

**KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY**

**AN ASSESSMENT OF THE EFFECTIVENESS OF THE INTERNAL  
CONTROL SYSTEMS AT PBC LIMITED IN THE WESTERN NORTH  
REGION OF GHANA**

**BY**

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**(Bsc Accounting)**

**A THESIS SUBMITTED TO THE INSTITUTE OF DISTANCE LEARNING  
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## DECLARATION

I hereby declare that this submission is my own work towards the masters of science in accounting and finance and that, to the best of my knowledge, it contains no materials previously published by another person nor materials which has been accepted for the award of other degree of the university except where due knowledge has been made in the text.

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## ABSTRACT

This study therefore seeks to identify and discuss the internal control mechanism in PBC Ltd in relation to fraud prevention, misappropriation of funds, the benefits it derives in the implementation of internal control and the challenges PBC Ltd encounters in the implementation of its internal controls. The research adopted both qualitative and quantitative approach involving the use of questionnaire and structured interview. Quantitative research method involves collecting and interpreting numerical data or one that has been quantified while the qualitative involved face-to-face verbal questioning and responses which were presented thematically. The target population included all management and employees of PBC Ltd in the Six Regions of Ghana, namely Ashanti, Brono Ahafa, Western, Eastern, Volta and Central regions. The study however used Western North (Sefwi –Wiawso) Region of Ghana, since it was not possible to use all the six regions for this study. The target population from which the sample was taken was therefore 1056, constituting permanent staff and non –permanent staff workers. It was empirically proven that the internal control system at PBC Ltd was quite effective due to the fact that the company had defined organizational structure and assigned duties and responsibilities that made control very effective. The study further revealed that internal auditors enjoy some degree of independence while it was able to maximize the use of IT to track the system. It was proven empirically also that the company has effective board of directors and competent management to formulate policies and procedures that aided the smooth implementation of the designed internal control. Despite the fact that majority of the respondents agree that internal audit enjoys some degree of independence, it was agreed also that they only enjoyed partial independence. It behooves that well-functioning audit committee should be constituted to give more strength to the auditors and further ensure their independence.

## DEDICATION

I dedicate this work to the family

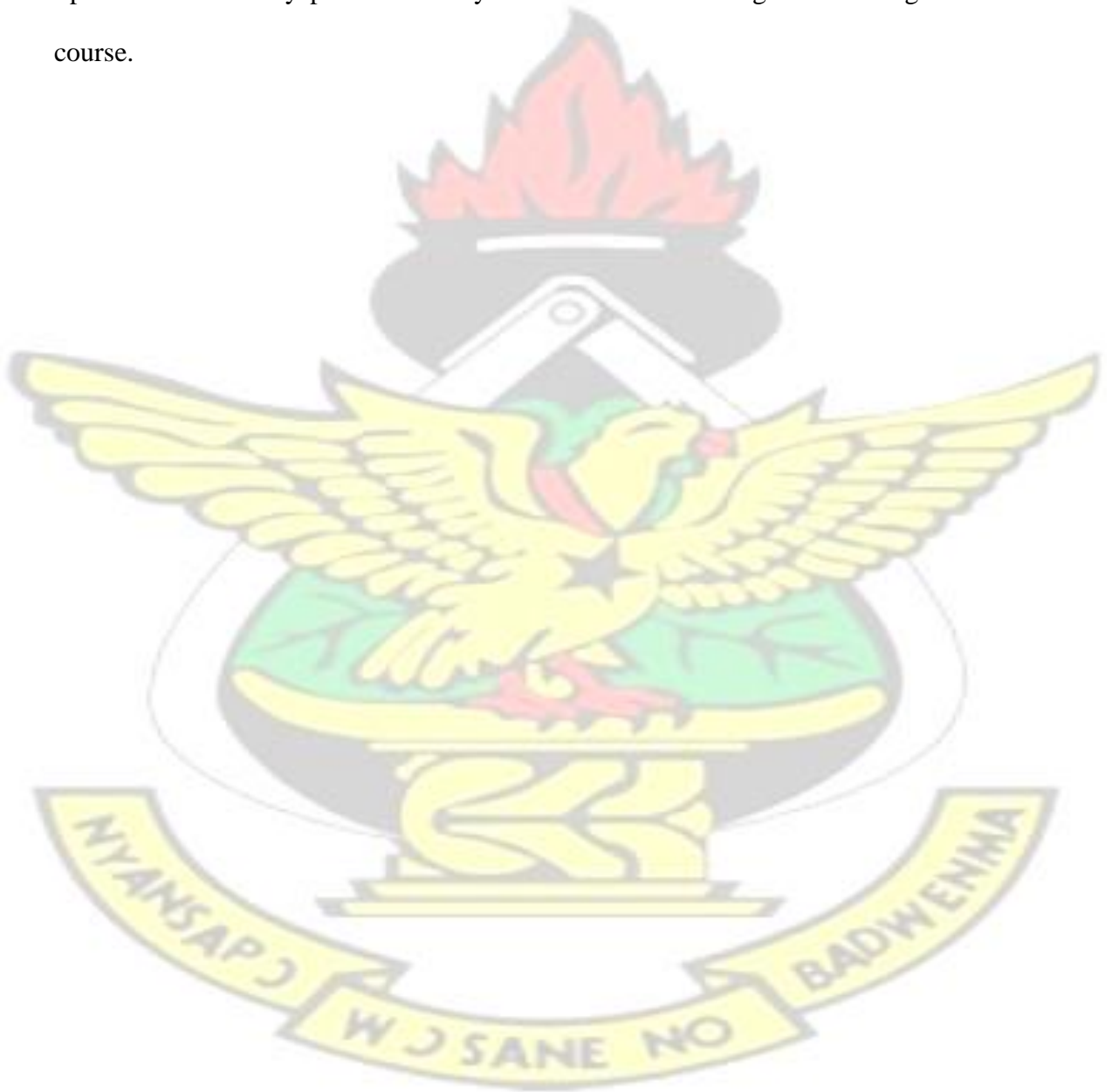
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## TABLE OF CONTENTS

<b>DECLARATION.....</b>	<b>ii</b>
<b>ABSTRACT .....</b>	<b>iii</b>
<b>DEDICATION.....</b>	<b>iv</b>
<b>ACKNOWLEDGEMENT.....</b>	<b>v</b>
<b>TABLE OF CONTENTS .....</b>	<b>vi</b>
<b>LIST OF TABLES .....</b>	<b>ix</b>
<b>LIST OF FIGURES .....</b>	<b>x</b>
<b>LIST OF ABBREVIATION.....</b>	<b>xi</b>
<b>CHAPTER ONE .....</b>	<b>1</b>
1.0 Introduction.....	1
1.1 Background of the study .....	1
1.2 Statement of the problem .....	3
1.3 Objectives of the study.....	4
1.4 Research Questions.....	4
1.5 Justification of the study .....	5
1.6 Scope and method of the study .....	6
1.7 Organization of the study .....	6
<b>CHAPTER TWO .....</b>	<b>8</b>
<b>LITERATURE REVIEW .....</b>	<b>8</b>
2.1 Introduction.....	8
2.2 Theoretical perspective of Internal Control System .....	8
2.2.1 Elements of Internal Control System.....	9
2.2.1.1 Control Environment .....	10
2.2.1.2 Accounting Information System (AIS) .....	10
2.2.1.3 Accounting Control Policies and Procedures .....	11
2.2.1.4 Risk Assessment .....	12
2.2.1.5 Control activities.....	12
2.2.1.6 Monitoring .....	12
2.2.1.7 Internal Audit as a Key Component of Internal Control Mechanism .....	13
2.2.1.8 Internal Audit Functions and Independence .....	13
2.2.8.2 Internal Audit Independence.....	14

2.2.3 Internal Audit Objectivity .....	15
2.2.4 Potential Threats to Internal Auditors .....	16
2.2.1.8 Auditing-related internal control.....	18
2.2.1.9 Control on Fund as a Key Element of Internal control mechanism.....	19
2.3 Potential Benefits of Internal Control System .....	20
2.4 Challenges of Internal Control.....	22
2.5 Empirical Perspective of Internal control System and Mitigation of Fraud / Embezzlement .....	24

### **CHAPTER THREE .....26**

#### **RESEARCH METHODOLOGY .....26**

3.1 Introduction.....	26
3.2 Research design .....	26
3.3 Population .....	26
3.4 Sample size and Sampling Techniques.....	27
3.4.1 Sample Size.....	27
3.4.2 Sampling Technique .....	27
3.5 Data Collection.....	28
3.5.1 Sources of data.....	28
3.5.2 Primary data .....	28
3.6 Data collection instrument .....	29
3.6.1 Questionnaire .....	29
3.6.2 Questionnaire development .....	29
3.7 Data analysis technique.....	30
3.6 Reliability and Validity.....	30
3.9 Ethical Consideration.....	31
3.10 The Profile .....	31
3.10.1 Profile of the study area .....	31
3.10.2 Organisational Profile .....	32
3.11 Conclusion .....	34

### **CHAPTER FOUR.....35**

#### **PRESENTATION, ANALYSIS AND DISCUSSION OF FINDINGS.....35**

4.1 Introduction.....	35
4.2 Background of Respondents .....	35

4.3 Effectiveness of Internal Control System at PBC Ltd .....	37
4.4 Internal Control System at PBC Ltd and Embezzlement of funds (Fraud) .....	42
4.5 Potential Benefits of Internal Control accruing to PBC Ltd.....	46
4.6 Challenges of Internal Control implementation at PBC Ltd.....	51
4.7 Reliability Test based on Cronbach Alpha .....	55
<b>CHAPTER FIVE .....</b>	<b>57</b>
<b>SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS</b>	<b>57</b>
5.1 Introduction.....	57
5.2 Summary of major findings .....	57
5.2.1 Effectiveness of internal control at PBC Ltd .....	57
5.2.2 Internal Control, Fraud and Embezzlement of Fund .....	58
5.2.3 Potential Benefits of Internal Control to PBC Ltd.....	58
5.2.4 Challenges encountered in the use of internal control system at PBC Ltd.....	59
5.3 Conclusion .....	59
5.4 Recommendations.....	60
5.5 Area for further study.....	61
<b>REFERENCES.....</b>	<b>62</b>
<b>APPENDIX 1 .....</b>	<b>64</b>



## LIST OF TABLES

Table 4.1 Background of Respondents .....	35
Table 4.2 Effectiveness of Internal Control System at PBC Ltd .....	37
Table 4.3 Mitigation of Fraud and Embezzlement at PBC .....	42
Table 4.4 Benefits of Internal Control to PBC Ltd .....	47
Table 4.5 Challenges faced in the Implementation of Internal Control Measures.....	51
Table 4.6 Case Processing Summary .....	55
Table 4.7 Reliability Statistics .....	56



## LIST OF FIGURES

Figure 3.1 Organisational Profile.....32

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## LIST OF ABBREVIATION

AIS	Accounting Information System
IIA	The Institute of Internal Auditors
LBC's	Licenses Buying Companies
PBD	Produce Buying Division
UGFCC	United Ghana Farmers' Cooperative Council



## CHAPTER ONE

### 1.0 Introduction

This chapter presents the background of the study, statement of the problem, objectives of the study, research questions, and justification for the study, scope of the study, brief methodology and chapter organization.

### 1.1 Background of the study

The work of Stephen (2014) cited university of California (2012) that defined “internal control as a system which is being designed to provide reasonable assurance required to achieve objectives of which are effectiveness and efficiency of operation, reliability of financial reporting and compliance with applicable laws and regulations”. The Institute of Internal Auditors (IIA, 2011) however views internal control as “any action taken management and other key stakeholders to enhance risk management and increase the chances that established objectives and goals would be achieved”. The work of Hannah (2013) has this to say “Internal controls are measures that organizations institute with the aim of ensuring that the objectives, goals, and mission of the organization are met (Stephen, 2014). They refer to set of organizational policies and procedures that ensure any transaction is processed in the appropriate way to avoid waste, theft and misuse of organization resources. Through internal control systems, organizations achieve performance and organizational goals, prevent loss of resources, enable production of reliable reports and ensure compliance with laws and regulations. Thus internal control is established by the organizational management to ensure that the business of enterprise is carried out in an orderly and efficient manner. This further ensures adherence to management policies safeguard the assets and secure the completeness and accuracy of the records”.



The concept of internal control could be traced to as far back as 20<sup>th</sup> century, when audit on financial statements came into being. The concept has consistently evolved as a result of continuous change in business environment (Joseph et al, 2013, Stephen, 2014).

The work of Hazmi (2013) identifies internal control to include control environment, Accounting Information System (AIS) and Accounting control policies and procedures. The work of Hannah (2013) however reiterates that under current operations of organizations in general, internal control mechanism has five main elements which include control environment, risk assessment, control activities, information and communication and monitoring.

Internal control has become part and parcel of any formal organization and its importance cannot therefore be underestimated. Some of the importance of internal control to organizations includes issues relating to detection of errors and fraudulence, decreasing illegal conduct, improving competence of business entity, improving data quality to mention but a few (John, Jang-hyung & Il-woon, 2010). Studies by Hussein (2013) supports the fact that internal control system ensures the effectiveness of business activities which leads to the achievement of the objectives of the business, while it again checks fraudulent activities and promote efficient use of organizations' human and material resources.

In spite of the numerous benefits of internal control, it continues to face several challenges that attempt to undermine its associated benefits (Atilla & Gulumser, 2016). Of these challenges is high cost of sustaining internal control system which might be so huge that small enterprises find it difficult to maintain or sustain effective internal control system (Shamsuddin & Johari, 2014). The work of Stephen (2014)

also maintains that it is not possible to completely prevent some risks related to human factor in the design of the system; it is also possible for the management to collude with the firms' accountants and/or auditors to siphon or steal funds without being detected at times. This is especially true where the firm's management knows the weaknesses of the software being used in the design of the internal controls. It has also been argued that internal auditors could be threatened to the point that their objectivity is compromised (Hussein, 2013). Notwithstanding the challenges that internal control goes through, it has continued to minimize corrupt practices that could adversely affect the effectiveness of firms in terms of meeting their set objectives and goals.

