theft of cash from government establishment through the preparations of the establishment's payroll. Some prominent examples of payroll fraud are: Pay cheque, diversions, Kickbacks, and Ghost workers. Like other forms of crimes, payroll fraud is a type of crime is prevalent at all levels of government in Nigeria.

The damage which this menace, called fraud specifically payroll fraud has done to the public fund is innumerable and needs urgent attention. Therefore, the attempt to put an end to this economic degradation have prompted this study. Although, several related studies have been carried out in Nigeria to investigate this concern (Ewa & Udoayang, 2012; Jones,2008; Tunji, 2013; Idowu & Adedoku, 2013; Chukwu, 2012; Onuyefulu & Ofor, 2016; Eze, 2013; Nyakarimi & Karwirwa, 2015; Ishola, Abikoye & Olajide, 2015; Adetula, Balogun, Uwajeh & Owolabi, 2016; Izedonmi & Ibadin, 2012; Modugu & Anyaduba, 2013; Enofe, Okpako & Abube, 2013; Obara, Nangih, & Agba, 2017; Nwaiwu & Aaron, 2018). However, in the specific area of accounting control system and Payroll Fraud in the Public Sector to the best of researchers' knowledge still lacks empirical investigation. In addition, most of these studies emphasized on the private sector, especially, the banking sector. Very few of this studies dealt with the impact of accounting control system on payroll fraud detection in the public sector. Though some Scholars have looked at the effect of Bank Verification Number on the Ghost Worker Syndrome; there is still much to be done; considering the negative impacts of this ugly phenomenon in Nigeria's public sector financial management.

The study of Obara, Nangih, & Agba, 2017 will anchor this current research. The study examined the effect of accounting information on payroll fraud in both ministries and parastatals in Rivers State. Although, the study is rich, it however did not address some of the conventional accounting control systems in detecting payroll fraud such as internal checks, budgetary controls, internal audits and computerized accounting etc. Also, the study looked at state ministries and parastatals of the state while this particular study focused on federal ministries given it a robustness advantage.

If payroll fraud, which has become a serious menace in our public financial management system, is not quickly checked or properly managed, it will further impact negatively on our already depleted public revenue. Realizing this fact, the government has come up with various measures towards checking the problem. One of the measures was the introduction of the Integrated Payroll and Personnel Information System (IPPIS). The other measure introduced by the government recently is the use of Biometrics Technology. This study addressed the effect of accounting control system on payroll fraud detection in the Nigeria Public sector.

1.3 Research Questions

The questions arising which needs to be addressed includes:

i. What is the effect of internal checks on payroll fraud detection in the Nigerian public sector?

ii. What is the effect of internal audits on payroll fraud detection in the Nigerian public sector?

iii. What is the effect of budgetary controls on payroll fraud detection in the Nigerian public sector?

iv. How does computerized accounting affect payroll fraud detection in the Nigerian public sector?

1.4 Research Objectives

The broad objective of this study is to investigate the effect of accounting control system on payroll fraud detection in the Nigerian public sector. The specific objectives include;

i. To ascertain the effect of internal checks on payroll fraud detection in the Nigerian public sector.

ii. To assess the effect of internal audits on payroll fraud detection in the Nigerian public sector.

iii. To determine the effect of budgetary controls on payroll fraud detection in the Nigerian public sector.

iv. To examine the effect of computerized accounting on payroll fraud detection in the Nigerian public sector.

1.5 Research Hypotheses

Ho_1: Internal Checks has no significant effect on payroll fraud detection in the Nigerian public sector.

Ho_2: Internal Audits has no significant effect on payroll fraud detection in the Nigerian public sector.

Ho_3: Budgetary Controls has no significant effect on payroll fraud detection in the Nigeria public sector.

Ho_4: Computerized Accounting has no significant effect on payroll fraud in the Nigerian public sector.

1.6 Significance of the Study

This study apart from contributing to the existing body of knowledge is expected to have implications on policy, practice and theory building. In relation to policy and practice, the findings of the study are expected to be important to the management of the selected Ministries in Abuja to maintain an enhanced controlled accounting system capable of detecting fraud most especially payroll fraud by helping management and employees to establish and maintain a system throughout the agencies that sets a positive and supportive altitude towards accountability, reliability, transparency and probity. The findings will also, assist operating personnel in effecting internal control and Internal Audit for evaluating whether appropriate controls have been implemented and whether the internal controls are functioning as intended. The government may use the study findings to formulate policies on payroll Fraud Detection and accounting control systems.

1.7 Scope of the study

The study is designed to examine the impact of accounting control system and fraud detection in selected Federal Ministries in Abuja. The opinion of Stakeholders such as internal audits, account staff, directors and heads of accounts and personnel's will be elicited. The study will cover a period of 2019. The study is limited to five selected Ministries in Abuja. The ministries will include; finance, education, agriculture, justice and health. The study is designed to examine the effect of accounting control system on payroll fraud detection in the Nigerian public sector. The specific variables included in the study are: Internal check, internal audit, budgetary control, independent audit and computerized accounting.

CHAPTER TWO

INTRODUCTION

2.1 Conceptual Framework

Conceptual framework is important in any research work. In this study, a review of the relevant concepts related to research the objective where discussed to give a better understanding of this research work to the reader. The conceptual framework was used to show the link between the dependent and independent variables and a theoretical framework that best explains this relationship was discussed.

2.1.1 Concept of Accounting Control System

Chionye (2003) defines accounting system as the art of identifying, recording, classifying measuring and interpreting in a significant manner the financial transaction of an organization for decision making. Eze (2013) defines an accounting as a consistent way of organizing, recording, summarizing and reporting financial transactions. Gupta (1999) defines accounting system as comprising of the procedures of initiating the transactions in the entity's operations, the accounting records, supporting documents, specific accounts in the financial statements for such transactions and the accounting and financial reporting process including how data are processed electronically. He further posited that an accounting system supplemented by effective controls can assure that assets are safeguarded from unauthorized use or disposal and financial records are reliable to permit the preparation of financial reports. Obara, Nangih and Agba (2017) defines accounting system as an organized set of manual and computerized accounting methodology, processes, and wheels which are used in gathering, recording, classifying, analyzing, summarizing, interpreting, and presenting accurate and timely financial information for decision making in an organization.

Onoja, Ajanga and Audu (2013) defines an accounting system as a series of tasks by which transactions are processed to maintain financial records. Such a system should recognize, calculate, classify, analyze, summarize and report transactions. The fundamental objective of accounting controls is to safeguard the assets of the company against the losses due to wastes, frauds, and carelessness of the staff members or from fire, earthquakes, riots, thefts, etc. The accounting controls aim at avoiding frauds, errors, wastes and inefficiency. Accounting controls measure the implementation of business policy, performance of business activities and of the members of the staff. Accounting controls ensure the maximum accuracy of all the records and statements, thereby, financial and other data also becomes reliable, which ensures the accuracy of policy decisions and management planning. Accounting controls execute transactions in a manner prescribed by the management. Accounting control aims at complete and prompt records in required form so that financial statements can be readily available. Besides, accountability for assets can be maintained. Accounting controls safeguard assets from unauthorized access, use or disposal. Also accounting controls verify assets at reasonable intervals and take appropriate action in case of discrepancies.

International Standards on Auditing (ISA) (2009) posits that management is responsible for maintaining an adequate accounting system incorporating in it various accounting controls necessary to the size and nature of the business. ISA requires that management should reasonably assure that the accounting system is adequate and that all the accounting information, which should be recorded, has in fact been recorded. Accounting controls normally contribute to such assurance. Institute of Chartered Accountants of Nigeria (ICAN) (2004) avers that management should gain an understanding of the accounting system and related accounting controls and should study and evaluate the operation of those accounting controls periodically.

Controls relating to the accounting system are concerned with achieving numerous objectives like transactions are executed in accordance with management's general or specific authorization, all transactions are promptly recorded in the correct amount in the appropriate accounts and in the accounting period in which they are executed. This permits preparation of financial reports according to recognized accounting policies, practices and relevant statutory requirements and to maintain accountability for assets, assets are safeguarded from unauthorized access, use or disposal and the existing assets are compared with the records at reasonable intervals and appropriate action is taken with regard to any differences.

Furthermore, Akinbuli (2013) posits that accounting controls comprise primarily the plan of organization and the methods and procedures that are concerned with the safeguarding of assets, prevention and detection of fraud and error, accuracy and completeness of accounting records, and timely preparation of reliable financial information. The accounting controls have a direct and significant bearing on the reliability of financial information. Accounting controls are designed, implemented and maintained to deal with identified business risks that threaten the achievement of the entity's objectives of reliable financial reporting; effectiveness and efficiency of operations; compliance of the applicable laws and regulations; and safeguarding of assets. ISA (2008) avers that an organization should have appropriate division of functional responsibilities and a system of authorization and record procedures to monitor reasonably the assets, liabilities, revenues and expenses. Accounting controls should be incorporated in the accounting system itself so that the work performed by the staff members will be automatically counter checked in the procedure itself.

Internal Checks

Internal Check is an integral part of accounting control. Internal checks are inbuilt in the system itself and operate concurrently with the execution of the transactions. ISA (2008) defines internal check as a system of instituting checks on the day-to-day transactions which operate continuously as a part of routine system whereby the work of a person is proved independently or is complementary to the work of another, the object being prevention and early detection of errors or fraud. The procedures are so designed that no single person is authorized to carry out all the stages involved in a transaction. Thus, a fraud cannot take place unless there is collusion between two or more persons.

Internal Check is an integral function of the internal control system. It is an arrangement of duties of the staff members in such a way that the work performed by one person is automatically and independently checked by the other.

Kiabel (2009) defines internal check as a continuous review of all control procedures and it includes surprise checks of procedures and periodic comparisons of accounting records and physical assets. He asserted that internal check is needed because systems changes frequently thus necessitating regular review. Internal check involves checking on individuals' performance, integrity of the process and data correctness. It ensures that records are kept according to standards and policies and transactions undertaken in accordance to guidelines and policies.