## **1.2 Statement of the problem**

Internal control system is the tool used to safeguard the assets of organizations and it also promotes effectiveness and efficiency in the running of business entities and public sector institutions, through waste avoidance, prevention of fraud and misuse of organizations' resources (Simeon & Ifeanyichukwu, 2018).

There have been several public and private sector-based studies on the relevance of internal control to proper functioning of public and private institutions (Muazu, 2012).

This further emphasizes the contribution internal control make to the successful realization of organizational objectives and goals. Failure to institute effective internal control system exposes an organization to uncountable problems ranging from fraud, corrupt practices, loss of inventory and other related assets, lateness to work, absenteeism to mention but a few (Shamsuddin & Johari, 2014). For internal control to be effective, it should spell out laid-down procedures for carrying each task in the

organization and should also stipulate rules and regulations governing each action to be undertaken (Hannah, 2013).

The work of Afiah & Azwari (2015) however, enumerated some key challenges that organizations face in the implementation of its internal control system.

In spite of the numerous studies, organizations continue to face challenges. This study therefore seeks to identify and discuss the internal control mechanism in PBC Ltd in relation to fraud prevention, misappropriation of funds, the benefits it derives in the implementation of internal control and the challenges PBC Ltd encounters in the implementation of its internal controls.

### **1.3 Objectives of the study**

The main objective of this study is to examine how internal control system could be used to ensure effectiveness and efficiency so as to prevent misappropriation of funds in PBC Ltd. The specific objectives of the study are:

1. To identify the internal control measures put in place by PBC Ltd to check financial misappropriation.
2. To assess the effectiveness of the internal control systems at PBC Ltd
3. To identify the potential benefits of internal control to PBC Ltd
4. To examine the challenges of implementing internal controls in PBC Ltd.

### **1.4 Research Questions**

The questions to be addressed by the study are:

- 1 What internal control measures are put in place by PBC to prevent misappropriation?

- 2 What is the effectiveness of the internal control systems at PBC Ltd?
- 3 What are the potential benefits of internal control measures to PBC Ltd?
- 4 What are potential challenges in the implementation of internal control measures in PBC Ltd?

### **1.5 Justification of the study**

This study will help PBC Ltd to identify ways of preventing financial misappropriation through internal control mechanism so that it continues to be effectiveness and financially self- reliant. Improvement in financial discipline and management will help PBC Ltd to meet most of its short-run and long-run financial obligations as well as its variable and fixed cost obligations.

The study will contribute to existing body of knowledge in relation to internal control mechanism. New theories continue to come up to add up to the existing ones. So the findings of this work will be of immense contribution to the existing body of knowledge.

Again, those in academia will have a lot to learn from this work. Many academic works would come to either support or refute some of the findings in this work, thereby opening the door for further discussion in the area of internal control.

Also, this finding will help the central government to explore more and better ways of instituting internal control measures to mitigate the perennial financial loss accruing the nation as a result of poor internal control measures.

PBC Ltd will find this study useful as it will help it appreciates the modern techniques of internal control mechanism that will yield maximum returns and the likely resistance and challenges it will face in instituting such internal control measures.



Also, other Licenses Buying Companies (LBC) will have a lot to learn from PBC's experience.

### **1.6 Scope and method of the study**

This research is limited to PBC Ltd alone but its findings can be used by other Licenses Buying Companies (LBC's) since they might have so much in common. This work is concerned primarily on the internal control elements, potential benefits of internal control and possible challenges of internal control measures in PBC Ltd. Primary data was used mainly through the use of questionnaire and analysed by the use of frequencies and percentages.

### **1.7 Organization of the study**

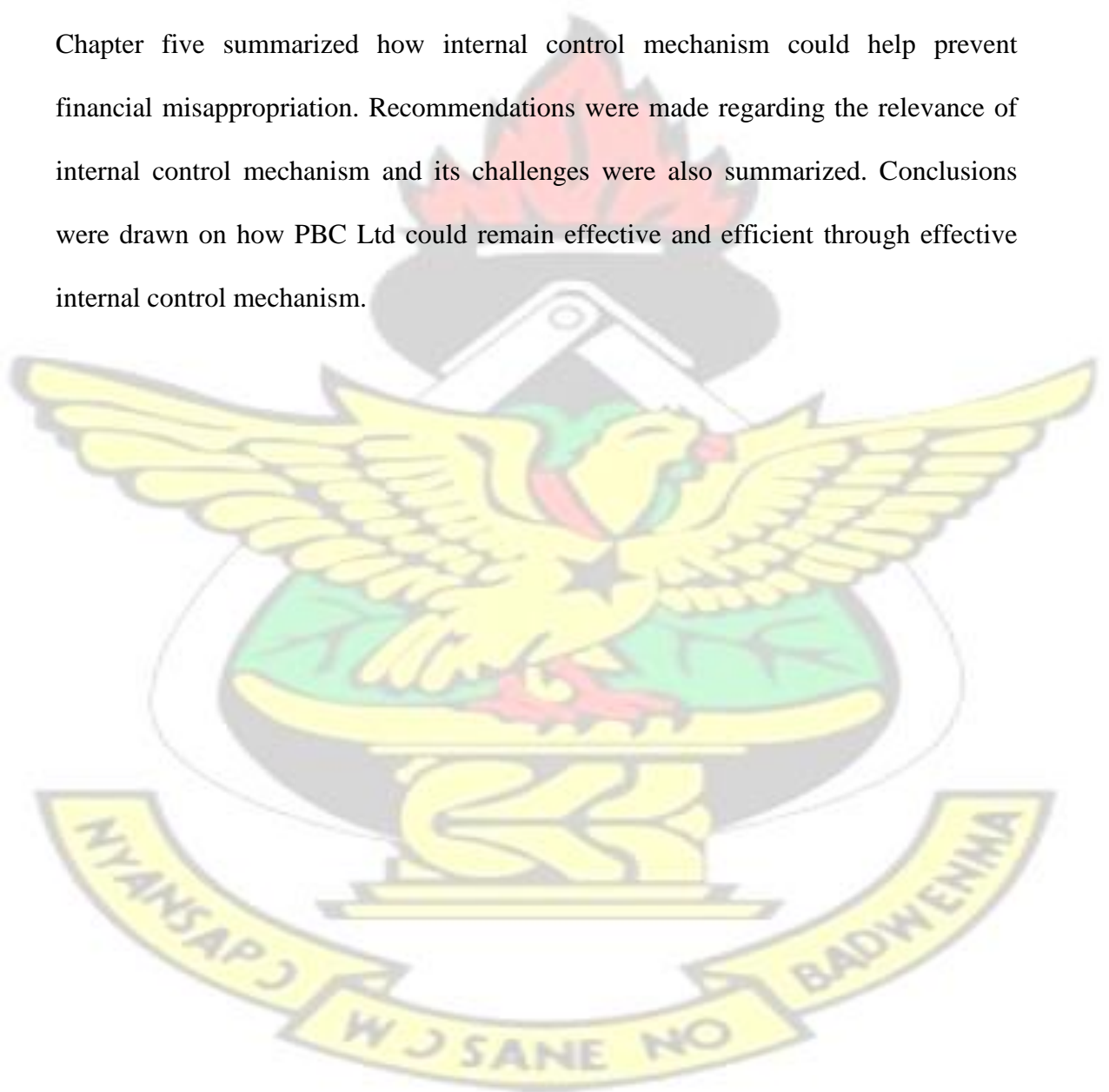
The thesis is divided into five chapters. Chapter one outlines the general introduction, the background of the study, statement of the problem, objectives of the study, research questions, justification of the study, scope of the study, limitation of the research and finally the organization of the study.

Chapter two is the literature review. Various literatures have been reviewed to appreciate how public institutions use internal control measures and the likely challenges that such institutions encounter in the use of internal controls. The potential benefits of internal control system are also highlighted.

Chapter three deals with the methods applied in executing the research. It highlights on the design of the research and processes, data requirements, data sampling and pre-testing of the research instruments. It outlines the introduction, the research working definitions, the sample size and techniques, method of collecting data, method of data analysis and finally the organization's profile.

Chapter four presents the analysis and findings of the study. It outlines the introduction and the information in this chapter is largely from primary data collected. Detailed discussions and analysis of findings are carried out using frequencies and other descriptive analysis. The chapter covered the background information of respondents, nature of internal control system put in place to mitigate financial misappropriation, its benefits and challenges.

Chapter five summarized how internal control mechanism could help prevent financial misappropriation. Recommendations were made regarding the relevance of internal control mechanism and its challenges were also summarized. Conclusions were drawn on how PBC Ltd could remain effective and efficient through effective internal control mechanism.



## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

There have been quite a large number of empirical and theoretical studies relating to internal control in the public sector. The chapter begins with the introduction, the theoretical and empirical perspectives of internal control elements, the potential benefits and challenges of internal controls to both private and public institutions are duly considered.

#### **2.2 Theoretical perspective of Internal Control System**

Internal audit is an independent, objective assurance and consulting activity designed to add value and improve and organization's operations. It helps an organization accomplish its objectives by bringing a systematic, disciplined approach to evaluating and improving the effectiveness of risk management, control and governance processes (Shamsuddin & Johari, 2014). According to INTOSAI standards, the internal control is defined as: " An integral process that is effected by an organization's management and personnel and is designed to cater for potential organizational risks and to provide reasonable assurance in pursuit of an organization's mission. The internal control system helps achieve the following in an organization:

First, internal control system is able to execute orderly, ethical, economical, efficient and effective operations. It also helps to ensure compliance to established rules and regulations. Internal control also safeguards resources against loss, misuse and damage. In addition to the above, internal control is composed of a set of actions

related to an entity's activities, acts as a management tool that focuses on reaching the organization's set goals and objectives (Najah & Omar, 2018). Internal control system is therefore a set of structures put in place in an organization to help maximize the use of human and material resources so as to bring about organizational effectiveness and efficiencies (Mu'azu, 2013). Financial misappropriation on the other hand connotes embezzlement, misuse, stealing, dishonesty, fraud and deceit that characterize the operation of any given organization or institution (Hannah, 2013). In this work, financial misappropriation stands for finance-based fraud in the public sector. Internal control system is therefore the structures put in place to prevent or minimize the possible embezzlement and misuse of public or private human and material resources (Mu'azu, 2013).

The theoretical aspects of internal control has to do with quite a number of structures that are assumed to bring about effectiveness and efficiency in the management of organization's human and material resources. The following sub-heading considers the elements of internal control system:

### **2.2.1 Elements of Internal Control System**

Hazmi (2013) identifies internal control structure to include Control environment, Accounting Information System (AIS) and Accounting control policies and procedures. The work of Hannah (2013) further cited Liu (2005) and Rittenberg et al. (2005) who opine that, under the current operations of organizations in general, the importance of internal control can be divided into six major categories which include:

- I. Detecting Error and Fraudulence
- II. Decreasing Illegal Conduct
- III. Improving the Competence of the Business Entity



IV. Improving the Quality of Data

V. Helping to create the Business Infrastructure

VI. Decreasing Auditors' Fee.

The illegal conduct mentioned above connotes so many things ranging from theft, corruption, and lateness to work, unnecessary absenteeism all of which create financial loss to both private and public entities.

#### **2.2.1.1 Control Environment**

Control environment covers management philosophy and operating style, organisation's structure, assignment of authority and responsibility, internal audit, uses of information technology (IT), human resources and audit committee. The study by Hannah (2013) adds that control environment deals with factors relating to the integrity and ethical values of personnel tasked with creating, administering, monitoring the control, commitment and competence of persons performing assigned duties and board of directors. This means that control environment entails a lot of issues and it is highly influenced by the effectiveness of board of directors, management and audit division (Simeon & Ifeanyichukwu, 2018).

#### **2.2.1.2 Accounting Information System (AIS)**

Accounting information System includes database content, data input-processing-output and financial report (Hazmi, 2013). The works of Hannah (2013) cited Aldridge and Colbert (1994) to have explained that internal control requires that all relevant information be identified, captured and communicated in the right form and at the right time to enable stakeholders carry out their financial reporting responsibilities. The relevance of Information Technology cannot be under estimated when efficient internal control mechanism is to be realized (Joseph et al, 2013). IT

protects sensitive information such as officers' record, tax revenue received, and employee social security details and among others. Najah & Omar (2018) claim that there are two distinguishing features of Information Technology System (IT) in place in most organizations. These are IT application control and IT general control. The IT application control helps provide control over data that is entered into the system such as tax revenue paid. This ensures that transaction processing is accurate and complete. The IT general control helps to ensure proper operation of IT system over time. General controls include those in charge of data centre operation as well as system software acquisition, maintenance and access security.

#### **2.2.1.3 Accounting Control Policies and Procedures**

Accounting control policies and procedures include segregation of duties, authorization procedures, adequate documentation, independent checks, physical control and records (O'Leary et al, 2006 in Hazmi, 2013). Accounting control policies and procedures emphasizes on financial control, which is the activities, policies and procedures adopted by the directors and management of an entity to assist in achieving the set goals and objectives of an organization. Included in this are adherence to internal policies, safeguarding of assets, preventing and detecting fraud and error, ensuring accuracy and completeness of the accounting records and the timely preparation of reliable financial information (Walters and Dunn, 2001 in Joseph et al, 2013).

Unlike Hazmi (2013), Hannah identifies five key issues relating to internal control mechanism. These five include:

Control Environment

Risk Assessment

Control Activities

Information and Communication

Monitoring.

Control environment and information and communication system have been identified and explained above. Other factors of internal control that Hazmi (2013) has not explicitly mentioned are the risk assessment, control activities and monitoring.

#### **2.2.1.4 Risk Assessment**

Risk assessment is the careful identification and assessment of those factors that mitigate the realization of organizational goals. These include relevant risks associated with preparation of financial statement in conformity with general accepted accounting principle or standard. Such risk needs to be identified and controlled within reasonable limit. (Hannah, 2013).

#### **2.2.1.5 Control activities**

Hannah (2013) cited Aikins (2011) that control activities is in reference to policies, procedures and mechanisms put in place to ensure that directives of management are properly carried out. It establishes appropriate and accurate documentation of policies and procedural guidelines to help determine how the control activities are to be executed. It also provides adequate information of auditors' examination of the overall adequacy of control design over financial management practices.