Work is divided among the staff members according to their qualifications and experiences. Division of work on the basis of skills and expertise promotes efficiency of the staff and leads to overall economy in operations. Work of each person is checked by another in routine procedures. Therefore, errors and fraud are detected early. Johnson (1974) states that overall efficiency, economy of operations and checking of each employee work by another, acts as an effective obstruction to commit errors and frauds. He concluded that books and accounts of an enterprise with a strict system of internal check are reliable. Management can prepare its final accounts without checking the authenticity of the data all over again. Overall efficiency and economy of operations leads to increased earnings for the owners of the enterprise. For Edori and Ogaluz (2018) where an enterprise operates an effective system of internal check, the external auditor can safely undertake test checking of a selected number of representative transactions and documents to determine the type and extent of audit tests and procedures to be applied.

Internal Audit

ISA (2009) defines internal auditing as an independent appraisal function established within an organization to examine and evaluate its activities, as a service to the organization. The objective of internal auditing is to assist members of the organization in the effective discharge of their responsibilities. To this end, internal auditing furnishes them with analysis, appraisals, recommendations, counsel, and information concerning the activities reviewed. Internal auditing aims at discovering errors and frauds.

Institute of Chartered Accountants of England and Wales (1975) defines internal auditing an independent activity within an organization for the review of the accounting, financial and other operations. It is a basis for protective and constructive service to the management. It functions by measuring and evaluating the effectiveness of other types of control. Internal auditing is not a function of authorization and recording. Instead, the function of internal auditing. It is concerned with procedures and transactions, when they are completed and recorded.

ICAN (2004) stipulates that internal auditing is appraisal and verification of the procedures and transactions. Internal audit team must know clearly and explicitly the objectives on each assignment given to it from time to time. Internal auditors can investigate any phase of activities of the organization at any time and under any circumstances. Internal audit reviews various operations and records of the company. This review may be periodical or continuous. Many large organizations conduct internal audit. They have a separate internal audit department. Internal audit formerly used to audit financial transactions and financial records only. However modern internal audit covers such matters also which are not directly of a financial or accounting nature. It has become a major control function.

Gupta (1990) opines that the scope of internal audit in an enterprise may be limited to reviewing whether the accounting and allied records have been properly maintained, the assets of the enterprise adequately safeguarded, and the policies and procedures laid down by the management complied with. Internal audit is a post transaction review to evaluate the records, controls, and operations in an organization. The work of the internal auditor is usually helpful to the external auditor in determining the nature, timing and extent of his procedures.

Effective Internal Audit

How to make internal audit effective has been an area of common interest to many. This has been responsible for the divergent views of authors on this concept. To that effect, the Institute of Internal Audit (2010) sees internal audit effectiveness 'as the degree (including quality) to which established objectives are achieved.' Vijayakumar and Nagaraja (2012) appear to be concerned more with the outcome of effective internal audit system which they argue helps in achieving performance, profitability and prevents loss of revenues particularly in public sectors. While Shoommuangpak and

Ussahawanitchakit (2009) view audit effectiveness as achieving audit's objective by gathering of sufficient and appropriate audit evidence in order to express reasonable opinion regarding the financial statements compliance with generally acceptable accounting principles, Mizrahi and Ness-Weisman (2007) express audit effectiveness as the number and scope of deficiencies corrected following the audited process.

Alberta (2005) as cited in Mu'azu and Siti (2013) states that effective internal auditor professionals should possess the following characteristics: Ability to align the structure of internal audit with the dynamics of the organizational operation; There should be strong relationship between management skills for maintaining appropriate visibility and audit committee needs and expectations; There should be strong service delivery capabilities (consistency in approach, standards, and delivery, including the abilities to maintain audit focus and alignment of resources to the plan; There should be also be strong management skills which will ensure that internal audit teams have appropriate skills and motivation. Besides the above, the level of training, education, experiences as well as professional qualifications of the internal auditors influenced the effectiveness of internal audit. The above characteristics are essential and we see them as building blocks to effective internal audit system.

Belay (2007) and De Smet and Mention (2011) are of the opinion that attributes of effective internal control include "organizational independence, a formal mandate (existence of approved audit charter, unrestricted access, sufficient staff, existence of audit committee, stakeholder support, professional audit standards and unlimited scope. In a related development, the Chartered Institute of Public Finance and Accountancy (2006) as cited in Mu'azu and Siti (2013) believes that effective internal audit service should aspire to understand the whole organization, its needs and objectives, understand its position with respect to the organization's other sources of assurance and plan its work accordingly; be seen as a catalyst for change at the heart of the organization; and value and assist the organization in achieving its objectives; help to shape the ethics and standards of the organization, ensure the right resources are available and seek opportunities for joint working with other organizations". A cursory look at the above reveals the holistic nature of the expectations of effective internal audit system from a professional stand point. It is more or less like setting the universal standard against which effectiveness of internal control would be assessed.

Budgetary Control

Brown and Howard (2009) defines budgetary control as a system of controlling costs which includes the preparation of budgets, coordinating the department and establishing responsibilities, comparing actual performance with the budgeted and acting upon results to achieve maximum output.

Chartered of Management Accountants (CIMA) (2007) defines budgetary control as the establishment of mechanism authorising responsibilities of executives to the requirements of a policy and the continuous comparison of actual with budgeted results either to secure by individual action the objective of a policy or to provide a basis for its revision. Hoftsede (1998) defines budgetary controls as planning translated into monetary terms. At the beginning, a budget is a plan and at the end it is a control device for measurement. In the view of Slim (1994) budgetary Controls aims at providing a formal basis for monitoring the progress of the organization as a whole and of its component parts towards the achievement of the objectives specified in the budget. Budgetary controls predetermine plans or standards of output and estimated incomes are compared with actual results and necessary corrective action taken.

Otley (1990) mentions that budgetary control is the main integrative control method for most business enterprises and the organization business plan can be represented financially by the budget. The budget can thus be used as a monitor and control method for the complex issues of the business plan.

Drury (2006), opines that two main budgetary controls exist, these are feed forward and feedback control. The feed forward control comes into being when the predictions are matched against desired outcomes. The purpose of feed forward control system is to anticipate errors or variances before they happen and to take steps to minimize them. The feedback control system is the measure of differences between planned and actual results so that subsequent actions can be modified to achieve the required results. He goes further to say that, the master budget is the budgeted profit and loss and balance sheet for the coming period which will be used as a basis for decision-making and control.

Budgetary control systems are so dependent on internal and external factors which affect the organization and changes in those factors must have impact on the budget. External, political, social and economic changes tend to have a slow effect on organizations as such changes are often unpredictable and organizations tend to act reactively rather than proactively. Also economic changes such as the rate of inflation will affect the predictive value of budgets. If these changes occur frequently then organizations will increasingly need to use techniques such as flexible budgeting and sensitivity analysis to the effect of these changes.

Lowe et al (2002) says that while there appears to be general agreement of the behavioral, planning and control or objectives of budget control, its implementation can be problematic. To understand the reason for this, one does not look inside the organization but also at the outside environment and the unpredictable of that context. In both private and public sectors, accountability is being driven down the organization to the level of the individual. Problems of budget control is how to control in an environment where there are also changing patterns both inside and outside the organizations.

Ashford (1989) posits that budgeting can be applied to virtually every situation. It does not matter whether we work in the public or privates sector of the economy. We may work for a profit making business or a non -profit making business. A company may be engaged in trading, manufacturing, or providing a service. In all of these situations, budgeting and budgetary control are utmost importance.

Welsch (2015) has defined budgetary control as the use of budgets and budgeting reports throughout the period to coordinate, evaluate and control day-to-day operations in accordance with the goals specified by the budget. According to Wheldon (2002), By budgetary control, every items of actual cost is so controlled by vigilant supervision as to make it conform, as nearly as possible, to the predetermined standards. It has resulted in the elimination of waste and excess costs in every suitable instance where budgetary control has been properly instituted.

Computerized Accounting

Today's modern technology brought into use the computer. This technology is the application of science to gathering, recording, processing and communicating of business information by means of electronic media. The most common tool for application is the computer and it involves all the transaction processing, system, management information system, various business support system etc. The computer is a central force in the advancement of various organizations. The historical development of computer started with Hollerith punched card of 1880, Goerge Alken calculator and Charles Babbage' creation of the difference engine. The computer can be defined as a tool or device which is able to accept facts (data) and figure in a prescribed form, apply prescribed processes to data and supply result of the processes in a specified format as a meaningful information. There are also different types of information depending on the make or type of their functions. The revolution in technology to the computer complements or in the other hand, substitute for ten elements which are: - paper, personal memos, charts, reports, calculators, terminals letter.

Hartzell (2006) defines computer as an electronic machine for processing information automatically and very quickly. The importance of computers is its ability to handle vast amount of information and to do other processes with accuracy and speed. Tasks which cannot be manually undertaken have been recognized and appreciated by financial institutions, hence the trend in the computerized of banking operations. Tanembaum (2010) sees computer as a machine that can solve problems for people by carrying out instructions given to it.

The American Accounting Association (1974) defines computerised accounting as the electronic process of identifying, measuring and communicating economic information to permit informed judgement and decision by users of the information. Adebisi and Gbegi (2015) define computerized accounting as the electronic establishment, maintenance, collection and analysis of financial position of an organization and any changes that have occurred or may occur overtime. Omolehinwe (2009) defines computerised accounting as an electronic means of collecting and recording of financial data about an organization whether in the private or in the public sector and analyzing the data so collected to suit the decision that needs to be taken and reporting the relevant information in a summary form to the user in a form that is meaningful to him or her.