#### **2.2.1.6 Monitoring**

Monitoring refers to the process of assessing the quality of the internal control structure over time. Since internal control are processes, frequent monitoring to assess the quality and the effectiveness of the system's performance is necessary. It

is important to monitor customers and employees complaints and provide timely feedback. There is also the need for periodic auditing by internal auditor to make sure that the entire financial control system functions.

#### **2.2.1.7 Internal Audit as a Key Component of Internal Control Mechanism**

Despite the huge cost of maintaining internal audit unit in an organization, its benefits cannot be overemphasized. Its key roles are the investigating and reporting adherence to procedural guideline in carrying out financial activities in the organization. It also acts as a pool that provides high caliber staff to augment the functions of other sections of the organization (Mu'azu,2012). Internal audit section performs financial control function in an organization. Mua'zu (2012) cited Adams (2004) and Mainoma (2007) who defined financial control as steps taken to ensure maximum safe custody of financial resources in order to avoid waste, misuse embezzlement, misappropriation and illegal disposal of public finance. Mu'azu (2012) again cited Anfayo (1994) who defined financial control as a process of assuring that cash is used properly and for authorized programmes. Financial control therefore becomes an essential element of internal control mechanism and therefore warrants due consideration in both private and public organization.

#### **2.2.1.8 Internal Audit Functions and Independence**

Internal audit is one of the most important components of internal control and without which internal control is partial and ineffective.

However, the effectiveness of internal control depends largely on the independence and objectivity of internal audit. Issues regarding internal audit independence and objectivity are discussed thus:



### **2.2.8.2 Internal Audit Independence**

The numerous definitions of internal audit mentioned internal audit objectivity and independence as major issues. The study of Stewart & Subramanian (2010) echoed that the universally accepted definition of independence of internal audit includes the freedom from conditions that threatens auditor's objectivity. So, any potential threat to objectivity should be given due attention. The management of such threats should be at the individual and organizational level. Auditor independence are of two kinds: The first one is independence of mind which means that auditor is free of any conditions of extra influence and threat that forces him to compromise his objectivity while the second meaning of independence deals with independence of appearance, which means that there is no relational influence, and other situations that would make users of the audited financial statements to perceive that there is an high risk that auditors lack independence of mind (Pickett, 2003).

There are other forms of auditor independence namely; the programming independence, investigative independence and reporting independence. Programming independence deals with situations where auditors have sole control over the nature of the audit programme while investigative independence connotes that auditors are being free to collect and evaluate all the evidence deemed necessary without interference. The reporting independence is where the auditors are free to report the results of a particular audit without interference (Allen & Siegel, 2002)

The study by Mutchler (2003) views independence as the freedom from material conflicts of interest that threatens objectivity.

For the independence of auditors to be made concrete, the Chief Audit Executive (CAE) must relate directly to senior management and the board of directors through dual

reporting relationship. Where there is powerful board of directors, auditor independence is usually ensured.

It becomes an undeniable fact that, once auditor independence is compromised then his or her objectivity could be lost partially or completely. In this regard there is a thin line between independence and objectivity since loss of independence could lead to loss of objectivity. The study by Stewart and Subramanian (2010) therefore reechoed the Practice Advisory 1130-1 that internal auditor is supposed to report to CAE any situations involving actual or potential impairment and maintains the relevance of not accepting fees, gifts or entertainment from audit clients. They should also not be made to audit works that they previously performed. If auditors take gifts or are made to audit activities that they have previously performed, then independence as well as objectivity will also be lost.

The work of Mutchler (2003) argues vehemently that despite the fact that auditors' independence is very important as far as internal control is concerned, perfect independence is difficult to achieve in this world because an auditor is a private professional who receives a fee for service rendered. So, practically, threats to independence of judgement can hardly be avoided. Despite this shortcoming, the importance of internal auditors cannot be underestimated.

### **2.2.3 Internal Audit Objectivity**

While independence connotes freedom from conditions that threaten objectivity, objectivity means an unbiased mental attitude that allows an internal auditor to perform their expected duties in a manner that stakeholders have confidence in the work of the auditor and that no significant quality compromises are made (Stewart & Subramanian, 2010). To this, Mutchler (2003) adds that objectivity is a state in which

biases appropriately affect assessments, judgement and decisions. Objectivity can be said to be a desired characteristic of the individual or team who are engaged in the performance of assurance services and who are making the necessary assessments, judgements, and decisions. Internal audit is a profession, value-adding and effective assurance services providers and this requires it to demonstrate high level of objectivity, integrity, competence and the use of due care.

Institute of Chartered Accountant (2004) cites Haggard (1932) that integrity is an uncompromising adherence to a code of moral values, and the avoidance of deception, expediency, artificiality, or shallowness of any kind. Integrity therefore requires an internal auditor to have the idea that he is performing public service and he must therefore dispense his duties far beyond reproach. This therefore requires the maintenance of high standards of achievement and conduct. Competence on the other hand is explained as having the intelligence, education and training to be able to add value through performance while due care is said to have various meanings. First, it could mean that attention must be paid to the nature of the professional services performed. Second, the manner in which the service is rendered must be given due assessment and scrutiny. This means that the services rendered should be appropriate and also conform to set standards.

#### **2.2.4 Potential Threats to Internal Auditors**

The study by Mutchler (2003) echoes Conceptual Framework (2000) which defines threat to auditor independence as pressures and other factors that impair auditors' objectivity. The Conceptual Framework and Nawaiseh & Alnawaiseh (2015) jointly identify five (5) sources of threats to objectivity and these include:



First, there is a self-interest threat. This type of threat emerges from the situation where an auditor acts in his own interest. The self-interest threat might include financial and/ or emotional. In this case the auditor might deliberately favour those self-interests over his interest in performing a quality audit. Also, an internal auditor might be employed by a management and this employment relationship could minimise the auditor's objectivity and independence. This same view is echoed by Plumlee (1985) who maintains that bias is likely to result when an auditor is auditing a firm in whose system design he was a member or his relationship with the organization might make him bias.

Second, there is Self-review threat which results from an auditor reviewing his own work or past works. It would not be appropriate for an auditor to review his own work without any bias. Hence, a self-review threat crops up when auditors' judgements and decisions are compromised.

Third, an auditor may suffer from advocacy threat, a situation whereby an auditor in his firm promoting or advocating for or against an auditee or its position or opinion rather than serving an unbiased financial information (Mutchler, 2003).

Fourth, there also exists familiarity or trust threat a situation in which an auditor is being influenced by a close relationship with an auditee. This is especially true in a situation where an auditor is quite confident in the judgement of the auditee to the level that viewpoints of the auditee are readily accepted without questioning it.

Last, there exists an Intimidating threat, a situation where an auditor believes that he is being overtly or covertly coerced by auditee or by other interested parties to succumb to their demands. An auditor who does not want to destroy his or her



relationship with the auditee would be reluctant to point serious flaws in the work of the auditee regarding improper application of an accounting principle.

The finding of Nawaiseh & Alnawaiseh (2015) reveals that all the afore-mentioning threat have significant negative impact on auditors' independence and objectivity and this also affects the effectiveness of internal control of an organization. It maintains however that though, the advocacy threat could be eliminated, self-interest threat could be minimized but cannot be completely erased.

#### **2.2.1.8 Auditing-related internal control**

There are various types of internal control for the purpose of auditing. Joseph et al (2013) cited Millichamp (2002) who identified various types of internal control for the purpose of auditing. These steps involve:

**Organization-** This means that there must be well defined organizational structure showing how responsibility and authority are delegated.

**Segregation of duties-** This is a situation where no one person does the recording and processing of a complete transaction. The involvement of several people reduces the risk of intentional manipulation or accidental error. Those who carry out internal financial control duty in financial service unit shall not be assigned any duty in the preparation and implementation of financial decisions and transactions.

**Physical-** This involves physical custody of assets and procedures designed to limit access to these assets. That is only authorized personnel will get access to these assets. This is a means to avoid pilfering and causing possible damage to these assets.

**Authorization and approval-** This means that all transactions should require authorization and approval by the appropriate quarters.

Personnel- In recruiting workers, people of integrity should be employed. This means that honest and qualified people should be engaged.

Supervision- All workers should be supervised by superiors and their work should be reviewed to ensure that work done conforms to standard and that procedures in accomplishing tasks are strictly adhered to.

Management- Management has the fundamental responsibility to develop and maintain effective internal control. It should review the current internal control system in place to identify loopholes and flaws so that corrective measures are taken.

In both private and public sector management, cash flow management is very important in meeting the financial needs of the organization. So, control of fund is an integral part of internal control mechanism.

#### **2.2.1.9 Control on Fund as a Key Element of Internal control mechanism.**

Cash flow management is mandatory for every going concern and in an attempt to avoid bankruptcy, management of cash is highly recommended. Sources and application of fund helps an organization to meet its cash needs and obligations when they fall due. Joseph et al (2013) identify five elements of control on fund and these include:

**Cash management-** Cash management deals with the raising of cash and how it is used to bring desired effect on the organization. Joseph et al (2013) cited Schacrr, (1989) that cash management has to do with the optimal level of cash in an organization to meet its daily needs and obligations.

**Internal audit-** This requires an independent appraisal functions established within an organisation to examine and evaluate the effectiveness, efficiency and economy of management control system (Subramanian, 2006 in Joseph et al 2013). Its objective is

to provide management with reassurance that their internal control system is adequate for the need of the organization is operating satisfactorily (Afiah & Azwari, 2015).

**Internal check-** Financial control is aimed at improving efficiency, accountability and transparency in the public sector financial management. It is to identify breakdown of routine procedures to avoid waste.

**Internal accounting control-** Internal account control comprise of all controls over the operation of an accounting system to help meet the requirement of organisations (Okai, 1996 in Joseph et al, 2013). This seeks to achieve (i) completeness, that is, all transactions are duly recorded in the accounting record (ii) validity and accuracy, that is, transactions recorded are verified and approved.

**Budget and budgetary control-** Budget is the statement showing expected cash revenue and proposed expenditure by the organization (Drury, 2001 in Joseph et al, 2013). Budgetary control is necessary to ensure prudent financial management practices of an organization. In budgetary control, the need to minimize cost in order to maximize production is highly considered. This is achieved by trying to reconcile expected revenue with proposed expenditure so that unnecessary financial difficulties would not be brought to bear on the organization.

### **2.3 Potential Benefits of Internal Control System**

Internal audit is an independent, objective assurance and consulting activity designed to add value and improve and organization's operations. It helps an organization accomplish its objectives by bringing a systematic, disciplined approach to evaluating and improving the effectiveness of risk management, control and governance processes (Shamsuddin & Johari, 2014).



Despite the numerous challenges facing internal control system of organizations, it has quite a number of supposed benefits which are discussed below:

First, internal control being a multidimensional concept has been discussed to have several benefits. Organisations are faced with several risks ranging from failure of internal control mechanism, financial misappropriation, environmental disaster, non-compliance and regulatory violation (Abd-Aziz, Rahman & Alam, 2015). These risks are worsened by technical advancement, increase in volume of business activity and globalization. So, a good internal control will help mitigate the incidence of bad financing, help organisations to be effective, create harmonious working environment, while it detects errors and irregularities in business operation ( (Abd-Aziz, Rahman & Alam, 2015).

Furthermore, internal control system acts as a useful tool in safeguarding the overall achievements of companies“ objectives which in turn maximizes stakeholders“ value (Zainab, Nasrin & Abdullah, 2016). Business physical as well as financial assets are thus safeguarded against misuse, misappropriation and embezzlement.

Also, internal control, through internal audit practice, directs and controls the activities in an organization thereby promoting transparency, accountability, responsibility and also promotes fairness to all stakeholders. This helps the organization to achieve its stated goals and objectives (Simeon & Ifeanyichukwu, 2018).

Moreover, effective internal audit has the tendency to reduce agency problems (due to information asymmetry) that characterizes the operation of many firms. With good internal audit practices, internal control system could reduce opportunism of management (Najah & Omar,2018).



In addition, it has been argued that organizations with internal audit function are more likely to detect and curtail fraud practices than those organizations without internal audit function. Thus, the function of an effective internal audit cannot be overemphasized. Possible losses emanating from theft, fraud, non-performance and rising operational costs are quickly detected and will lead to profit maximization (Atilla & Gulumser, 2016).

Again, where an organisation avails its self the use of monitoring technology and this technology is fully implemented, there will be lower chances of material weaknesses, smaller increase in audit fees, smaller increase in audit delays and these go a long way to help the organisation to maximize its returns through lower cost of doing business and possible reduction in unnecessary delays.

Also, well-functioning internal control will provide quality financial and management information at lower cost while at the same time it raises the value of the company. Inside and outside users of firms' information base on several information provided by internal control mechanism to make their investment decision (Zainab, Nasrin & Abdullah, 2016)

## **2.4 Challenges of Internal Control**

First, internal control only provides a reasonable and not an absolute assurance about the company's objective realization and sustainability (Simeon & Ifeanyi-chukwu, 2018). So, it does not change a bad manager to a good one neither does it influence macroeconomic factors or variables.

Again, though internal control is assumed to mitigate organizational risks, some risks could not be eliminated due to the presence of human factor in the design of the internal control system. Other risks that remain unsolved might include errors of

judgment or interpretation, misunderstanding, carelessness, tiredness or distraction, collusion and abuse. These therefore call for periodic review of internal control system to ensure better functioning towards realizing the set objectives of the organization (Shamsuddin& Johari, 2014).

Also, small and medium-scale enterprises (SME"s) might not have sufficient funds to design and implement strictly an effective internal control system. Related to this is the fact that some of these enterprises do not have sufficient funds to strictly comply with burdensome rules and regulations. The financial cost of effective internal control is so huge that those small firms find it difficult to fully implement most of the elements of internal control system. This inability to fund effective internal control mechanism can expose firms to serious problems emanating from fraud, lateness to work, absenteeism, theft and malpractices (John, Jang-hyung & Il-woon, 2010).

Furthermore, management is able collude with firm"s accountant and auditors to conduct dubious act to the detriment of the firm. Being a human institution, firms are very often exposed to the evil intent of management that internal control can hardly manage. So, where some key personnel are easily corruptible, internal control system can easily be manipulated to satisfy the whims and caprices of the power that be. In such situation the internal control mechanism cannot live up to expectation (Shamsuddin& Johari, 2014).