In a study, Nash et al (1999) argued that with the improvements in technology, information systems have been computerized. Improvements in this technology have replaced manual bookkeeping systems with computerized ones, hence, accounting information systems that were previously performed manually are now performed by computers in most companies. While accounting systems have been around for centuries, the introduction of business technology and Computerized Accounting Systems radically changes the playing field. Lately, Vitez (2010) reviewed that paper ledgers, manual spreadsheets and hand-written financial statements have all been translated into computer systems that can quickly present individual transactions into financial reports. Computerized Accounting Systems follow the same logic of journal, ledgers, reports and statements in a manual system. Computerized systems simply consolidate posting functions and other basic tasks into a "behind the scenes" system. Companies can also generate reports and financial statements easier, allowing for better performance management reviews. Computerised Accounting System is therefore a computer based system which combines accounting principles and concepts as well as the concept of information system to record, process, analyse and produce financial information to its users for making economic decisions. (Gelinas, 2005).

2.1.2 Concept of Fraud

The concept of fraud in itself is disordered, but scholars vary significantly in their expressions about fraud. The cause is sometimes confused with effect. Defining fraud is as difficult as identifying it. Fraud is defined by Economic and Financial Crimes Establishment Act (EFCC) (2004) as the non-violent criminal and illicit activity committed with objective of earning wealth illegally either individually or in a group or organized manner thereby violating existing legislation governing the economic activities of government and its administration. Nwaze (2012) defined fraud as a predetermined as well as planned tricky process or device usually undertaken by a person or group of persons with the sole aim of cheating another person or organisation to gain ill-gotten advantage which would not have accrued in the absence of such deceptive procedure.

Onuorah and Appah (2012) as cited in Bello (2001) and quoting Russel (1978) remarked that the term fraud is generic and is used in various ways. Okafor (2004) added that fraud embraces all the multifarious means which human ingenuity can devise, which are resorted to by an individual to get advantage over another in false representation. No definite and invariable rule can be laid down as a general proposition in defining fraud as it includes surprise, trick, cunning and unfair ways by which another is cheated fraudulently, Ojaide (2000).

Ramamoorti (2007) argued that fraud is a human endeavor, involving deception, purposeful intent, intensity of desire, risk of apprehension, violation of trust, and rationalization. It is therefore important to understand the psychological factors that might influence the behavior of fraud perpetrators. The rationale for drawing on behavioral science built on evident from the intuition that one needs to think like a crook to catch a crook. Karwai (2002) and Ajie and Ezi (2000) are of the view that fraud in organizations vary widely in nature, character and method of operation in general. Fraud may be classified into two broad ways: nature of fraudsters and method employed in carrying out the fraud. On the basis of the nature of the fraudsters, fraud may be categorized into three groups, namely; internal, external and mixed frauds. Internal fraud relates to those committed by members of staff and directors of the organizations while external fraud is committed by persons not connected with the organization and mixed fraud involves outsiders colluding with the staff and directors of the organization. Karwai (2002) reported that the identification of the causes of fraud is very difficult. He stated that modern day organizations frauds usually involve a complex web of conspiracy and deception that often mask the actual cause.

The Association of Certified Fraud Examiners (2008) defined fraud as the use of one's occupation for personal enrichment through deliberate misuse or misapplication of the employing organization's resources or assets. It is therefore any act of misappropriation, theft or embezzlement of corporate assets in a particular economic environment. It has been considered as is any act of deception performed by somebody to cheat or deceive another person to his detriment or the detriment of any other, or to cause injury or loss to another person while the perpetrator has a clear knowledge of his intension to deceive, falsify or take advantage over the unsuspecting and innocent victim Robinson (1976) resulting to suffering loss or damage Stanley (1994).

According to Udoayang and James (2004), fraud is simply "stealing by tricks." Ramamoorti and Olsen (2007) in their definition of fraud argued that it "is a human endeavour, involving deception, purposeful intent, intensity of desire, risk of apprehension, violation of trust and rationalisation. Fraud is an intentional act done by human beings through deception, trickery and misrepresentation (Ramamoorti, 2008). Fraud could be any deliberate actions taken by management at any level with the intention to deceive, con, swindle, or cheat investors or other stakeholder Drew and Drew (2010). Many authors Ojo and Adewunni (1986) in Hamilton and Gabriel (2012); Sydney, (1986); Ojigbede (1986) agreed that fraudulent activities involve the use of deceit and tricks to change the truth so as to deprive another person of his right.

Frauds are committed in all spheres of human activities: business, public and financial sectors (Ratlift, 1996). It is a strategy to achieve a personal or organisational goal or to satisfy human needs. Fraud is any action, behaviour or oral expressions deliberately aimed at deception and /or misinformation. It is a sequence of activities perpetrated to obtain money, property or services, to avoid payment or of services or to secure personal or business advantages. These acts are not dependent upon the application of threat of violence or of physical force (International Standards for Professional Practice of Internal Auditing, 2002).

Pedneault, Sheetz, and Rudewicz (2012) agreed that modern definition of fraud appears to be derived from case and statute law even though many of the ancient components still obtain. It can be traced to the Latin noun *fraus*, which conveys a range of meaning centered on the idea of harm, deceit and wrongdoing (Silverstone and Sheetz, 2007). "The modern definition derived from case law focuses on the intent of the fraudster(s) to separate the trusting victim from property or a legal right through deception for his or her own benefit" (Silverstone and Sheetz, 2007).

Even though the reasons for fraud occurrence or causes of fraud in an organisation is not really the interest in accounting, but that of the behavioural sciences like sociology, psychology, criminology and anthropology, the interdisciplinary approach of fraud examination and forensic accounting in the development of theory and in practice lend support for understanding why fraud occurs by accountants interested in its prevention and detection. In fact, Ramamoorti (2008) argued for the integration of the behavioral sciences in fraud and forensic accounting curricula for fraud to be effectively prevented and detected.

In any case, all the definitions of fraud stresses on acts that are capable of deceiving and misappropriation perpetrated deliberately. Such acts are carried by somebody or group of persons against another person or an organisation, and can be expressed verbally or through behaviour.It is believed that that the responsibility for fraud prevention and detection rests with every staff of an organization, whether on managerial position or not. Eze (2005) pointed out, "That detection of fraud is a secondary object of an audit, an auditor does not set out with a declared intention of detecting fraud, this comes to light in the normal course of his examination of vouchers, ledger and other available evidence in support of the financial statements he is auditing. As a means of fraud prevention, Millichamp (1996) affirmed that an effective Internal Audit is an essential element of a system of internal control and should be a prevention of fraud.

2.1.2.1 Concept of Payroll Fraud

Payroll fraud involves the theft of cash from government establishment through the preparations of the establishment's payroll. Some prominent examples of payroll fraud are: Pay cheque diversions, Kickbacks, and Ghost workers. Like other forms of crimes, payroll fraud is a type of crime is prevalent at all levels of government in Nigeria. We have observed, that as a type of corruption, it continues because the society and the environment we live in today support material accomplishment (Babalobi, 2008). This represents attempt to safeguard wealth or power at government expenses by government employees. Payroll fraud thrives because of greed on the part of public officers to divert government funds to personal accounts to make quick money. Fraudster and other perpetrators see it as the quickest means to "get rich quick". Jaja (2012) observes that, passion for worldly things, pressure for a shortcut to wealth, exaltation, and approbation of illicit riches among others account for the increased rate of crime in Nigeria. The regrettable yard stick of measuring good life in Nigeria is ostentatious living and wealth (Olaleye, 2008). It has not been easy for the government to get to the source of the problem which is fueled by employees' corruption. It therefore shows that the unending desires for riches by whatever feasible mean contribute to fraud in public sector.

According to Babalobi (2008), corruption in the public service is encouraged by weak government institutions, poor pay incentive, lack of openness and transparency. In his view, the payroll fraud apparently becomes a means to making up with the meager pay incentives. Obinna (2013) notes that, there is collaboration within the system that enhances the operation of payroll fraud. He further observed the insider influence as a means that tends to obstruct possible Payroll departments in organizations could be linked with payroll fraud. The financial crime of payroll fraud is usually fast tracked by a payroll clerk, internet facility or through the connivance and collusion of another staff. The instruments of payroll fraud include ghost employees, inflating hours of work and overtime, as well as overstating expense accounts or medical grounds.

The financial crime of payroll is committed when the payroll clerk uses various criminal practices to avoid being caught in the fraud. Ghost workers could be included on the payroll and salaries paid out to the payroll clerk who forges the signature of the ghost worker and obtains value through third party transactions. Hours of work and overtime could be inflated in connivance with other fraudulent staff of the organization and payment made on the basis of this is shared. A usual case is when medical bills are inflated, and sometimes where employees do not attend hospitals, such bills can even feature at regular or irregular interval and cash or value received by the fraudulent employees. The latter description of financial crime is a common feature in an organization that accredits on private clinic or hospital for the treatment of its staff. Most times, the statutory auditors constrained by their statutory functions plan their audit procedures to have reasonable expectation of material fraud and errors.

Silverstone and Sheetz (2004) asserts that cash is the favourite of fraudsters; and this accounts for about 77.8% of asset misappropriations in the U.S. According to them, much of cash is taken by outright cash larceny and skimming. Larceny occurs when cash is taken or stolen after it has been recorded. Skimming occurs when theft of cash takes place before cash is recorded. However, majority is done through a more elaborate cash disbursement schemes. This includes some manipulation of the billing of payroll system, fabrication of expenses, reimbursements and cheque tampering. The Association of Certified Fraud Examiners (ACFE) (1996) describes larceny, skimming and elaborate cash disbursement as cash theft fraud.

According to the Association of Certified Fraud Examiners's (ACFE) (1996) findings, the process of committing this financial crime by the employee begins when it is realized that the cash produced from accounting transactions into the accounting cycle has two destination points – as petty cash and demand deposit, inclusive of interest bearing account. Petty cash is stolen by forging authorized signature or creating false vouchers, for reimbursement. For cash met for demand deposit, receipts are forged or prepared and false cheques written. This particularly occurs in a small organization where controls are loose. Besides, where a long term trusted employee creates an atmosphere of incentive, opportunity, and rationalization, he can engage in cash theft.

At other situations, where the money is so available for the long term trusted employee, he becomes an opportunity taker. With the incentive and opportunity, the employee rationalizes the theft; he sees nothing wrong in taking some money in the pretext of borrowing and to return it later. Since the cash is easier to take than to return, the accrued amount becomes too large to replace and the employee is locked up into an endless round of theft and cover up. The schemes adopted by the employee to execute the planned cash theft fraud could go undetected by the statutory auditor who is not primarily commissioned to detect fraud.

These financial crimes are committed when management over-rides the controls instituted by themselves to prevent the thefts they now commit. These thefts are usually difficult to detect. Shackell (2000) reports the pervasiveness of this type of crime in corporate organizations and concludes that management thefts are difficult to detect. Silverstone and Sheetz (2004) opines that the effects of management misconduct can also have severe consequences for the company's overall morale and set a negative model for employees further down the company's ladder.

2.2.0 Empirical Review

2.2.1 Empirical Review

Several researches have sought to empirically establish the relationship between internal control system and fraud management, these studies have been conducted in different countries and at different times with results advancing mixed reactions.

Obara, Nangih and Agba (2017), studied Accounting system and payroll fraud in the Nigerian public sector. The study used structured and well validated questionnaire distributed to staff of Ministries, Departments, and Agencies (MDAs) of Government Parastatals in Rivers State of Nigeria. Data gathered were presented using descriptive statistical tools such as tables, percentages, and charts. Findings from the study revealed that there was significant correlation between the effectiveness of manual and computerized accounting system payroll fraud in the Nigerian public sector. However, the study concentrated on the public sector using Rivers State as an instance while this current study focused on the Nigerian public sector (at the Federal level) at large.

Nnanta and Ewe (2013) carried out a research on ''analysis of computerized accounting system'' on monthly emolument of workers in the Payroll. The paper examines the pros and cons of computerized accounting system in wages/salaries administration, as well as factors that affect the applicability of computerized accounting system. It also identifies some rules and principles guiding the payrolling processes using the local government system as a case study. The study discovered that payroll officers engage in all sorts of frivolous activities such that workers have lost confidence in them. The paper argues that the expected benefits derivable from a computerized accounting system exceed the costs/challenges associated with it. The study dwell on the making decision between computerized accounting payroll system and manual accounting payroll system and also the activities of the payroll officers in this regards. This study is concerned with the efficacy of the current Nigerian accounting control system in curbing payroll fraud in the Nigerian sector.

Adongoi and Victor (2016) studied Corruption in the civil service: A study of payroll fraud in selected ministries, departments and agencies (MDAS) in Bayelsa State, Nigeria. The study investigated factors responsible for payroll fraud in Bayelsa State civil service, Nigeria. The study gathered data from secondary sources and Robert K. Merton's anomie theory was adopted as the study's theoretical framework. The findings of the study revealed that payroll fraud persists in civil service despite frantic efforts by the government to curb the menace. It also identifies inadequate funding of Economic and Financial Crime Commission (EFCC). This study employs a different theoretical framework and covered federal ministries as opposed to the current study which covers only Bayelsa State.

Enofe (2016) examined internal control mechanism and fraud prevention in the Nigerian public sector using the new fraud diamond theory. It adopted a survey design and made use of primary data while the Spearman Ranked Correlation (rho) was used to analyze the hypotheses. The findings revealed that "corporate governance and job segregation exhibits insignificant influence on fraud prevention while employees' capability and management integrity significantly influence fraud perpetration and prevention in the

Nigerian Public Sector". This study is on fraud generally while this current study was align strictly with payroll fraud constituting it major difference.

Ggbegi and Adebisi (2015), in their studies "Analysis of Fraud Detection and Prevention Strategies in the Nigerian Public Sector" tested four hypotheses, "There is no strong internal control system in the Nigerian public sector" and "Management integrity has no influence on fraud prevention in Nigerian public sector". It was found that, "there is no strong internal control system in the Nigeria public sector and management integrity has influence on fraud prevention in the Nigeria public sector".

Ademola et al (2015) in their study on "the effect of internal control system in Nigeria public sector" concluded in the study that "the establishment of internal control play a vital role in prevention of fraud and irregularities" after testing two hypotheses to analyze "the effectiveness of internal control on the prevention and detection of fraud in the public sector organization". They went further to say that, "management and relevant authorities should focus on more strategic ways of internal control establishment as a way to preventing fraud in the public sector. More so, even though there is an inefficient internal control, such as public sector reform etc., effective internal controls are most effective for fraud prevention".

In the study of internal control system and fraud detection in the Nigerian public sector, Edeh (2015) concluded that internal control is a mechanism used to prevent and detect irregular activities and fraudulent practices in order to protect corporate assets from fraud and corrupt activities. In trying to analyze the accounting implication of the result, it was stated that internal control systems are approaches required to promote the effectiveness and efficiency of an organization's, accounting system in order to reduce risks of asset loss due to fraud, and help to ensure the reliability of financial statements and compliance with laws and regulations.

Odunayo (2014) in his study; accounting control system a managerial tool for proper accountability stated that, Internal Control system involves internal auditing, administrative and other accounting controls set-up by the management in order to ensure achievement of its planned objective he went further to say that "these objectives entails keeping of appropriate records, ensuring adherence to the management policies and ensuring that actions are in line with plan". One of the recommendations he made was that "there should be adequate motivation such as bonus and incentives to the employees/officers to avoid financial fraud".

Maria and Anastasios (2010) investigated Investing incidence of fraud in small economies: the case for Cyprus. The study identifies the extent and types of fraud victimization in small economies and the state of the art in a small economy the policy implications. The study used primary data with questionnaire administered on 600 workers randomly selected from organization in Cyprus. Findings of the study revealed that no industry or size of firm is immune from fraud. Whilst executives are well aware of fraud they seem not to prevent it in their organization since audit has pass vote of confidence as 85.8 are victimized in the last five years. The implication of this is that it is relevant to both industry and stakeholders as practical implications are raised regarding fraud precautions and the need for a specialized fraud investigation.

Sarens and De Beelde (2006) investigated the association between accounting systems and fraud management in Belgium. The study adopted a descriptive survey design where public servants were used population. The study adopted the use of ANOVA to analyze the data. The result found that certain control characteristics like tone-at-the-top, level of risk and control awareness, extent to which responsibilities related to risk Management and internal controls are clearly defined and communicated are significantly related to the role of the Internal Audit function and fraud detection within an organization.

Chukwu (2012) examined the impact of accounting control system on the financial management of public sector organizations in Enugu state. The population of the study was 250 randomly selected accounting staff of the various ministries. Questionnaire were used as data collection instrument. Utilizing regression analysis, it was found that accounting control system has a significant relationship with financial management in the public sector. It was concluded that perpetration of fraud and losses of revenue in the ministries are as a result of weakness in the internal control system.

Idowu and Adedoku (2013) studied the effects of accounting control system on payroll fraud detection in selected Nigerian commercial banks. The population of the study was all quoted deposit money banks in Nigeria while sample size was determined using filtering technique. Using the least square regression analysis; their result showed that internal control variables have significant effect of fraud detection in Nigerian banks. It was concluded that concluded among others that fraud was visible as a result of poor employee training.

Eze and Ani (2013) evaluated accounting control procedures as a weapon for fraud detection, deterrence and prevention in an emerging democracy after decades of Military incursion in governance. Using a sample consisting of about fifty per cent of the population of the study, selected through random sampling techniques, new light has been shed on how internal control procedures can assist in fraud detection, deterrence and prevention in Nigeria. Specifically, it was found that the degree of internal control in Ministries and departments leaves much to be desired. There were clear cases of failure of the system of internal check and absence of actual segregation of duties.

Mahdi, Mahmoud, Shiri and Fatemeh (2011) investigated the effectiveness of internal control in the Iranian banking sector with special reference to Bank Mellat. The statements embedded in the questionnaire were; (1) Does an internal control system in Bank Mellat has proper power in preventing fraud and error? (2) Is there a significant relationship between the weakness of internal control system components (Control Environment, risk assessment, information and communication, Control Activities and monitoring) and the occurrence of error and fraud? To test the validity of the questions, hypotheses are postulated relating frequency of fraud reported as failure of internal control with the questionnaire answered on the relationship between the fraud and components of internal control. The paper evaluated the effect of Control Environment, Control Activities, risk assessment, information and communication and continuous monitoring on failure of internal control quantified as reported errors and fraud. The empirical evaluation found out that all the elements of the internal control have significant effect on occurrence of errors and fraud, though the magnitudes are different. Accordingly, Weakness of Control Environment, Control Activities, risk assessment, information and communication and monitoring as a component of internal control system in an incident of error and fraud is effective.

Tekalign (2011) investigated if the existing accounting control in public enterprises in Ethiopia contributing to accounting fraud. The survey instruments on 11major public enterprises in Addis Ababa were conducted using self-administered questionnaires to auditors and accountants. Frauds were represented as any violation of principles, manipulation of sales, expenses or inventories. The result indicated that the respondents believe the existed internal controls were sufficient to keep possibility of accounting fraud to reasonably low level. Even though the internal control would detect accounting fraud, respondents require codes of conduct and employees training as additional tool to detect fraud events.

Ewa and Udoayang (2012) carried out a study to establish the impact of accounting control design on banks" ability to investigate staff fraud and staff life style and fraud detection in Nigeria. Data were collected from 13 Nigerian banks using a four point likert Scale questionnaire and analyzed using percentages and ratios. The study found that Internal control design influences staff attitude towards fraud such that a strong accounting control mechanism is deterrence to staff fraud while a weak one exposes the system to fraud and creates opportunity for staff to commit fraud.