Moreover, the design and implementation flaws can render internal control ineffective and therefore hardly serve the purpose for which it is set. Inventory is by far one of the most significant constituents of total cost of production of any enterprise and therefore calls for effective management and control in order to minimise losses arising from fraud, poor procurement and general inefficiencies (Stephen, 2014). Again, failure to follow or comply by the directives of internal control system exposes

several firms to higher levels of risks resulting from poor stock procurement and distribution system (Stephen, 2014).

Another serious challenge that bedevils the implementation of any internal control is threats that internal auditors suffer from and which adversely affect their objectivity. These threats include self-interest, self-review, advocacy threat, familiarity threat and intimidation threat. All of these threats can exert pressure on auditors so that their objectivity is compromised. Having auditors' objectivity compromised means that internal control system can badly be affected and its intended purpose defeated (Afiah & Azwari, 2015).

## **2.5 Empirical Perspective of Internal control System and Mitigation of Fraud / Embezzlement**

This section discusses empirically factors that could be used to mitigate fraud and embezzlement in both private and public sector institutions.

The work of Karagiorgos, Drogalas and Dimou(.) conducted in the banking sector in Greece revealed that, in mitigating fraud and minimizing potential risks there is the need for effective internal control and system. They argue that every effective internal control must have along it effective and independent internal audit that is capable to revealing bad administration and financial malfeasance.

Again, the study by Atilla and Gulumser (2016) revealed that effective internal control system is important for Small and Medium-Scale Enterprises (SMEs) in Turkey. They assert that internal control is influential for both accounting process and overall fraud and corruption prevention.



Also, the work of Masli et al (2009) using a panel data of some sampled firms in the US revealed that implementing internal control monitoring technology could deal with a number of issues among which are lowering the likelihood of material weaknesses, smaller increase in audit fees and delays in addition to its ability to effectively check corrupt practices.

Furthermore, the work of Najah and Omar (2018) using a sample of ten(10) publicly traded companies in Morocco reveal that internal audit is considered as a response to several insufficiencies and helps in monitoring and piloting the effectiveness of internal control system. Hence effective internal control is successful in mitigating corrupt practices, fraud and possible embezzlement.

Moreover, the study by Stephen (2014) at the River Valley Institute of Science and Technology used 187 sample to reveal that internal procurement control, stores controls, stock distribution control and management control policies were identified to be the more effective ways of safeguarding inventories at the institute

Again, the work of Hussein (2013) using a sample of 83 accountants, finance director, chief cashier and chief executive officer in remittance firms in Somalia reveals that internal auditing practices is found to be effective in ensuring effective internal control and hence in reducing negative attitudes at work place.

Also, the work of Simeon and Ifeanyichukwu (2018) using sample of Small and Medium Enterprises(SMEs) at Obio / Akpor in Nigeria revealed that increase in segregation of duty; internal checks and proper procedure for authorization will cause a reduction in embezzlement and payroll fraud in SMEs. This suggests that installing and strengthening internal control system could help mitigate fraud and embezzlement.



## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter explains the method adopted in the research and the profile of the study area. The chapter therefore begins with the research methodology, which includes the research design, research purpose, description of the population, sample and sampling technique, data collection technique (including the pilot testing) and data analysis. The next section involves the discussions on the organisational profile, which includes a brief history about the study area, and a profile of the study organisation.

#### **3.2 Research design**

The research adopted quantitative and qualitative approach involving the use of questionnaire. Quantitative research method involves collecting and interpreting numerical data or one that has been quantified (Saunders et al., 2012). Quantitative methods help to analyze and present data statistically.

The questionnaire was administered to the management and employees of PBC Ltd in Ghana. The administered questionnaire sought to gather relevant information on the elements of internal control system, its benefits, and challenges and how internal control mechanism could be used to check financial misappropriation at PBC Ltd.

#### **3.3 Population**

The target population included all management and employees of PBC Ltd in the Six Regions of Ghana, namely Ashanti, Brono Ahafa, Western, Eastern, Volta and Central regions. The study however used Western North (Sefwi –Wiawso) Region of

Ghana, since it was not possible to use all the six regions for this study. The choice of Western North Region was due to the fact that the researcher is a worker of PBC Ltd in this area.

The total numbers of workers of PBC Ltd at the Western North stand at One thousand and fifty - six (1,056) of which one-hundred and eighteen (118) are permanent staff while nine hundred and thirty- eight (938) are non-permanent staff (cocoa marking clerks which is known as „PC“). The target population from which the sample was taken was therefore 1056, constituting permanent staff and non –permanent staff workers.

### **3.4 Sample size and Sampling Techniques**

This sub section dealt with the sampling technique to choose a reliable sample and to further determine the sampling size

#### **3.4.1 Sample Size**

Sample size refers to the number of respondents chosen out of the entire sampling frame calculated from the targeted population (Saunders, Lewis and Thornhill, 2009). Of One thousand and fifty - six (1056), only twenty (20) key respondents were chosen to provide response.

#### **3.4.2 Sampling Technique**

Sampling technique is defined as the method used by the researcher in choosing the members of a sample from a larger population (Saunders et al., 2009) and where sampling frame could not be obtained, non-probability sampling technique could be used. Non-probability sampling technique is where the samples are gathered in a process that does not give all the individuals in the population equal chances of being

selected. it could also be used where the time and cost would not allow the use of probability sampling (Saunders et al., 2009). The study therefore used non-probability sampling technique because there was not sufficient time and resources to use probability sampling though the sample frame or population is known.

The study used non-probability sampling and the type non – probability sampling used is purposive sampling technique to choose 20 PBC Ltd key staff responsible for internal control measures. The use of purposive sampling was warranted by the fact that the researcher wanted to use respondents who could provide appropriate response to the questions at hand.

### **3.5 Data Collection**

Data collection involved the sources from which data was collected and the data collection instruments used.

#### **3.5.1 Sources of data**

The researcher collected data from primary source only through the use of questionnaire. These questionnaires were administered to the chosen or selected respondents at PBC Ltd at Western-north Region of Sefwi-Wiawso.

#### **3.5.2 Primary data**

Primary data is the first-hand data collected or it is set of original information that is collected purposely for the research being undertaken (Saunders et al., 2012). Therefore, the primary data used in the collection of relevant information was through the questionnaire. The research questions were answered by the use of questionnaire on four-point (Likert) scale.

### **3.6 Data collection instrument**

Data collection instrument is the technique employed to collect information from necessary individuals and institutions. The study used questionnaires.

#### **3.6.1 Questionnaire**

A well designed questionnaire was used as research instrument. To this end, questionnaire on four-point (Likert) scale were developed. The questionnaire was pilot tested using 20 employees of PBC Ltd in Ashanti Region who were not part of sample. The purpose of the pretesting was to find out the appropriateness and usefulness of the designed questionnaire and also to check the understanding of the questions by the respondents. The pilot study revealed that the questionnaire had been simple, concise, clear and devoid of any ambiguity.

The finalized questionnaire was administered to the employees of PBC Ltd at Sefwi-Wiawso of Western-north Region of Ghana personally. The researcher accomplished this by administering the constructed questionnaire and the respondents took the questionnaires home and brought their responses three days after. Contact numbers of the selected respondents were taken to ensure that response rate would be reasonably high.

#### **3.6.2 Questionnaire development**

The questionnaire was in four parts. The first section dealt with the profile or background of the respondents while the second section provided questions that dealt with the element of internal control present at PBC Ltd. The third section however dealt with questions relating to the issue of potential benefits of internal control mechanism to PBC Ltd, while the last section dealt with questions relating to the challenges that PBC Ltd encounter in the implementation of internal control system in



the organisation. The questionnaire was developed on a four-point (Likert) scale and the subjects were asked to use the four-point Likert response format which was anchored with 1= “Strongly Disagree”, 2= “Disagree” ,3 = “Agree, and 4 = “Strongly Agree.

### **3.7 Interviews**

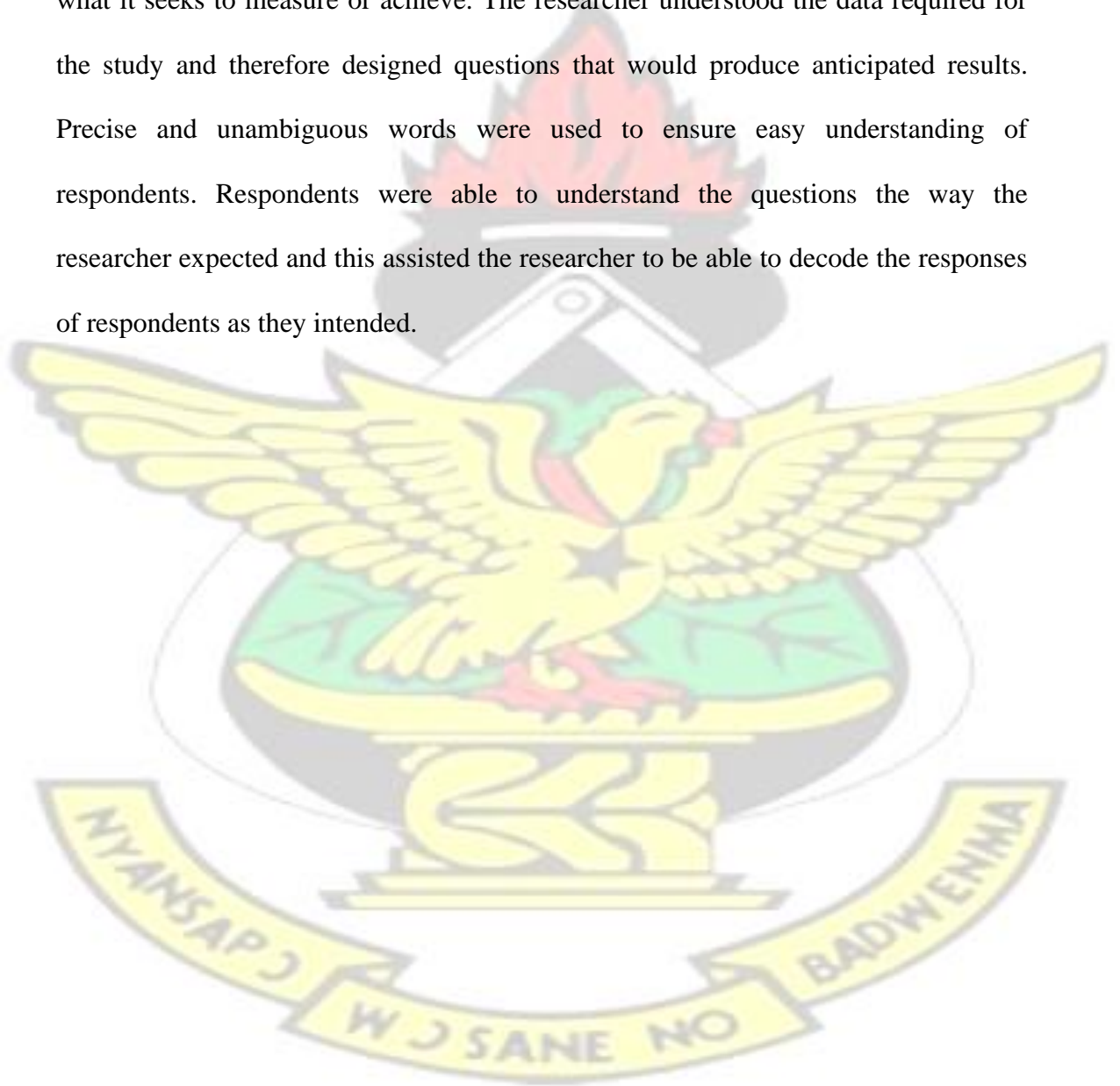
Interview involves having a formalised and structured or unstructured conversation with participants to solicit response for research questions raised (Saunders et al., 2012). The researcher adopted a face--to- face approach of interview with 1 manager and an accountant of PBCLtd. A semi-structured interview was conducted to solicit detailed information regarding misappropriation funds and how to mitigate that. Detailed interview guide (as shown in Appendix 1) consisting of a list of questions was used.

### **3.8 Data analysis technique**

Quantitative data analysis was done by the use of Stata14, and quantified in terms of the descriptive statistics such as frequency distribution and percentages. The frequency and percentages were used to indicate the proportion of respondents for various responses. This was carried out for each of items relating to research questions. The proportions demonstrated the diverse views of the respondents. The apparent use of tables were to facilitate easy understanding of the analyses.

### 3.9 Reliability and Validity

According to Saunders et al. (2012), reliability is the extent to which data collection techniques would reveal consistent outcome irrespective of the time frame or place that similar research would be conducted. Again, according to Saunders et al. (2012), validity is the extent to which data collection methods precisely measure what they were intended to measure or the extent to which research findings exactly measure what it seeks to measure or achieve. The researcher understood the data required for the study and therefore designed questions that would produce anticipated results. Precise and unambiguous words were used to ensure easy understanding of respondents. Respondents were able to understand the questions the way the researcher expected and this assisted the researcher to be able to decode the responses of respondents as they intended.



### **3.10 Ethical Consideration**

Ethics are the socially expected behaviours and attitude that are expected of individuals in a given society or organization (Donald Ary et al, 2002). Gaining access to companies whose employees were used for the study, the researcher needed to use both existing contacts such as co-workers, and friends, as the researcher has been a worker at the organization. Notwithstanding the researcher's relationship with some of the employees, management consents were sought before the questionnaires were administered. The verbal request was augmented by introductory letters to authenticate the importance of the mission at hand. Employees' high response rate was due to the involvement of management who gave full support to the exercise.

Despite the long standing relationship between the researcher and the staff, the researcher promised to treat all provided information as confidential. The researcher therefore concealed both the names of individual respondents.

### **3.11 The Profile**

This section considered the profile of the study area and the organisational profile. The next sub-section considered the profile of the study area followed by organisational profile.

#### **3.11.1 Profile of the study area**

The Western North region is located in the southern western part of Ghana. It is one of the six (6) new Regions created in 2019. The Western North Region has the highest rainfall in Ghana with green hills and fertile soils. There are several small and large-scale mining companies in the Region. The Sefwi forms the dominant ethnic group

and the languages mainly spoken in this area are Sefwi, Akan, French and English.