Onyefulu and Ofor, (2016) determined how internal control can prevent and detect fraud in the public sector. This study covers the accounts section of Anambra state government of the 247 staff in the accounts section, 152 staff in the director of accounts office, internal control unit, cash unit and pay office were sampled using well-structured questionnaire. Data were analyzed using Pearson's moment correlation coefficient. The study shows internal control of Anambra state public sector is faced with a risk of inadequate staff, not equipped with qualified personnel to prevent and detect fraud. It was concluded internal control system is a viable measure for detecting fraud in the public sector.

A study by Roth and Espersen (2003) on the situation of internal control in companies introduced the components of an internal control (Control Environment, evaluating risks, Control Activities, information and communication and supervising) as an advocator for a company to achieve its goals as well as its own progressive procedures. The results suggest (a) Recognizing an internal control system and the role of corporate relationship; (b) Propagating self-control systems, (c) Identifying risk factors; and (d) Preventing incidents of fraud and financial mistakes.

Joseph and Victoria (2012) examined the effectiveness of accounting control systems of listed firms in Ghana. The study used annual reports of a sample of 33 firms listed on the Ghana Stock Exchange. In measuring the level of internal control effectiveness, 23 items relating to internal control categorized under Control Environment, information and communication, risk assessment, Control Activities and monitoring were operated and the effectiveness score was determined based on the items. Overall internal control system showed an average level of effectiveness in this study, which implied an overall low level of effectiveness. Of the five categories assessed under internal control system, Control Environment showed a higher level of effectiveness.

Machura (2007) carried out a study on effectiveness of internal auditing in the Tanzanian public sector. This study assesses the effectiveness of internal auditing in Tanzanian public sector whereby ministries, independent department and agencies (MDAs) were selected as case study. The study is based on fieldwork that concentrated in Dar es Salaam and Dodoma regions whereby discussions and interviewees were used to collect data. The study revealed that generally internal auditing in Tanzanian public sector is not effective. It was found that internal audit units are inadequately staffed, and there is little understanding among key stakeholders on the roles of internal auditing services in MDAs. Some perceive it as policing service hence provide little or no support to internal auditors. Internal audit units in MDAs have low organizational status, many operating without budget lines, and very few executives who take actions on findings raised by chief internal auditors.

The results also showed that internal auditors contribute to the ineffectiveness by performing financial audits only, and performing their duties without having official auditing standards and manuals which could be used as guidance. The researcher therefore recommends to the Ministry of Finance to make sure that the required number of internal auditing staff with relevant skills is recruited and maintained, action enforcing provisions within the legislations are in place, and independent and functional audit committees within MDAs are made operational. Executives should provide conducive working environment by allocating enough funds to internal auditing units, also by raising the status of internal auditing units in terms of remuneration and the organizational status.

Ochoge (2011) carried out the study titled "Internal controls and organizational performance: a case of Medipont industries limited in Uganda." The study sought to establish a relationship between internal control and organizational performance of Medipoint Industries Limited.

The study objectives were; to examine the effectiveness of internal controls used in Medipoint Industries Limited, to establish the level of performance in Medipoint Industries Limited and to establish a relationship between internal control and performance in Medipoint Industries Limited. It was concluded; the study findings indicated that the internal controls used in Medipoint Industries Limited were ineffective and unsatisfactory, the level of organizational performance was found to be inadequate and a significant positive relationship between internal controls and organizational performance was established to exist.

It was recommended that the management of Medipoint Industries Limited should design effective internal control systems through ensuring that adequate asset listings is done by management,, capital assets purchased are approved by appropriate level of management and asset numbering is done to show location and protection of the assets. Management ensures that it strengthens strategies aimed at improving organizational performance in all categories of staff; management should appreciate the findings in the relationship between internal controls and organizational performance to ensure its continued production in a competitive industry in Uganda..

Edwin (2009) carried out a study on assessment of the effectiveness of internal financial control system in local government authorities in Tanzania, The Case Study of Kisarawe District Council. The objective of this study was to assess the effectiveness of the internal financial control system in local government authorities in Tanzania. Specifically the study aimed at the assessment of the effectiveness of internal financial control system in accounting department of local government authorities; determination of the effectiveness of the internal audit unit in local government authorities; determination of the effectiveness of the procurement management unit in local government authorities and the assessment of the effectiveness of budget as internal control tool in local government authorities.

A cross-sectional study design was employed, basically quantitative method of data collection was used where by both structured questionnaires with open and closed ended options were used. The researcher collected data from sixty three respondents comprised of; nineteen councilors, seventeen heads of departments and projects, thirteen procurement unit staffs and tender board members, thirteen finance department staffs and one internal audit staff. Data obtained were analyzed quantitatively using the Statistical Package for Social Sciences (SPSS) and tested using CHI-square.

The findings indicated that there was poor internal financial control in accounting department including lack of monthly bank reconciliations and trial balances. Also, there were lack of updated fixed asset register, vote book and computerized accounting package. Budgeted votes and procurement regulation were not followed accordingly. Internal auditing was understaffed and lack facilities which impair its efficiency. Godfrey (2009) conducted a research on effectiveness of internal audit in fraud detection in Tanzania commercial banks. Internal audit processes are integral part of fraud fighting functions in organizations. The main thrust of this research was to explore the effectiveness of internal audit function in fraud detection in Tanzania commercial banks. It also examined ways through which internal audit function and other functions can further help fraud detection in Tanzania commercial banks. Given the nature of the research, it was deemed appropriate to use the survey approach with deployment of questionnaires to selected commercial banks, from which the researcher believed that data would be a fair representative of the commercial banking industry in Tanzania.

The study found out that analytical reviews, independent confirmations and inquiry techniques are effective ways of detecting fraud. It also found that other ways through which fraud can be detected includes use of forensic accountants, continuous auditing, staff rotation, whistle blowing and fraud reporting.

The study also found that relevant training has a direct impact on internal auditors' ability to detect fraud. For effectiveness of internal auditors in fraud detection to be more pronounced, it is recommended that commercial banks' management should extend more support to their respective internal audit functions in terms of training, resources and general attitude change towards internal audit. Management of commercial banks should consider staff rotations, introduction of continuous auditing and defining clear and rewardfull whistle blowing channels to supplement the existing fraud fighting efforts.

The study recommended that there should be close supervision of accounting procedures with job description and rotation in finance department. Also, the use of full computerized accounting system to enhance internal financial control and timely financial report delivery. The procurement regulations and plan should be properly adhered. The internal audit unit should be added with more staffs and given more facilities to perform its work efficiently.

Omondi (2013) carried out a study on the impact of forensic accounting services on fraud detection and prevention among commercial banks in Kenya. The objective of this study was to examine the impact of forensic accounting services on fraud detection and prevention among commercial banks in Kenya, the most prevalent type of fraud and to establish the major areas of application of forensic accounting services. The data collection instrument preferred for the study was a questionnaire. Findings from the study saw that fraud detection and prevention increased when forensic accounting services was employed. The study used descriptive research survey design and uses a sample of 47 respondents in 16 commercial banks in Kenya. The data was analyzed using Statistical package for social sciences (SPSS). The study findings indicated that the application of forensic accounting services by banks led to increased fraud prevention in the commercial banks and the highest application was on enhancing quality of financial reporting. The most prevalent type of fraud in the banking sector was fraudulent expense claims.

Barra (2010) investigated the effect of penalties and other accounting controls on employees" propensity to be fraudulent. Data was collected from both managerial and non-managerial employees. The results showed that the presence of the internal checks, separation of duties, increases the cost of committing fraud. Thus, the benefit from committing fraud has to outweigh the cost in an environment of segregated duties for an employee to commit fraud. Further, it was established that segregation of duties is a "least-cost" fraud deterrent for non-managerial employees, but for managerial employees, maximum penalties are the "least-cost" fraud disincentives. The results suggest the effectiveness of preventive controls Control Activities such as segregation of duties is dependent on detective controls.

Amudo and Inanga (2009) also carried out a study in Uganda to evaluate the internal control systems that the regional member countries of the African Development Bank Group institute for the management and control of the Public Sector Projects and activities that the Bank finances. There are 14 projects of the bank's public sector portfolio in Uganda. The data received and analyzed is for eleven projects. Three projects were omitted because they were not fully operational to install effective internal control systems. The study identified the following six essential components of an effective internal control system: Control Environment, risk assessment, Control Activities, information and communications, monitoring and information technology. The outcome of the evaluation process was that some control components of effective internal control systems were lacking in those projects. These rendered the control structures ineffective.

Abu-Musa (2004) examined the existence and adequacy of implemented security controls in the Egyptian Banking Sector (EBS). The results revealed that the computer departments paid relatively more attention to technical security controls, while Internal Audit departments emphasized more on the behavioral and organizational security controls. The study also provided valuable empirical results regarding inadequacies of implemented Accounting Information Systems (AIS) security controls, and introduced some suggestions to strengthen and improve the security controls in the EBS.
A study by Roth and Espersen (2003) on the situation of internal control in companies introduced the components of an internal control (Control Environment, evaluating risks,

Control Activities, information and communication and supervising) as an advocator for a company to achieve its goals as well as its own progressive procedures. The results suggest (a) Recognizing an internal control system and the role of corporate relationship; (b) Propagating self-control systems, (c) Identifying risk factors; and (d) Preventing incidents of fraud and financial mistakes.

Kiprop (2010) carried out a study on responses to fraud related challenges by Barclays bank of Kenya. This was a case study since the unit of analysis was one organization aimed at getting detailed information regarding the strategic responses to increasing fraud risk at Barclays Bank. Primary data was collected using self-administered interview guides. The interview guides contained open-ended questions. The content analysis was used to analyze the respondents' views about the strategic responses to fraud risk in Barclays Bank. The information was presented in a continuous prose. 18 out of the 20 interviewees targeted completed the interview guide making a response rate of 87.5%. The study concluded that the bank had put in place fraud detection systems. However, the study failed to assess the effectiveness of the fraud detection systems that had been put in place.

Kakucha (2009) evaluated the level of effectiveness of monitoring internal controls of enterprises operating in Nairobi. The study was quantitative and was conducted between September 2007 and June 2009 using a sample of 30 small businesses as listed in the National Social Security Fund (NSSF) Register of Kenya. Primary data was collected from the managers of the small business using interviews and examination of documents pertaining to internal controls. The study established that there are deficiencies in the systems of internal controls, with the degree of deficiencies varying from one enterprise to another. The components of internal control that were missing in most businesses surveyed were: firstly, risk analysis, and secondly lack of proper flow of information.

Loebback, Eining and Willingham, (1989) also used the red flags approach to develop a conceptual model to assess the probability of the occurrence of material management fraud. They surveyed 277 audit partners at KPMG (Peat Marwick). Loebback, et al (1989) concluded that the auditor's evaluation of the client's Control Environment is Important in order to assess the likelihood of material mis-statements during the planning of the audit. It was also found that Weak control creates a significant condition that would allow management fraud, a defalcation or an error to occur.

Sartini (2012) conducted an exploratory study on accounting control system for Islamic micro financing. This paper aimed to evaluating the implementation of internal control system for Islamic micro financing. It also aims to investigate the implementation of an internal control system for financing activities practiced by Baitul Maal wat Tamwil (BMT) a special micro finance organization; in Indonesia system for Islamic financing is formulated. Primary data that relate to the implementation of an internal control system for financing activities were obtained through a direct survey using questionnaires. The data are then analyzed using descriptive statistic and qualitative analysis to find the implementations of the internal control system. BMTs in Indonesia have implemented an internal control system for their financing activities. The rank of the implementation is: information and communication and monitoring This study also indicated that the implementation of authorization and consultation to the Shariah Supervisory Board was low.

Kasum (2007) studied "The Relevance of Accounting Systems to Financial Crimes in Private and Public Sectors of Third World Economies with particular reference to Nigeria". The work specifically evaluated the extent of financial crimes in developing countries and compared the private and public sector with a view to determining the sector where accounting systems are more required. The results of their reviews are that fraud

factor theory of Cressey. Capabilities mean that, the fraud perpetrator must have the necessary traits, abilities, or positional authority to pull off his crime.

Wolfe and Hermanson (2004) believed most financial crimes or frauds would not occur without the right person with the right capabilities implementing the details of the fraud (Wolfe & Hermanson, 2004). They agreed with Cressey (1953) that opportunity opens the doorway to fraud, while incentive and rationalization can draw fraudsters to commit fraud. However, fraudsters must have capability to recognize the open doorway as an opportunity. They further suggested six essential traits for capability which are; (1) authoritative position (power) or function within the organization; (2) capacity to understand and exploit internal control weaknesses to the greatest advantage; (3) strong ego and great confidence that he/she will not be detected or if caught he/she will get out of it easily; (4) capability to coerce others to commit fraud; (5) lies effectively and consistently; and (6) capability to deal very well with the stress (Wolfe & Hermanson, 2004).

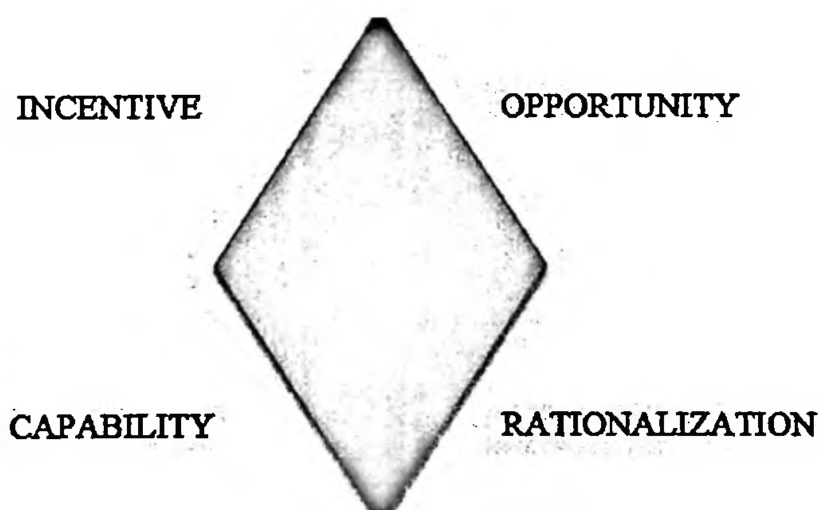

Figure 2.The fraud diamond
Source: Wolfe and Hermanson (2004)

Reviewing literature shows that researchers classified the motive side of the fraud diamond differently. Some researchers classified them as personal, employment or external pressure, while other classified it as financial and nonfinancial pressure. However, it can be noticed that both classifications are interrelated. For instance, personal pressure can come from both financial and non-financial. A person's financial pressure in this case could be gambling addiction or a sudden financial need, while a personal non-financial pressure can be lack of personal discipline or greed. By the same token, employment pressure and external pressure can come from either financial or non-financial pressure. Thus, Forensic Accountants have to keep in mind that pressure/motive to commit financial crimes can be either a personal pressure, employment pressure, or external pressure, and each of these types of pressure can also happen because of financial and non-financial pressure. Forensic Accountants also need to understand the opportunity for financial crimes to help them in identifying which fraud schemes an individual can commit and how fraud virus occurs when there is an ineffective or missing internal control.

However, it can be criticized that even though the fraud diamond added the fourth variable capability to the fraud triangle and filled the gap in other theories, the model alone is an inadequate tool for deterring, preventing or detecting financial crimes. This is because, the two sides of the fraud diamond (incentive/pressure and rationalization) cannot be observed, and some important factors like national value system are ignored. Our present National Value System is not good, little or no premium is put on things like honesty, integrity and good character. The society does not question the source of "wealth". Any person who stumbles into wealth is instantly recognized and honored. It is a fact of our time that financial crimes have its root firmly entrenched in the social setting where wealth is honored without questions. Ours is a materialistic society which to a large extent encourages financial crimes. The desire to be with the high and mighty caliber of the society extreme want that is often characterized by need, cultural demands or cultivation of a life too expensive for the legitimate income of the individual. The research believes that, it is important for Forensic Accountants to consider all the fraud theory to better understand why financial crime occurs. Therefore, all other fraud theory should be regarded as an extension to wolf and Hermanson's fraud diamond and should be integrated in one theory that includes national value system. This should help them in effectively investigating and assessing financial crime risk.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Research Design

A descriptive survey research design was adopted in this work which dwells on the effect of accounting controls on payroll fraud detection in Nigeria. The study elicited the perceptions of variety stakeholders on whether accounting controls identified can be used as tools to detect payroll fraud in the Nigerian public sector. The survey approach is preferred, according to Carmichael and Sweieringa (1968), Lee, Ali and Gloeck, (2009) on the grounds of relevance and efficiency; the thrust of this work require the different views of a wide-range of stakeholders thus supporting the generalization of its outcome and external comparison of its result; and as prior studies of the phenomena adopted the same technique.

3.2 Population, Sample and Sampling Techniques

The population of the study comprised five (5) selected Federal Ministries in Abuja, Nigeria. The Ministries and various populations are therefore tabulated below:

Table 3.1 List of sampled Ministries and Population

S/No	Ministries	Population of staff in accounting unit
1	Ministry of Finance	188
2	Ministry of Education	87
3	Ministry of Agriculture	49
4	Ministry of Justice	67
5	Ministry of Health	55
Total		446

Source: *Field Survey, 2019*

For the purpose of this study, the researcher used a non-probability sampling (purposive sampling) to select the five (5) Ministries used as population for the study. The use of purposive sampling was based on the fact that the Ministries appears to be the same and therefore may serve a good representative of the whole population. Hence, the researcher used accounting staff in the 5 selected Ministries as the sample size. The sample size of 446 respondents was selected from the 5 sampled Ministries in Abuja

3.3 Methods of Data Collection

This study used primary sources of data collection. The data was obtained through questionnaire. The adoption of the primary source was prompted by the requirement of the model and tool of analysis adopted and that the variables of the study consist of accounting control systems and payroll fraud detection. A four point Likert rating scale was used to measure all variables. The lowest rating of 1 signified a low rating by the respondents while a high rating of 4 signified a high rating by the respondents.

Reliability and Validity

An instrument is said to be dependable when it has the ability to produce reliable and consistent measurements. Reliability of this instrument will be evaluated using Cronbach Alpha which measures the internal uniformity of the instrument. Cronbach Alpha values are widely used to authenticate the dependability of a construct. The most common reliability coefficient is Cronbach's alpha which assesses internal dependability by defining how all variables on a test relate to each other and to further test- internal consistency or coherence of data. The reliability is expressed as a coefficient between 0 and 1.00. The higher the coefficient, the more dependable is the test.

Table 3.2: Alpha Test

Variable	α=Alpha	Comment
Payroll Fraud Detection	0.9746	Reliable
Internal Check	0.9714	Reliable
Internal Audit	0.8756	Reliable
Budgetary Controls	0.9460	Reliable
Computerized Accounting	0.9680	Reliable

Source: STATA Output, 2019.

The result indicates that all the variables have no reliability constraint because the widely acceptable threshold is 0.7 and since all variables depicted an Alpha value above 0.7 the instrument is considered reliable. This represents significant degree of reliability and on this basis, it is supported that the scales used for the study are reliable to capture the variables. The most common reliability coefficient is Cronbach's alpha which assesses internal dependability by defining how all variables on a test relate to each other and to further test- internal consistency or coherence of data. The reliability is expressed as a coefficient between 0 and 1.00. The higher the coefficient, the more dependable is the test.