The thick forest reserves serve as tourist attraction.

Western Region has many colleges of education with adequate number of post-secondary schools including teachers' college and nursing training college.

The western Region has eight districts made up of one metropolitan, two municipal and five districts which include Aowin, Bia East, Bia West, Bodi, Juabeso, Sefwi Akontombra, Sefwi-Bibiani-Anhwiaso-Bekwai and Sefwi-Wiawso.

### **3.11.2 Organisational Profile**

The organisational profile focuses on the profile of the study area, a profile of the



**Figure 3.1 Organisational Profile**

The Cocoa Purchasing Company was established in 1947 as a marketing wing of the Ghana Cocoa Marketing Board. The Cocoa Purchasing Company was operating alongside Cocoa Buying Firms such as Cadbury and Fry, GB Olivant, UAC, J. Lyon and UTC which happened to be the main cocoa purchasers in the colonial period.

In 1956 however, the Cocoa Purchasing Company alongside other expatriate buying firms were dissolved and disbanded as a result of recommendation made by the



Jibowu Committee. In their stead, the United Ghana Farmers' Cooperative Council (UGFCC) was thus formed as the sole Licenced Buying Agency for the Cocoa Marketing Board (COCOBOD). It operated for ten (10) years up to 1966.

The aftermath of the 1966 coup saw the birth of several indigenous Ghanaian companies like Sampa, Aboafo, and Cocoa Farmers' Company among others. Unfortunately, these internal marketing companies could not stand the test of time as they became heavily indebted to COCOBOD which made COCOBOD to bring them together to form single department called PRODUCE BUYING AGENCY and which later turned into PRODUCE BUYING DIVISION (PBD) in 1977.

The PBD was incorporated into Limited Liability Company on 13<sup>th</sup> November, 1981 as a fully state-owned enterprise and as a subsidiary of COCOBOD and was finally granted certificate to commence business on 18<sup>th</sup> November 1981. The PBD Board of

Directors succeeded in changing the name from PBD to PRODUCE BUYING COMPANY on the 27<sup>th</sup> October 1983. The haulage unit responsible for cocoa evacuation was added to this new company.

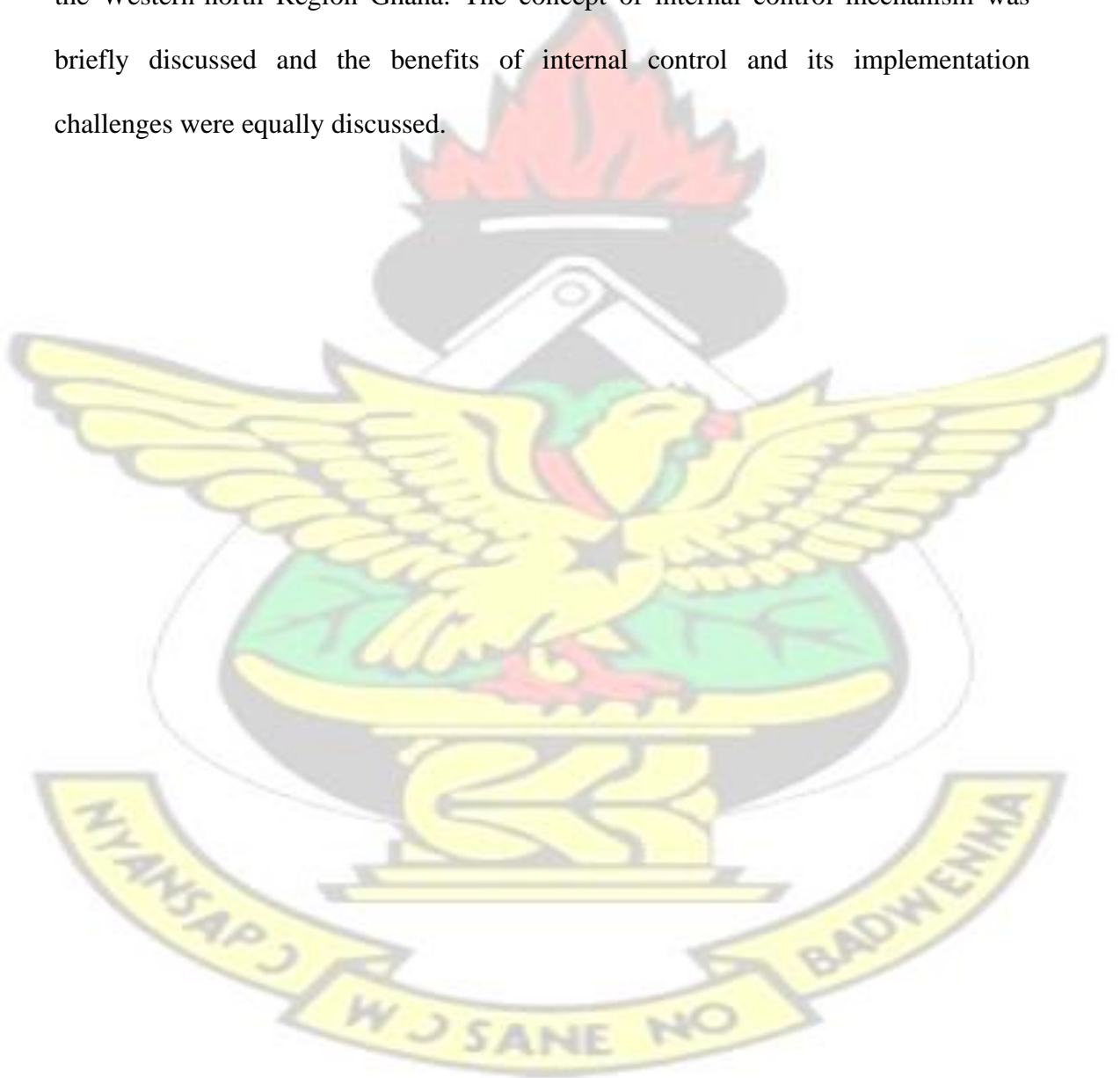
In 1993 a reform was made and this led to the granting of full autonomy to the PBC in 1999. Other private marketing companies were later allowed to operate and compete with PRODUCE BUYING COMPANY Limited in the internal marketing of cocoa.

On 28<sup>th</sup> March 2012, the company's name was changed from PRODUCING BUYING COMPANY Limited to PBC Limited.

**Source: Google Map and Wikipedia (2018)**

### 3.12 Conclusion

The study used quantitative approach to accomplish the research. This was done through the use of questionnaire. Since the sample frame was known, probability sampling technique (simple random) was used. The data was analysed through the use of Stata14 for the quantitative data. Ethical means were used to gain access into the organization. The organization of interest (PBC Ltd) is situated at Sefwi-Wiawso of the Western-north Region Ghana. The concept of internal control mechanism was briefly discussed and the benefits of internal control and its implementation challenges were equally discussed.



## CHAPTER FOUR

### PRESENTATION, ANALYSIS AND DISCUSSION OF FINDINGS

#### 4.1 Introduction

This chapter presents the background of the respondents and further discusses the main findings of the study. The chapter begins with the background of the respondents and followed by elements of internal control in PBC Ltd. The chapter again presents the findings as to whether there have been sufficient internal control measures to check fraud and embezzlement at PBC Ltd. It also assesses the potential benefits that PBC Ltd enjoys through instituting internal control system and finally concludes by investigating the potential challenges that PBC Ltd face in the operation of its current internal control system.

#### 4.2 Background of Respondents

**Table 4.1 Background of Respondents**

	Gender (%)	Age (%)	Educational level (%)	Department (%)	Work experience (%)	Total (100%)
Male	18(90)					20 (100%)
Female	2(10)					
Below 20yrs		0(0)				20 (100%)
20-30yrs		2(10)				
31-40yrs		10(50)				
41-50yrs		6(30)				
51 + yrs		2(10)				
Tertiary			20(100)			20 (100%)
2 <sup>nd</sup> Cycle			0(0)			
Basic			0(0)			
Accounts				3(15)		20 (100%)
Audit				5(25)		
Human Resource				5(25)		
Top management				7(35)		
Less than 1 year					0(0)	20 (100%)
1-4 years					2(10)	
5-9 years					13(65)	
10 years and above					5(25)	

**Source: Field Survey, 2019**

It is quite evident from the Table 4.1 above that 90% of the respondents are males while the remaining 10% are females. This suggests that either majority of employees at PBC Ltd are males or majority of employees from whom we can get detailed information are males.

Also, of the total 20 respondents, 80% fall within the age bracket of between 31 and 50 years while only 10% are within the age bracket of between 51 and above. However, another 10% of the respondents are within the age bracket of between 20 and 30 years. This suggests that majority of the respondents are young people within the age bracket of between 31 and 50 years.

Furthermore, it could be seen from the Table 4.1 above that, of the total respondents, 100% had tertiary education. This suggests that all of the respondents had high education and could therefore provide reasonable response to the questionnaire being administered.

In addition, it is quite evident from Table 4.1 above that that, the respondents come from various departments among which include Accounts (15%), Human Resource (25%), Top Management (35%) and Audit (25%). This means that majority of the respondents come from top executives followed by those in human resource department.

Again, it is quite clear from Table 4.1 above that, majority of the respondent spent between 5 to nine years (65%) on the job while those who spent ten years and more constitute only 25%. Only 10% of the respondents spent between one year and four years on the job.



### *Objective 1 – Identifying the Internal Control Measures Put in Place at PBC Ltd*

#### **4.3 Internal Control System at PBC Ltd**

This section deals with objective one which seeks to investigate whether PBC Ltd has internal control system in place.

**Table 4.2 Internal Control System at PBC Ltd**

<b>Statement</b>	<b>SDA</b>	<b>DA</b>	<b>A</b>	<b>SA</b>	<b>TOTAL (100%)</b>
The firm has a defined organizational structure	0(0)	2(10)	8(40)	10(50)	20(100%)
There is assigned authority and responsibility	0(0)	0(0)	5(25)	15(75)	20(100%)
There is an independent internal audit unit	0(0)	2(10)	16(80)	2(10)	20(100%)
There is intensive use of IT infrastructure to minimize error and detect fraud	1(5)	0(0)	18(90)	1(5)	20(100%)
There is a well-functioning Human Resource Department	2(10)	2(10)	4(20)	12(60)	20(100%)
There is a well-functioning Audit Committee	13(65)	3(15)	2(10)	2(10)	20(100%)
There is an effective board of directors	1(5)	2(10)	15(75)	2(10)	20(100%)
Management team is very effective	1(5)	1(5)	16(80)	2(10)	20(100%)
There is efficient communication channel	18(90)	2(10)	0(0)	0(0)	20(100%)
Risk assessment is reviewed on periodic basis	0(0)	2(10)	14(70)	4(20)	20(100%)
There is documentation of policies and procedural guidelines	0(0)	0(0)	15(75)	5(25)	20(100%)
There has been effective monitoring	1(5)	2(10)	2(10)	15(75)	20(100%)

**Source: Field Survey, 2019**

It is quite evident from Table 4.2 above that majority of the respondents agree that PBC Ltd has a well-defined organizational structure. Of all the respondents, 90% agree that that PBC Ltd has a well-defined organizational structure. It makes separation of powers, duties and responsibilities possible and which further ensures

effective and efficient control. Control environment covers management philosophy and operating style and organization's structure among others. The study by Hannah (2013) adds that effective control environment should have something to do with organizational structure. This means that control environment entails a lot of issues and it is highly influenced by the effectiveness of board of directors, management and audit division and the unit heads (Simeon & Ifeanyichukwu, 2018).

Again, it is clear from Table 4.2 above that majority of the respondents (100%) agree that PBC Ltd is able to assign authority and responsibility to their staff. This helps control excesses and non-performance of duties. When authority is assigned it becomes easy to track problems and to quickly take measures to arrest that (Hannah, 2013). So the effectiveness of internal control depends largely on the assignment of authority and responsibility.

Moreover, it is quite clear from Table 4.2 above that majority of the respondents are of the view that PBC Ltd has independent audit unit. While about 80% of the respondents just agree to the fact that PBC Ltd has independent audit unit in place, 10% of the respondents strongly agree to this assertion. In all, about 90% of the respondents agree that PBC Ltd has independent audit unit. Audit unit independence is a crucial component of internal control measures. The effort to control financial and material resources in an organization would become futile if the independence of auditors is compromised (Hazmi, 2013). So the effectiveness of any internal control depends largely on independent audit unit (Mu'azu, 2013).

It also been agreed that there has been intensive use of IT infrastructure at PBC Ltd to detect and minimize errors and fraud. It could be seen from Table 4.2 above that while 90% of the respondents agree to the fact that PBC Ltd has IT infrastructure in

place, just 5% strongly agree to this. In all, 95% of the respondents agree that PBC Ltd has IT infrastructure in place to deal with errors and fraud. The works of Hannah (2013) cited Aldridge and Colbert (1994) to have explained that, effective internal control requires that all relevant information be identified, captured and communicated in the right form and at the right time to enable stakeholders carry out their financial reporting responsibilities. The relevance of Information Technology cannot be under estimated when effective and efficient internal control mechanism is to be realized (Joseph et al, 2013).

It is also evident from Table 4.2 above that majority of the respondents agree that PBC Ltd has a well-functioning human resource department to deal with human resource issues. Of the total respondents, 20% agree that PBC Ltd has a well-functioning human resource department, while

60% strongly agree to this. In all, 80% of the respondents agree that PBC Ltd has a well-functioning human resource department to deal with sensitive employee issues such as recruitment, selection, retention and promotion policies. The work of Joseph et al (2013) maintains that for effective internal control, there is the need for up-and-doing human resource department to recruit and select people of integrity into the organization. Due diligence is therefore required in the recruitment and selection of employees.

Moreover, it is quite clear from Table 4.2 above that majority of the respondents are of the view that PBC Ltd has no effective and well-functioning audit committee. While about 65% of the respondents strongly disagree to the fact that PBC Ltd has effective audit committee in place, 15% of the respondents just disagree to this assertion. In all, about 80% of the respondents disagree that PBC Ltd has effective



audit committee in place. Well- functioning Audit committee is a crucial component of internal control measures. The work of Hannah (2013) holds that effective control environment requires an active audit committee to establish good and resilient auditing procedure that would bring about desired results.