3.4 Techniques for Data Analysis and Model Specification

Multiple regression was adopted to empirically, run the regression using STATA as tool of analysis. The study used correlation in order to determine the relationships between the variables of the study. All tests were conducted in order to meet the assumptions of regression analysis.

Model Specification and Variables Measurement

$PFD = \beta0 + \beta1IC + \beta2IA + \beta3BC + \beta4CA + \epsilon$

Where

PFD= Payroll Fraud Detection

$\beta 0$= constant

IC= Internal Checks

IA= Internal Audits

BC= Budgetary Control

CA= Computerized Accounting

ϵ= error terms

Variables Measurement

Variables	Measurement
Payroll Fraud Detection	Was measured by red flags, whistle blowing policy, fraud Risk Assessments and fraud control.
Internal Check	This was measured by the frequency of checks on accounting transactions and level of compliance with financial rules and regulations.
Internal Audit	This was measured by the level of independence exercised by internal auditors and also, the level of compliance to internal control measures in the public sector.
Budgetary Control	Was measured by the level of control exerted by officers on the budget to reduce the level variance.
Computerized Accounting	Was measured by the volume of accounting transactions carried out in the various ministries using computers.

3.5 Justification of Method

Multiple regressions was used for this study, because it determined the relationship between one dependent and two or more independent variables for a given level of change in the independent variable. The adoption of this method is in line with Gbegi (2015).

CHAPTER FOUR

DATA PRESENTATION AND ANALYSIS

4.1 Data Presentation

4.1.1 Response Rate

The number of questionnaires distributed was 446 out of which 378 were appropriately completed and returned. The results for the response rate are displayed below.

Table 4.1 Response Rate

Response	Frequency	Percent
Returned	378	84
Unreturned	68	16
Total	446	100

Source: Authors computation, 2019

The result in the table above shows a total positive response rate of 84%. According to Mugenda and Mugenda (2003) a response rate of above 50% is sufficient for descriptive study. Babbie (2004) also, posited that the response rates of above 50% are considered adequate for analysis and publication. He concluded that 60% is considered good, 70% very good while 80% and above is excellent. Built on these affirmations from well-known scholars, 84% response rate is considered appropriate for the study.

4.1.2. Descriptive Statistics

Table 4.2 Result of Descriptive Statistics

A descriptive statistic explains the behavior of data used for any study. For the purpose of this study, the behavior of primary data collected from the sampled respondents expressed in mean, standard deviation, minimum and maximum is explained below.

Question on Fraud Detection

Questions	MEAN	STD. DEV.	MIN.	MAX
Payroll Fraud Detection	2.5712	1.0905	1	4
Internal Check	2.4796	1.0372	1	4
Internal Audit	2.7384	1.1487	1	4
Budgetary Controls	3.0272	0.8327	1	4
Computerized Accounting	2.8691	0.9243	1	4

Source: STATA OUTPUT, 2019.

From the table above it can be seen that payroll fraud detection has a cumulative mean of approximately 3 with a corresponding standard deviation of 1.0905 which showed that the respondents were almost equally divided in their opinion concerning the questions raised on payroll fraud detection. The mean figure indicated that majority of the respondents agree with statements raised under fraud detection. It was also found that internal check had mean of approximately 2 and a standard deviation of 1.0372 which also, show that most of the respondents showed a positive view on the assertions on internal check. Based on the likert rating the mean value showed that majority of the respondents agree with these assertions. The study elicited the opinion of respondents on the issues concerning internal controls and the outcome depicted an average of approximately 3 and a corresponding standard deviation of 1.1487 which clearly shows a certain level of agreement with internal control measures in place. Respondents were also, quizzed on the instituted budgetary controls with results showing a mean of about 3 and a standard deviation of 0.8327 which evidence that the level of satisfaction expressed by stakeholders regarding the instituted budgetary controls. Based on the likert scale, it shows that respondents agree with this assertion. Finally, the effectiveness of the computerized accounting system with respect to payroll fraud detection was also checked the results indicated a mean of 3 and a standard deviation of 0.9243 which shows that the computerized accounting system was satisfactory given the opinion of the respondents. The result also showed that minimum and maximum had an output values of 1 and 4 respectively for all variables which shows a complete absence of outliners.

4.1.3 Correlation Coefficient Matrix

The table below show the pearson correlation coefficients between all combinations of dependent and independent variables. The correlation matrix is used to determine the relationship between the dependent and independent variables of the study.

Table 4.3 Correlation Matrix of the Independent and Dependent Variables

Variables	PFD	IC	IA	BC	CAS
PFD	1.0000				
IC	0.9407	1.0000			
IA	0.9607	0.9686	1.0000		
BC	0.7386	0.7055	0.7734	1.0000	
CAS	0.9048	0.9208	0.9233	0.5673	1.0000

Source: STATA Output, 2019.

A correlation matrix shows the correlation coefficients between sets of variables. Each random variable in the table is correlated with each of the other corresponding values in the table. This allows you to see which pairs have the highest correlation. In this table the correlation between the dependent variable (Payroll Fraud Detection) and the accounting control explanatory variables (internal check, internal control, budgetary controls and computerized accounting system) is presented. The result indicates an all positive correlation between the dependent and independent variables with internal audit having the highest correlation with the dependent variable.

Multicollinearity Test

Multicollinearity is a statistical situation where some independent variables in a multiple regression model are highly auto-correlated. When multi-collinearity occurs the correlated predictors provide redundant information about the responses (Lauridsen & Mur, 2005). It is important to undertake a multi-collinearity test to help reduce the variables that measure the same things (Robert, 2007). According to O'Brien (2007), the Variance Inflation Factor (VIF) measures the impact of collinearity among the variables in a regression model. Values of VIF that exceed 10 are often regarded as indicating multi-collinearity problem.

Table 4.4: Variance Inflation Factor Measure of Multicollinearity Test

Variable	VIF	1/VIF
IC	1.26	0.790524
IA	1.21	0.827585
BC	1.13	0.887705
CAS	1.05	0.954342
MEAN VIF	1.46	

Source: STATA OUTPUT, 2019.

Table above shows that VIF and tolerance value for all the variables had mean VIF of less than 10 and tolerance of higher than 0.05. It therefore, implies that there was no multi-collinearity among the independent variables.

Homoscedacity Test for Fraud Detection

Homoscedascity means that the previous error terms influence other error terms and hence violating the statistical assumption that the error terms have a constant variance. But, Homoscedascity suggests that the dependent variable has an equal level of variability for each of the values of the independent variables (Garson, 2012). A test for homoscedascity is made to test for variance in residuals in the regression model used. If there exists equal variance of the error terms, we have a normal distribution. Lack of an equal level of variability for each value of the independent variables is known as hecteroscedastitcity, the Breusch-pagan test developed by Breusch and pagan (1979) was used to test for homogeneity in a linear regression mode. The rule is that if p-value is greater than 0.05, Ho is accepted and H1 is rejected, if the p-value is less than 0.05, Ho is rejected and H1 is accepted.

Test for Hecteroscedastitcity in the response and residuals.

1.003	3	0.2080
Test – Statistics	Df	Sig

The result of the test shown in the table above indicate that the test statistic is 1.003 p-value = 0.2080. since the p-value is greater than 0.05. The null hypothesis was accepted and concluded that the data is homogeneous in nature (that is, the data is not heterogeous in variance), which satisfies the assumption of the regression.

4.2 Results and Analysis

This section analyses and presents the regression results of the model of the study. The study specifically, presented the summary of the regression result, the result of the individual explanatory variables and discussion of findings.

Table 4.5 Summary of Multiple Regression Results

R Square	0.9269		
Adj. R square	0.9258		
F. statistics	890.22	0.000	

Source: STATA OUTPUT, 2019

The result of the linear regression in the table below indicate R2=0.9269. The R-squared value of 0.9269, gives an indication that there is a strong linear relationship between the dependent and independent variable. The R-squared indicates that the explanatory power of the independent variables is 93%. This means that about 93% of the effectiveness of payroll fraud detection can be explained by the independent variables while the remaining 7% is explained by variables not included in the model. The adjusted R-squared which is slightly lower than the R-squared value is a precise indicator of the strength of the relationship between the dependent and the independent variables because is sensitive to the addition of irrelevant variables. The table above also, showed that the model is fitted as indicated by the F-Statistics of 890.22 which is significant at 1% level of significance (as evidenced by the p-value of 0.0000).

4.2.1 Internal Check and Payroll Fraud Detection

Ho1: Internal Checks have no significant impact on payroll fraud detection in the Nigerian public sector.

Table 4.6: Internal Check

Variables	Coefficient	P-Value
Internal Check	0.1335198	0.039
Constant	-.1351196	

Source: STATA OUTPUT, 2019.

The result from the table above shows that internal checks has a coefficient of 0.1335198 and a p-value of 0.0039. Based on the p-value which is less than the t-statistic of 0.05, the study therefore, rejects the null hypothesis which states that, internal checks have no significant impact on Payroll fraud detection in the Nigerian public sector.

4.2.2 Internal Audit and Payroll Fraud Detection

Ho2: Internal Audit has no significant impact on payroll fraud detection in the Nigerian public sector.

Table 4.7: Internal Audit

Variables	Coefficient	P-Value
Internal Audit	0.6297243	0.000
Constant	-.1351196	

Source: STATA OUTPUT, 2019.

From the table above, internal audit has a coefficient of 0.6297243 and p-value of 0.0000. Based on this finding which is evidenced by a p-value of 0.0000 we reject the null hypothesis which states that internal audit has no significant impact on payroll fraud detection in the Nigerian public sector.

4.2.3 Budgetary Controls and Payroll Fraud Detection

Ho_3 Budgetary Controls has no significant impact on payroll fraud detection in the Nigeria public sector.

Table 4.8: Budgetary Controls

Variables	Coefficient	P-Value
Budgetary Controls	0.143175	0.057
Constant	-.1351196	

Source: STATA OUTPUT, 2019.

The result in the table above showed a coefficient of 0.143175 and a p-value of 0.0057. Considering the p-value which is greater than the t-statistics 0.05, the study accepts the null hypothesis which states that budgetary Controls have no significant impact on payroll fraud detection in the Nigeria public sector.

4.2.4 Computerized Accounting System and Payroll Fraud Detection

Ho4: computerized accounting has no significant impact on payroll fraud detection in the Nigerian public sector.

Table 4.9: Computerized Accounting System

Variable	Coefficient	P-Value
Computerized Accounting System	0.1795519	0.003
Constant	-.1351196	

Source: STATA OUTPUT, 2019.

The result of the regression indicated a coefficient of 0.1795519 and a p-value 0.003. Considering that the p-value is less than the t-statistics we reject the null hypothesis which states that computerized accounting has no significant impact on payroll fraud detection in the Nigerian public sector.

4.3 Discussion of Findings

4.3.1 Internal Check and Payroll Fraud Detection

The first objective of the study was to ascertain the effect of internal checks on payroll fraud detection in the Nigerian public sector. The hypothesis tested stated that internal checks have no significant effect on payroll fraud detection in the Nigerian public sector.

The result of the regression shows that internal checks exerts significant influence on payroll fraud detection in the area covered by the study. The implication of this result is that a percentage increase in the internal checks of ministries in the Nigerian public sector will result to a percentage increase in payroll fraud detection. This out outcome supports the fraud diamond theory which is the core theory underpinning this work. These finding is also in line with Chukwu (2012); Idowu and Adedoku (2013) and Joseph and Victoria (2012).

4.3.2 Internal Audit and Payroll Fraud Detection

The study also, assessed the effect of internal audit on payroll fraud detection in the Nigerian public sector. The hypothesis stated that internal audit has no significant effect on payroll fraud detection in the Nigerian public sector. The result indicated that internal audit has a significant effect on payroll fraud detection in the Nigerian public sector environment. This means that the efficiency in internal audit in the Nigerian public sector will not only reduce fraud but will also, result to payroll fraud detection. Most of the stakeholders agreed with the assertion that if internal audit is properly conducted will result increased payroll fraud detection. This outcome also supports the fraud diamond theory which is the main theory underpinning this work. The outcome is also in line with Ewa and Udoayang (2012) and Roth and Espersen (2003).

4.3.3 Budgetary Controls and Payroll Fraud Detection

The third objective of the study determined the effect of budgetary controls on payroll fraud detection in the Nigerian public sector. The hypothesis in this situation stated that budgetary controls have no significant effect on payroll fraud detection in the Nigerian public sector. This result indicated that budgetary controls have no significant influence on payroll fraud detection in the Nigerian public sector. It means that budgetary controls in the Nigerian public sector are not effective enough in detecting payroll fraud and other irregularities. This is evidenced by a large proportion of the respondents who strongly disagreed that these activities can go a long way in assisting the ministries in detecting payroll fraud. This finding does not support any theory used in the study but are consistent with those of Barra (2010); Amuda and Iyanga (2009); Abu-Musa (2004).

4.3.4 Computerized Accounting and Payroll Fraud Detection

The fourth objective of the study evaluated the effect of computerized accounting on payroll fraud detection in the Nigerian public sector. The hypothesis stated that computerized accounting has no significant effect on payroll fraud detection in the Nigerian public sector. The result of the regression shows that computerized accounting has a positive and significant influence on payroll fraud detection in the area covered by the study. it therefore, means that the effectiveness of computerized accounting system in the public sector will consummate into payroll fraud detection. This result is in support of the fraud diamond theory which is the core theory underpinning this work. This finding is in tandem with those of Kakucha (2009); Mahdi et al (2012) and Sartini (2012).

CHAPTER FIVE

SUMMARY CONCLUSION AND RECOMMENDATION

5.1 Summary

The main purpose of this study is to investigate the effect of accounting controls on payroll fraud detection in the Nigerian public sector. Specifically, the study examined the combined effects of internal checks, internal audit, budgetary controls and computerized accounting on payroll fraud in the Nigerian public sector. The chapter one dwelled on the background issues bothering on payroll role fraud and the accounting controls as well as the puzzles and limitations of other studies. The chapter also, presented the four research questions, objectives and hypotheses.

In chapter two, the study conceptualized the main variables, presented the empirical review and the theoretical framework. The concept of payroll was discussed, with other concepts such as internal checks, internal audit, budgetary controls and computerized accounting. The study empirical literature in order to create the research gap and bring out the weaknesses in other previous studies that necessitated the current study. In this study the fraud triangle theory and the fraud diamond were discussed, however, the study aligned with the fraud diamond theory as it was considered to have a more meaningful theoretical explanation of the existence of fraud in an organization.

The methodology employed to achieve the objective of the study was presented in chapter three. A descriptive survey research design was employed for the study. The population consisted 446 accounting staff across the five different federal ministries selected in Abuja. The 446 staff were adopted holistically, as sample size of the study. Meanwhile, primary sources of data through four point likert scale questionnaire were used to elicit the opinion of respondents. The study adopted the use of multiple regression to analyze the data after all regression pre-diagnostic tests were conducted.

In chapter four the study presented, analysed and discussed the results of the study. It presented the response rate for the questionnaires, the descriptive statistics, the correlation matrix, the post diagnostic tests and result of the multiple regression as well as the discussion of findings. The result of the study showed that internal check, internal audit and computerized accounting have a positive and significant effect on payroll fraud while budgetary controls have an insignificant effect on payroll fraud in the Nigerian public sector.

5.2 Conclusion

The study examined the combined effects of internal check, internal audit, budgetary controls and computerized accounting on payroll fraud detection in the Nigerian public sector. Based on the findings of this study, it was concluded that internal checks, internal audit and computerized accounting exerts a statistically, significant influence on payroll fraud detection in the Nigerian public sector. On the other hand, it was found that there is no statistical evidence to conclude that budgetary controls have any significant effect on payroll fraud detection in the Nigerian public sector.

5.3 Recommendations

Based on the findings and conclusion of this study, the following recommendations are made:

1. Government should strengthen the framework for internal checks working towards improving the integrity and ethical values of staff saddled with responsibility for monitoring the day-to-day operations of the organisations.
2. To add value and improve the operations of the ministries, government ensure that internal audit staff are well trained and their schedules reviewed from time to meet current challenges.

3. Government should review her policies and procedures for budgetary controls. This can be by exploring better ways of performance review, information processing, physical controls etc.
4. Government should evolve the use of computerized accounting system and the knowledge of staff in ICT should be enhanced. This can be done by equipping staff with skills on how operate accounting software and to identify, analyze and evaluate organizations' accounting systems while maintaining an acceptable level of independence.

5.4 Suggestion for further studies

With respect to the fact that respondents of this study are stakeholders from Federal Ministries in Abuja , it is proposed that scholars should explore other accounting controls system that affect payroll fraud in the private sector and Local Government Area so as to improve the reliability of the research outcomes when drawing inference about the population.

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APPENDIX ONE

LETTER OF INTRODUCTION

C/o Department of Institute of
Governance

and Development Studies,

Nasarawa State University,

Keffi.

Dear Participant,

We kindly request your participation in an on-going research that looks into the **EFFECT OF ACCOUNTING CONTROL SYSTEM AND PAY ROLL FRAUD DETECTION IN NIGERIAN PUBLIC SECTOR**. The questionnaire attached represents a section of data to be collected for the completion of the research work. The questionnaire was designed to mask the identity of participants to this research hence, participant confidentiality is guaranteed.

As a participant, we may like to hear your stories, experiences gained from carrying out our work. We would be very grateful for your time and experiences shared. Also, note that the information provided will be treated with utmost confidentiality.

Thank you.

Yours faithfully

APPENDIX TWO.

QUESTIONNAIRE

Statements on Payroll Fraud Detection

Questions	Strongly Agree	Agree	Disagree	Strongly Disagree
1. Fraud auditing is an effective mechanism for to detect payroll fraud				
2. Fraud reporting policies are important tools to the organization				
3. whistleblowing policy can significantly reduce payroll fraud to a reasonable extent				
4. The staff training on fraud prevention and detection is vital to mitigating the occurrence of fraud				
5. Use of forensic accountants can help in fraud detection				

Internal Checks

Questions	Strongly Agree	Agree	Disagree	Strongly Disagree
1. There are well-established standards for internal checks				
2. There should be adequate strategy in place to evaluate and ensure adherence to the established standards.				
3. There should be in existence clearly defined organizational structures within the ministry				
4. There should be an adequate framework to identify and alleviate any personnel deficiency in the system.				
5. management should closely ensure checks and balances in the system				

Internal Audits

Questions	Strongly Agree	Agree	Disagree	Strongly Disagree
1. Internal Audit Department is functioning effectively				
2. There are sufficient staff in the Internal audit department				
3. Internal report addresses weaknesses in the operating system.				
4. Management responds swiftly to internal audit queries.				
5. There are usually appropriate recommendations for improvement				

Budgetary Controls

Questions		Strongly Agree	Agree	Disagree	Strongly Disagree
1. There is a high degree of					

segregation of duties in the ministries.					
2. There exist well developed policies to ensure that standards conform with budgets					
3. Controls are in place to regulate expenditure incurred on allocated funds.					
4. There exist an appropriate framework to initiate corrective action whenever an anomaly in the budget control system is identified.					
5. There exists effective					

accountability and responsibility in executing budget control system.					

Computerized Accounting

Question	Strongly Agree	Agree	Disagree	Strongly Disagree
1. There are staff with specialized skill on ICT				
2. There is a high degree of compliance with the relevant accounting system				
3. There exist effective framework for ICT risk identification				
4. There exist appropriate fraud detection and				

mitigating strategic in the ICT framework				
5. There is continuous risk assessment of various changes in the documents stored on the computers.				