Again, it is quite evident from Table 4.2 above that majority of the respondents agree that PBC Ltd has effective board of directors. While about 75% of the respondents just agree to the fact that PBC Ltd has effective board of directors, about 10% of the respondents strongly agree to this assertion. In all, about 85% of the respondents agree that PBC Ltd has effective board of directors. Effective control environment entails a lot of issues and it is highly influenced by the effectiveness of board of directors, management and audit division (Simeon & Ifeanyichukwu, 2018).

It also been agreed that there has been effective management team at PBC Ltd. It could be seen from Table 4.2 above that while 80% of the respondents agree to the fact that PBC Ltd has very effective management team, just 10% strongly agree to this. In all, 90% of the respondents agree that PBC Ltd has very effective management team. The work of Mu'azu (2013) argues that effective management team is required to assess the quality of internal control structure overtime.

Again, it is quite evident from Table 4.2 above that majority of the respondents disagree that PBC Ltd has effective and efficient communication channel. While about 90% of the respondents strongly disagree to the fact that PBC Ltd has effective and efficient communication channel, 10% of the respondents just disagree to this assertion. In all, about 100% of the respondents disagree that PBC Ltd has effective and efficient communication channel. The relevance of Information Technology



cannot be under estimated when efficient internal control mechanism is to be realized (Joseph et al, 2013).

Again, it is quite evident from Table 4.2 above that majority of the respondents agree that PBC Ltd reviews its risk assessment on periodic basis. While 70% of the respondents strongly disagree to the fact that PBC Ltd periodically reviews its potential risks and risk level, 20% of the respondents just disagree to this assertion. In all, about 90% of the respondents disagree that PBC Ltd reviews its potential risk and risk level. Risk assessment is the careful identification and assessment of those factors that mitigate the realization of organizational goals. For effective internal control, it is important to identify and assess the relevant risks associated with preparation of financial statement and whether it is in conformity with general accepted accounting principle or standard (Hannah, 2013).

Moreover, it could be observed from Table 4.2 above that majority of the respondents agree that PBC Ltd conducts effective monitoring. While 10% of the respondents just agree to the fact that PBC Ltd, 75% of the respondents strongly agree to this assertion. In all, about 85% of the respondents agree that PBC Ltd conducts monitoring of all sectors of the firm. The work of Mu'azu (2013) argues that effective monitoring is required to assess the quality of internal control structure overtime. This is because internal control system is a process and frequent and effective monitoring is required to assess the effectiveness and efficiency of the internal control.

In conclusion therefore, it could be argued that there exist sufficient internal control measures in place and the internal control system at PBC Ltd is effective and would more likely be able to achieve its intended purposes.

***Objective 2 – Assessing the effectiveness of the Internal Control System in mitigating financial misappropriation at PBC Ltd***

**4.4 Internal Control System at PBC Ltd and Embezzlement of funds (Fraud)**

One important function of any effective internal control is to mitigate corrupt practices in an organization. The internal control therefore sets legal and ethical constraints on management and employees so that the objectives of the organization would be maximized.

**Table 4.3 Mitigation of Fraud and Embezzlement at PBC**

<b>Statement</b>	<b>SDA</b>	<b>DA</b>	<b>A</b>	<b>SA</b>	<b>TOTAL (100%)</b>
There is effective internal checks	0(0)	0(0)	18(90)	2(10)	20(100%)
There is effective internal accounting control	0(0)	0(0)	18(90)	2(10)	20(100%)
There is effective budget and budgetary control	2(10)	3(15)	12(60)	3(15)	20(100%)
There is well defined organizational structure	0(0)	4(20)	13(65)	3(15)	20(100%)
There is segregation of authority and responsibilities	0(0)	2(10)	8(40)	10(50)	20(100%)
There is effective custody of physical assets	1(5)	0(0)	8(40)	11(55)	20(100%)
There is effective supervision	0(0)	1(5)	1(5)	18(90)	20(100%)
Persons of integrity are employed to manage financial resources	1(5)	2(10)	3(15)	14(70)	20(100%)
Management has the capacity to develop, review and maintain effective internal control	0(0)	0(0)	2(10)	18(90)	20(100%)

**Source: Field Survey, 2019**

Majority of the respondents agree that PBC Ltd has effective internal checks in place to deal with fraud, embezzlement and misappropriation. Of the total respondents, about 90% of them agree that the company has effective internal checks in place while 10% of them strongly agree to this assertion. In all, 100% of the respondents agree that PBC Ltd has effective internal checks in place to deal with fraud and embezzlement.

Internal check is needed to mitigate financial and material waste. As part of internal

check, financial control is pursued to improve efficiency, accountability and

# KNUST



transparency in the public and private sectors” financial management. It is to identify breakdown of routine procedures to avoid waste (Afiah & Azwari, 2015). .

Again, it is quite evident from Table 4.3 above that majority of the respondents agree that PBC Ltd has effective internal accounting control measures in place. While 90% of the respondents just agree to the fact that PBC Ltd has effective accounting control measures in place, 10% of the respondents strongly agree to this assertion. In all, about 100% of the respondents agree that PBC Ltd has effective accounting control measures in place. Internal account control comprise of all controls over the operation of an accounting system to help meet the requirement of organizations. This seeks to achieve completeness, (that is, all transactions are duly recorded in the accounting record), validity and accuracy (that is, transactions recorded are verified and approved) (Okai, 1996 in Joseph et al, 2013).

Furthermore, it is quite evident from Table 4.3 above that majority of the respondents agree that PBC Ltd has effective budget and budgetary control measures in place. While 60% of the respondents just agree to the fact that PBC Ltd has budget and budgetary control measures in place, 15% of the respondents strongly agree to this assertion. In all, about 75% of the respondents agree that PBC Ltd has effective budget and budgetary control measures in place. Budget is the statement showing expected cash revenue and proposed expenditure by the organization. Budgetary control is necessary to ensure prudent financial management practices of an organization. In budgetary control, the need to minimize cost in order to maximize production and revenue is highly considered. This is achieved by trying to reconcile expected revenue with proposed expenditure so that unnecessary financial difficulties would not be brought to bear on the organization (Joseph et al, 2013). .



Again, it is quite evident from Table 4.3 above that majority of the respondents agree that PBC Ltd has well-defined organizational structure. While 65% of the respondents just agree to the fact that PBC Ltd has well-defined organizational structure, 15% of the respondents strongly agree to this assertion. In all, about 75% of the respondents agree that PBC Ltd has well-defined organizational structure. The study by Hannah (2013) adds that effective control environment should have something to do with organizational structure. When a piece of work is broken down into units and each unit is manned by a person or group of persons, it becomes easier to identify or track errors and those responsible for the errors (Simeon & Ifeanyichukwu, 2018).

Moreover, it is quite clear from Table 4.3 above that majority of the respondents agree that PBC Ltd has been able to segregate employees into various departments and functional areas and each functional area is manned by certain group of people who are made responsible and accountable to the highest authority. While 40% of the respondents just agree to the fact that PBC Ltd has ensured segregation of personnel who are made responsible and accountable to highest authority, 50% of the respondents strongly agree to this assertion. In all, about 90% of the respondents agree that PBC Ltd ensures segregation of authority and responsibilities. When a piece of work is broken down into units and each unit is manned by a person or group of persons, it becomes easier to identify or track errors and those responsible for the errors (Simeon & Ifeanyichukwu, 2018).

Again, it could be seen from Table 4.3 above that majority of the respondents agree that PBC Ltd take effective custody of its physical assets. While 40% of the respondents just agree to the fact that PBC Ltd take effective custody of their physical assets, 55% of the respondents strongly agree to this assertion. In all, about 95% of the respondents agree that PBC Ltd take proper custody of their physical assets.

Embossing and proper recording of all bought and disposed assets need to be adhered to in order to minimize theft and possible loss of physical assets of the organization (Joseph et al, 2013).

Also, it is evident from Table 4.3 above that majority of the respondents agree that PBC Ltd conducts effective supervision to make sure that right things are done properly and that financial and physical assets are duly managed and protected from possible embezzlement and encroachment. While 5% of the respondents just agree to the fact that PBC Ltd conducts effective supervision, 90% of the respondents strongly agree to this assertion. In all, about 95% of the respondents agree that PBC Ltd conducts effective supervision. All workers should be supervised by superiors and their work should be reviewed to ensure that work done conforms to standard and that procedures in accomplishing tasks are strictly adhered to (Mu'azu, 2013; Hannah, 2013).

Again, it is quite clear from Table 4.3 above that majority of the respondents agree that PBC Ltd employs people of integrity to manage its financial resources. While 15% of the respondents just agree to the fact that PBC Ltd employs people of integrity are employed to manage financial resources, 70% of the respondents strongly agree to this assertion. In all, about 85% of the respondents agree that PBC Ltd employs persons of integrity to manage its financial resources. In recruiting workers, people of integrity should be employed to reduce the cost of supervision and to maximize production and revenue. This means that honest and qualified people should be engaged at all times (Simeon & Ifeanyichukwu, 2018).

Furthermore, it could be seen from Table 4.3 above that majority of the respondents agree that PBC Ltd has seasoned and highly qualified management with the requisite

skill and capacity to develop, review and maintain effective internal control. While 10% of the respondents just agree to the fact that the management of PBC Ltd has the capacity to develop, review and maintain effective internal control, 90% of the respondents strongly agree to this assertion. In all, about 100% of the respondents agree that management of PBC Ltd has the capacity to develop, review and maintain effective internal control. Management has the fundamental responsibility to develop and maintain effective internal control. It should review the current internal control system in place to identify loopholes and flaws so that corrective measures are taken (Shamsuddin & Johari, 2014).

In conclusion, it could be argued that PBC Ltd has sufficient checks in place to mitigate or drastically reduce possible embezzlement and fraud at the company.

### ***Objective 3 – Potential Benefits of Internal Control System at PBC Ltd***

#### **4.5 Potential Benefits of Internal Control accruing to PBC Ltd**

Organizations spend heavily on developing and sustaining effective internal controls so that the attended benefits of the control would be realized. Effective internal controls reduces cost of operation and maximizes production and revenue and for that matter profit.



**Table 4.4 Benefits of Internal Control to PBC Ltd**

<b>Statement: The internal control at PBC Ltd succeeds in :</b>	<b>SDA</b>	<b>DA</b>	<b>A</b>	<b>SA</b>	<b>TOTAL (100%)</b>
Mitigating financial misappropriation	1(5)	0(0)	2(10)	17(85)	20(100%)
Checking environmental disaster	12(60)	6(30)	2(10)	0(0)	20(100%)
Ensuring harmonious working environment	0(0)	0(0)	5(25)	15(75)	20(100%)
Minimizing errors and irregularities in operations	0(0)	1(5)	3(15)	16(80)	20(100%)
Safeguarding physical assets	0(0)	5(25)	12(60)	3(15)	20(100%)
Ensuring transparency, accountability, responsibility and fairness	0(0)	0(0)	15(75)	5(25)	20(100%)
Reducing agency problem	16(80)	4(20)	0(0)	0(0)	20(100%)
Detecting and controlling of fraud	0(0)	0(0)	15(75)	5(25)	20(100%)
Reducing material loss due to monitoring technology	16(80)	3(15)	1(5)	0(0)	20(100%)
Providing quality financial and management information at reduced cost	0(0)	1(5)	4(20)	15(75)	20(100%)

**Source: Field Survey, 2019**

It could be observed from Table 4.4 above that majority of the respondents agree that the PBC Ltd internal control succeeds in mitigating financial misappropriation. While 10% of the respondents just agree to the fact that PBC Ltd internal control system succeeds in mitigating financial misappropriation, 85% of the respondents strongly agree to this assertion. In all, 95% of the respondents agree that the internal control system at PBC Ltd succeeds in mitigating financial misappropriation. Organizations are faced with several risks ranging from failure of internal control mechanism, financial misappropriation. So, a good internal control will help mitigate the incidence of bad financing and embezzlement (Abd-Aziz, Rahman & Alam, 2015).

Again, it is quite clear from Table 4.4 above that majority of the respondents disagree that the internal control system at PBC Ltd succeeds in checking environmental disaster. While 30% of the respondents just disagree to the fact that the internal control system at PBC Ltd succeeds in checking environmental disaster, 60% of the



respondents strongly disagree to this assertion. In all, about 90% of the respondents disagree that the internal control system at PBC Ltd succeeds in checking environmental disaster. There are several risks facing organisations among which are internal control system failure ... and environmental disaster (Zainab, Nasrin & Abdullah, 2016).

It is evident from Table 4.4 above that majority of the respondents agree that the internal control system at PBC Ltd succeeds in ensuring harmonious working environment. While 25% of the respondents just agree to the fact that the internal control system at PBC Ltd ensures harmonious working environment, 75% of the respondents strongly agree to this assertion. In all, 100% of the respondents agree that the internal control system at PBC Ltd succeeds in ensuring harmonious working environment and this promotes productivity. A good internal control will help ensure harmonious working environment, while it detects errors and irregularities in business operation ( (Abd-Aziz, Rahman & Alam, 2015).

It could be seen from Table 4.4 above that majority of the respondents agree that the PBC Ltd internal control succeeds in minimizing errors and irregularities in operation. While 25% of the respondents just agree to the fact that the internal control system at PBC Ltd succeeds in minimizing errors and irregularities in operation, 75% of the respondents strongly agree to this assertion. In all, 100% of the respondents agree that the internal control system at PBC Ltd succeeds in minimizing errors and irregularities in operation. Internal control system acts as a useful tool in safeguarding the physical as well as financial assets are thus safeguarded against misuse, misappropriation and embezzlement (Zainab, Nasrin & Abdullah, 2016).

It is quite clear from Table 4.4 above that majority of the respondents agree that the internal control system at PBC Ltd succeeds in safeguarding physical assets. While 60% of the respondents just agree to the fact that the internal control system at PBC Ltd succeeds in safeguarding physical assets, 15% of the respondents strongly agree to this assertion. In all, 75% of the respondents agree that the internal control system at PBC Ltd succeeds in the safeguard of its physical assets. These are achieved through stocktaking exercises, recording of purchased and disposed of items while newly acquired physical assets are duly embossed. Embossing and proper recording of all bought and disposed assets need to be adhered to in order to minimize theft and possible loss of physical assets of the organization (Joseph et al, 2013).

It is quite evident from Table 4.4 above that majority of the respondents agree that the internal control system at PBC Ltd succeeds in ensuring transparency, accountability, responsibility and fairness. While 75% of the respondents just agree to the fact that the internal control system at PBC Ltd succeeds in ensuring transparency, accountability, responsibility and fairness, 25% of the respondents strongly agree to this assertion. In all, 100% of the respondents agree that the internal control system at PBC Ltd succeeds in ensuring transparency, accountability, responsibility and fairness. Internal control, through internal audit practice, directs and controls the activities in an organization thereby promoting transparency, accountability, responsibility and also promotes fairness to all stakeholders. This helps the organization to achieve its stated goals and objectives (Simeon & Ifeanyichukwu, 2018).

It could be observed from Table 4.4 above that majority of the respondents disagree that the internal control system at PBC Ltd succeeds in reducing agency problem. While 80% of the respondents strongly disagree to the fact that the internal control

system at PBC Ltd succeeds in reducing agency problem, 20% of the respondents just disagree to this assertion. In all, 100% of the respondents disagree that the internal control system at PBC Ltd succeeds in reducing agency problem. Effective internal audit has the tendency to reduce agency problems (due to information asymmetry) that characterizes the operation of many firms. With good internal audit practices, internal control system could reduce opportunism of management (Najah & Omar, 2018).

Again, it is quite clear from Table 4.4 above that majority of the respondents agreed that the internal control system at PBC Ltd succeeds in detecting and controlling fraud. While 20% of the respondents just agree to the fact that the internal control system at PBC Ltd succeeds in detecting and controlling fraud, 75% of the respondents strongly agree to this assertion. In all, 95% of the respondents agree that the internal control system at PBC Ltd succeeds in detecting and controlling fraud. The function of an effective internal audit cannot be overemphasized as it checks possible losses emanating from theft, fraud, non-performance and rising operational costs. These are quickly detected and arrested which leads to profit maximization (Atilla & Gulumser, 2016).

Moreover, it is quite clear from Table 4.4 above that majority of the respondents agree that the internal control system at PBC Ltd succeeds in reducing material loss due to monitoring technology. While 80% of the respondents strongly disagree to the fact that the internal control system at PBC Ltd succeeds in reducing material loss due to monitoring technology, just 15% of the respondents disagree to this assertion. In all, 95% of the respondents disagree that the internal control system at PBC Ltd succeeds in reducing material loss due to monitoring technology.



It is also evident from Table 4.4 above that majority of the respondents agree that the internal control system at PBC Ltd succeeds in providing quality financial and management information at reduced cost. While 20% of the respondents just agree to the fact that the internal control system at PBC Ltd succeeds in providing quality financial and management information at reduced cost, 75% of the respondents strongly agree to this assertion. In all, 95% of the respondents agree that the internal control system at PBC Ltd succeeds in providing quality financial and management information at reduced cost

#### ***Objective 4 – Challenges of Implementing Internal Control at PBC Ltd***

#### **4.6 Challenges of Internal Control implementation at PBC Ltd**

Being a human institution, internal control system suffers several challenges ranging from micro to macro-based problems. At micro level, deviant attitudes of management, accountant, employees and even auditors can render a particular internal control ineffective. At macro level, government policies, macroeconomic variables, technological change and financial constraints in the acquisition and implementation of modern monitoring devices can all reduce the effectiveness of internal controls.

**Table 4.5 Challenges faced in the Implementation of Internal Control Measures**

<b>Statement- Internal control at PBC Ltd:</b>	<b>SDA</b>	<b>DA</b>	<b>A</b>	<b>SA</b>	<b>TOTAL (100%)</b>
Is able to influence macroeconomic variables and policies	15(75)	5(25)	0(0)	0(0)	20(100%)
Is able to cater for all possible risks facing it	3(15)	17(85)	0(0)	0(0)	20(100%)
Is inexpensive to manage and maintain	2(10)	16(80)	1(5)	1(5)	20(100%)
Ensures internal auditors' independence	13(65)	3(15)	3(15)	1(5)	20(100%)
Is effective in inventory control	0(0)	0(0)	15(75)	5(25)	20(100%)
Is rendered ineffective by the collusion between management, accountant and auditors	0(0)	0(0)	3(15)	17(85)	20(100%)



Occasionally suffers ICT(IT) failures	0(0)	0(0)	2(10)	18(90)	20(100%)
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**Source: Field Survey, 2019**

# KNUST



It is also evident from Table 4.5 above that majority of the respondents disagree that the internal control system at PBC Ltd is able to influence macroeconomic variables and policies. While 25% of the respondents just disagree to the fact that the internal control system at PBC Ltd is able to influence macroeconomic variables and policies in the country, 75% of the respondents strongly disagree to this assertion. In all, 100% of the respondents disagree that the internal control system at PBC Ltd is able to influence macroeconomic variables and policies in the country. The work of Simeon and Ifeanyichukwu (2018) asserts that internal control only provides a reasonable and not an absolute assurance about the company's objective realization and sustainability. So, it does not change a bad manager to a good one neither does it influence macroeconomic factors or variables.

It is also clear from Table 4.5 above that majority of the respondents disagree that the internal control system at PBC Ltd is able to cater for all possible risks facing it. While 85% of the respondents just disagree to the fact that the internal control system at PBC Ltd is able to cater for all possible risks facing it, 15% of the respondents strongly disagree to this assertion. In all, 100% of the respondents disagree that the internal control system at PBC Ltd is able to cater for all possible risks facing it. This finding supports the work of Shamsuddin & Johari (2014) argues that though internal control is assumed to mitigate organizational risks, some risks could not be eliminated due to the presence of human factor in the design of the internal control system. Other risks that remain unsolved might include errors of judgment or interpretation, misunderstanding, carelessness, tiredness or distraction, collusion and abuse. These therefore call for periodic review of internal control system to ensure better functioning towards realizing the set objectives of the organization.

It is also observed from Table 4.5 above that majority of the respondents disagree that the internal control system at PBC Ltd is inexpensive to manage and maintain. While 80% of the respondents just disagree to the fact that the internal control system at PBC Ltd is inexpensive to manage and maintain, 10% of the respondents strongly disagree to this assertion. In all, 90% of the respondents disagree that the internal control system at PBC Ltd is inexpensive to manage and maintain. The financial cost of effective internal control is so huge that those small firms find it difficult to fully implement most of the elements of internal control system. This finding supports the assertion made by John, Jang-hyung & Il-woon (2010) that inability to fund effective internal control mechanism by small firms can expose them to serious problems emanating from fraud, lateness to work, absenteeism, theft and other malpractices.

Furthermore, it is evident from Table 4.5 above that majority of the respondents disagree that the internal control system at PBC Ltd ensures internal auditors' independence. While 15% of the respondents just disagree to the fact that the internal control system at PBC Ltd ensures internal auditors' independence, 65% of the respondents strongly disagree to this assertion. In all, 80% of the respondents disagree that the internal control system at PBC Ltd ensures internal auditors' independence. This is in line with argument raised by Shamsuddin and Johari (2014) and Umar (2016) that management is able collude with firm's accountant and auditors to conduct dubious act to the detriment of the firm. Being a human institution, firms are very often exposed to the evil intent of management that internal control can hardly manage

Moreover, it is evident from Table 4.5 above that majority of the respondents agree that the internal control system at PBC Ltd is effective in inventory control. While

75% of the respondents just agree to the fact that the internal control system at PBC Ltd is effective in inventory control, 25% of the respondents strongly agree to this assertion. In all, 100% of the respondents agree that the internal control system at PBC Ltd is effective in inventory control. The study by Stephen (2014) maintains that failure to follow or comply by the directives of internal control system exposes several firms to higher levels of risks resulting from poor stock procurement and distribution system.

Again, it is evident from Table 4.5 above that majority of the respondents disagree that the internal control system at PBC Ltd is rendered ineffective by the collusion between management, accountants and auditors. While 15% of the respondents just disagree to the fact that the internal control system at PBC Ltd is rendered ineffective by the collusion between management, accountant and auditor, 85% of the respondents strongly disagree to this assertion. In all, 100% of the respondents agree that the internal control system at PBC Ltd is rendered ineffective by the collusion between management, accountants and auditors. The work of Afiah and Azwari, (2015) reveals that another serious challenge that bedevils the implementation of any internal control is threats that internal auditors suffer from and which adversely affect their objectivity. These threats include self-interest, self-review, advocacy threat, familiarity threat and intimidation threat. All of these threats can exert pressure on auditors so that their objectivity is compromised. Having auditors' objectivity compromised means that internal control system can badly be affected and its intended purpose defeated.

Also, it could be seen from Table 4.5 above that majority of the respondents agree that the internal control system at PBC Ltd occasionally suffers ICT (IT) failures.



While 10% of the respondents just agree to the fact that the internal control system at PBC Ltd occasionally suffers ICT (IT) failures, 90% of the respondents strongly agree to this assertion. In all, 100% of the respondents agree that the internal control system at PBC Ltd occasionally suffers ICT (IT) failures.

In conclusion, majority of respondents agree that PBC Ltd suffers from macroeconomic policy variables. Change in government policies can favourably or unfavourably affect the operation of PBC Ltd. Again, majority of the respondents also agree that, being a human institution, risks could not be completely controlled but rather minimized. Also, it is agreed by the respondents that maintenance of internal control system is quite expensive beyond the financial constraints of firms, especially small and medium-scale firms. It is also agreed by majority of the respondents that auditors at PBC Ltd could not be very independent, though no evidence to suggest this. Moreover, majority of respondents agree that there is effective inventory control at PBC Ltd while majority of them again agree that there is evidence to believe in the collusion between management and auditors or accountants at PBC Ltd.

#### **4.7 Reliability Test based on Cronbach Alpha**

To ensure that the construct is consistently valid and to be relied upon, reliability test should be carried. For this study Cronbach Alpha test was used.

**Table 4.6 Case Processing Summary**

		N	%
Cases	Valid	20	100.0
	Excluded	0	.0
	Total	20	100.0

The study used twenty(20) respondents to gather relevant information relating to issues pertaining to internal control system in PBC Ltd.

**Table 4.7 Reliability Statistics**

Cronbach's Alpha	N of Items
0.68	38

To test for internal consistency of using Likert scale questionnaire, the study used Cronbach Alpha test. In Table 4.7 above, the Cronbach Alpha stands at 0.68, suggesting that there has been 68% probability that the constructs are consistent and are therefore reliable. This means that our constructs consistently measure what we need to measure. Though in general 70% is deemed good, 68% is equally good as proven by several empirical findings (Saunders, 2009).

#### **4.8 Qualitative (Interview) Analysis: Results of Interviews with the Management and Accountant of PBC Ltd**

The qualitative analysis presents thematic approach, which involves the examination of interview data for themes and sub-themes, which were derived from the literature review in Chapter Two and in line with the research objectives in Chapter One. Key findings are summarized below.

##### **4.8.1 Has there been sufficient Internal Control Measures at PBC Ltd?**

The interviewees were asked to identify whether there has been sufficient internal control measures in place at PBC Ltd. The manager said that there have internal control measures in place and further added that:

*“the existence of independent internal audit, effective monitoring and periodic review of risk assessment have all contributed to the success of the company”.*

The accountant also agree to the fact that there have been sufficient internal control measures in place. For example, the accountant stated that:

*“... the well-functioning Audit Committee, effective budgetary control and intensive use of IT infrastructure all come to help check financial misappropriation”.*

#### **4.8.2 How effective are the Internal Control Measures in PBC Ltd?**

In response to the question, the manager affirms that:

*“the success of the company and minimal financial casualty in the company are all due to the effective internal control measures put in place”*”. The same view is held by the accountant who added that:

*“the effective physical custody of assets in the company helps reduce theft and misappropriation”.*

#### **4.8.3 To what extent has the internal control measures benefitted PBC Ltd?**

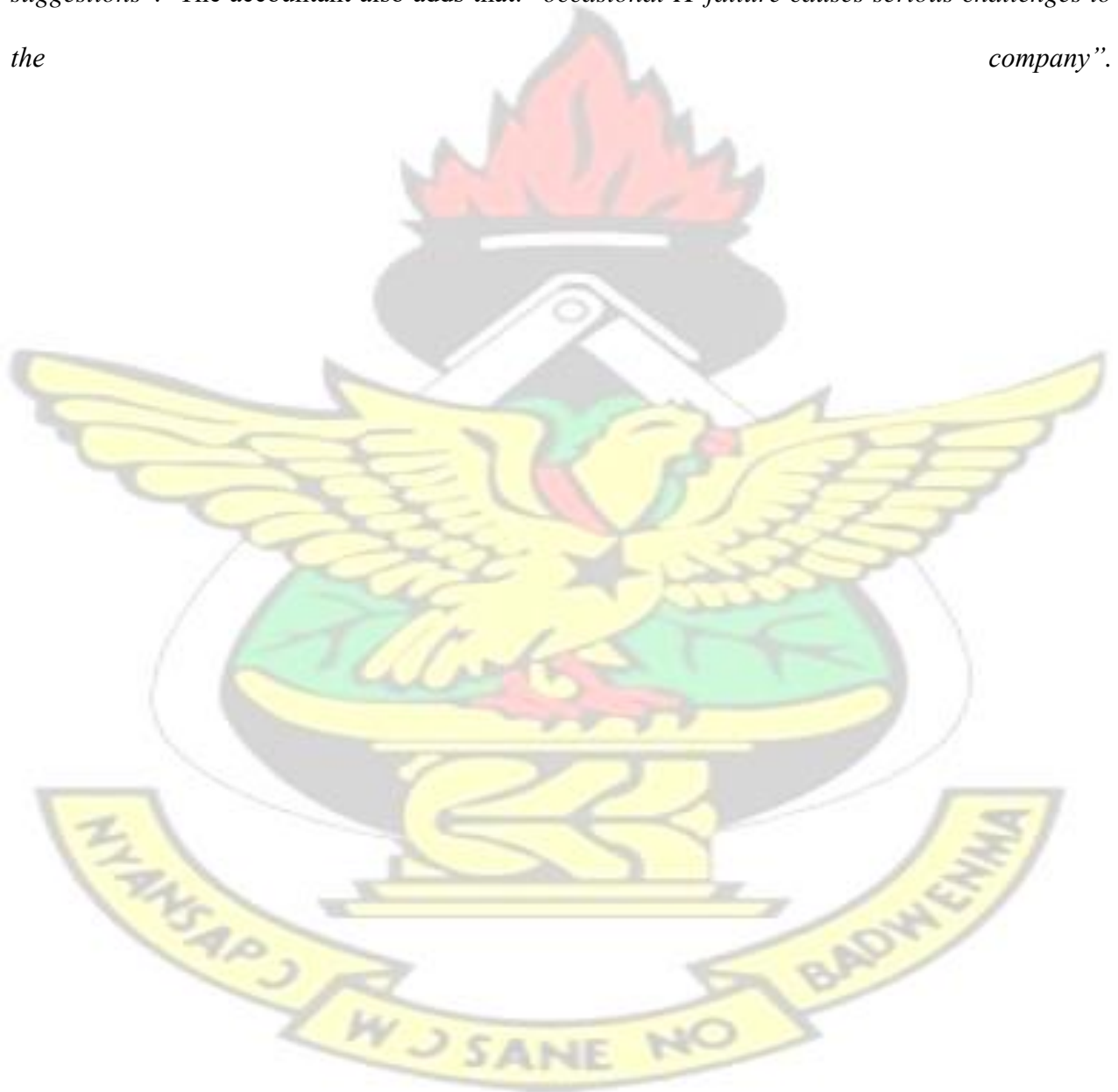
All the interviewees affirm that the company derives pecuniary and non-monetary benefits from the existing internal control measures. The manager has this to say:

*“I think the success and perpetual existence of the going-concern will attest to the fact that the internal control measures have been beneficial to the company”.* The accountant further added that: *“the huge profits the company makes over several years is evident to the fact that internal control measures have been effective and beneficial”*

#### 4.8.4 What are the challenges that affect the successful implementation of Internal Control Measures?

The manager and the accountant both maintain that macroeconomic policies do at times affect measures implemented at the company. The manager adds that:

*“... insufficient modern monitoring devices and bureaucratic ways of doing things slow down vertical communication and causes delays in implementation of new orders and suggestions”*. The accountant also adds that: *“occasional IT failure causes serious challenges to the company”*.





## **CHAPTER FIVE**

### **SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS**

#### **5.0 Introduction**

This study aimed at investigating the effectiveness of internal control system at PBC Ltd. It also sought to investigate where the internal control measures put in place at PBC Ltd were sufficient and effective at mitigating possible fraud and embezzlement and it went further to investigate the potential benefits that accrued to PBC Ltd for instituting the internal control measures. The study finally sought to identify the potential challenges or threats that PBC Ltd was exposed to as a result of the use of the internal control measures.

#### **5.1 Summary of major findings**

This section summarizes the major findings relation to the effectiveness of internal control measures at PBC Ltd, the effectiveness of the internal control in mitigating fraud and embezzlement. It again investigated the potential benefits and challenges that accrue to PBC Ltd

##### **5.1.1 Existence of Internal Control Measures and its Effectiveness at PBC Ltd**

It was empirically proven that the internal control system at PBC Ltd was quite effective due to the fact that the company had defined organizational structure and assigned duties and responsibilities that made control very effective. The study further revealed that internal auditors enjoy some degree of independence while it was able to maximize the use of IT to track the system. It was proven empirically also that the company has effective board of directors and competent management to formulate

policies and procedures that aided the smooth implementation of the designed internal control. Also, risk assessment was reviewed periodically to reduce the level of risks while monitoring was also found to be effective. In the nutshell, it could be argued that the internal control system at PBC Ltd was effective and would most likely be able to achieve its intended purposes.

#### **5.1.2 Internal Control, Fraud and Embezzlement of Fund**

It was once again empirically proven that there were effective checks at PBC Ltd indicating the potency of its internal control. Empirically it was also found that there were effective budget and budgetary control and effective internal accounting control. While supervision was perfect, persons of integrity were employed to minimize the level of fraud and embezzlement. The employment of competent persons to manage the company also aided in the design of effective controls that helped to mitigate incidence of fraud and embezzlement. In the nutshell, it could be concluded that there have been sufficient and effective checks in place to mitigate or reduce drastically incidence of fraud and embezzlement.

#### **5.1.3 Potential Benefits of Internal Control to PBC Ltd**

It empirically proven that PBC Ltd derived sufficient benefits from instituting effective internal control measures. These benefits include mitigating financial fraud and misappropriation, minimizing errors and irregularities, detecting and controlling fraud and providing timely information to help improve on the internal control system in place. In conclusion, it could be argued that the internal control system provided sufficient benefits to PBC Ltd. The attended benefit could directly or indirectly reduce cost of doing business and also help the company in its efforts to maximize production and revenue.

#### **5.1.4 Challenges encountered in the use of internal control system at PBC Ltd**

While it was empirically proven that PBC Ltd enjoyed enormous benefits from its internal control system, it was also proven empirically that the internal control suffered a number of setbacks. Among the challenges the company suffered included inability to influence certain macroeconomic variables and policies. Certain decisions taken at national level might hamper some of the checks put in place and the company has no control over such macroeconomic variables. In addition to this was the fact that some risks could not easily be assessed and managed, especially those that involved human factors. It was also empirically found that though internal audit independence was guaranteed, it was only partial. It was also proven empirically that the company occasionally suffered IT failure which could be disastrous to the company.

#### **5.1.5 Interview on Management and Accountant**

The manager and Accountant interview both affirm that there exists sufficient internal control measures at PBC Ltd. They further admit that the internal control measures are effective judging from the success story of the company and the recent huge profit the company makes. The interviewees also agree that the company derives maximum benefits from the existence of the internal control measures.

## 5.2 Conclusion

The study sought to identify measures put in place at PBC Ltd to check fraud and misappropriation, assess the effectiveness of internal control measures put in place, identify the potential benefits of the internal control measures put in place and identify the perceived challenges of the measures put in place to check fraud and misappropriation.

This study empirically established the fact that PBC Ltd has effective internal control system in place. Sufficient structures were put in place to the effectiveness of the internal control. These measures or structures include effective monitoring, risk assessment on period basis, effective and efficient communication channel, presence of IT infrastructure and well-defined organizational structure. These measures could most likely help the company to achieve its stated objectives

Again, the study further proved the fact that the system of control put in place at PBC Ltd was able to mitigate or at worst reduce the incidence of fraud and embezzlement. This further indicated the robustness of the internal control system put in place at the company. In view of the fact that the internal control was authentic, effective and efficient the company derived several benefits from instituting the internal control. These benefits included mitigating or reducing to the minimal fraud and financial misappropriation, minimizing errors and irregularities in operation, ensuring transparency, accountability and responsibility among others.

However, the internal control structures faced some challenges which included inadequacy of advanced technology to cater for all possible risks facing the company, partial independence of internal auditors, possible collusion between management, accountant and auditors and occasional failure of IT infrastructure.



The study employed survey approach through the use of questionnaire and interview. This therefore allowed the use of quantitative and qualitative method to gather sufficient and appropriate responses. The study used purposive sampling technique to obtain and use twenty (20) key respondents from the company and three (3) interviewees from the top management position.

In conclusion therefore, the company has in place effective and efficient internal control measures in place to help check fraud and misappropriation. These measures help minimize cost of doing business and for that matter helps maximize corporate returns. The few challenges identified could be worked on to ensure very perfect internal control structures capable of maximizing firm value and shareholders' wealth. has the tendency to reduce cost of production while at the same time it helps to maximize gains.

In spite of the numerous benefits the company faces some levels of challenges in the use of its internal control.

### **5.3 Recommendations**

Despite the fact that majority of the respondents agree that internal audit enjoys some degree of independence, it was agreed also that they only enjoyed partial independence. It behooves that well-functioning audit committee should be constituted to give more strength to the auditors and further ensure their independence.

Again, there is the urgent need to improve the channel of communication. Sizable number of respondents have agreed that there is not effective communication channel. Communication channel is very important and it aids internal control system to function well.

Also, it is very important to include environmental issues in designing internal control system. It is ethically and legally required to take environmental issues in the design of internal control. Environmental pollution brings untold hardship to the lives of the people in the community and must therefore be sufficiently compensated and efforts should also be made to reduce this environmental disaster.

Furthermore, it was agreed that the internal control has not been able to reduce agency problems that characterize the operation of many businesses. It is important therefore the internal control should aid the preparation and provision of sufficient information to stakeholders and potential investors to enable them make informed decision.

Moreover, for effective internal control, there is the need for monitoring technology to improve monitoring and also reduce the cost of monitoring all in a bid to minimize cost while at the same time helps to maximize revenue.

Again, though it is very difficult to plan against macroeconomic policies and variables, it is proper also to be more proactive instead of being more reactive. Supplementary steps could be put down to help check unforeseen contingencies.

#### **5.4 Area for further study**

1. Factors that ensure the internal audit independence at PBC Ltd.
2. How does internal control affect profitability of PBC Ltd?

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## **APPENDIX 1**

KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY,  
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INSTITUTE OF DISTANCE LEARNING

AN ASSESSMENT OF THE EFFECTIVENESS OF THE INTERNAL CONTROL  
SYSTEMS AT PBC LIMITED IN THE WESTERN NORTH

REGION OF GHANA

This is part of an MBA research project looking at the effectiveness of internal control system in mitigating fraud and embezzlement at PBC LTD. Thank you for your cooperation

**SAMUEL ODURO TEMENG**

Research Student

Department of accounting and finance

KNUST School of Business

KNUST, Kumasi

Contact:

Mobile: +

August, 2019

### **QUESTIONNAIRE FOR WORKERS IN PBC LTD**

This questionnaire is part of an academic work to fulfill an award of a master's degree at Kwame Nkrumah University of Science & Technology (KNUST). I would be grateful if you could please spare some of your precious time to answer all the questions before you. You are assured that all the information you provide would be treated with utmost confidentiality. I thank you in advance for your cooperation.

Please indicate your answer by ticking the appropriate box [✓]

## Section A

### Background of Respondents (Tick appropriate response)

1. **Age:**

- i. Below 20 years ☐
- i. 20 – 30 years ☐
- ii. 31- 40 years ☐
- iii. 41-50 years ☐
- iv. above 50 years ☐

2. **Gender:** Male ☐ Female ☐

3. **Work experience**

- i. Less than 1 years ☐
- ii. Between 1- 4 years ☐
- iii. Between 5- 9 years ☐
- iv. Over 10 years ☐

4. **Department:**

- i. Administration ☐
- ii. Tender committee ☐
- iii. Procurement ☐
- iv. Accounts / Audit ☐
- v. Stores ☐
- vi. Security ☐
- vii. Driving (transport) ☐
- viii. Purchasing ☐

5. **Educational background:**

- i. Basic ☐
- ii. Second-cycle ☐
- iii. Tertiary ☐

## Section B

### Effectiveness of Internal Control System at PBC Ltd

This section wanted to investigate there have been effective of internal control system at PBC. **4=Strongly Disagree (SDA); 3=Disagree (DA); 2=Agree (A); 1=Strongly Agree (SA).**

Tick the appropriate response

#### Effectiveness of Internal Control System at PBC

	Statement	4	3	2	1
1	The firm has a defined organizational structure				
2	There is assigned authority and responsibility				
3	There is an independent internal audit unit				
4	There is intensive use of IT infrastructure to minimize error and detect fraud				
5	There is a well-functioning Human Resource Department				
6	There is a well-functioning Audit Committee				
7	There is an effective board of directors				
8	Management team is very effective				
9	There is efficient communication channel				
10	Risk assessment is reviewed on periodic basis				
11	There is documentation of policies and procedural guidelines				
12	There has been effective monitoring				

## Section C

### Mitigation of Fraud and Embezzlement at PBC

This section wanted to investigate how the internal control mechanism is used to mitigate fraud and embezzlement at PBC.

**4=Strongly Disagree (SDA); 3=Disagree (DA); 2=Agree (A); 1=Strongly Agree (SA).**

Tick the appropriate response

#### Mitigation of Fraud and Embezzlement at PBC

	Statement	1	2	3	4
13	There is effective internal checks				
14	There is effective internal accounting control				
15	There is effective budget and budgetary control				
16	There is well defined organizational structure				
17	There is segregation of authority and responsibilities				
18	There is effective physical custody of assets				
19	There is effective supervision				
20	Persons of integrity are employed to manage financial resources				
21	Management has the capacity to develop, review and maintain effective internal control				

## SECTION D

### Potential Benefits of Internal Control System to PBC Ltd

This section wanted to investigate the potential benefits that PBC Ltd derives from instituting internal control mechanism.

**4=Strongly Disagree (SDA); 3=Disagree (DA); 2=Agree (A); 1=Strongly Agree (SA).**

Tick the appropriate response

		1	2	3	4
22	Statement: The internal control at PBC Ltd succeeds in :				
23	Mitigating financial misappropriation				
24	Checking environmental disaster				
25	Ensuring harmonious working environment				
26	Minimizing errors and irregularities in operations				
27	Safeguarding physical assets				
28	Ensuring transparency, accountability, responsibility and fairness				
29	Reducing agency problem				
30	Detecting and controlling of fraud				
31	In reducing material loss due to monitoring technology				
32	In providing quality financial and management information at reduced cost				

## SECTION E

### Potential challenges the Internal Control System of PBC Ltd face

This section wanted to investigate the potential challenges that PBC Ltd incurs in its internal control mechanism.

**4=Strongly Disagree (SDA); 3=Disagree (DA); 2=Agree (A); 1=Strongly Agree (SA).**

Tick the appropriate response

	Statement- Internal control at PBC Ltd:	1	2	3	4
32	Is able to influence macroeconomic variables and policies				
33	Is able to cater for all possible risks facing it				
34	Is inexpensive to manage and maintain				
35	Ensures internal auditors' independence				
36	Is effective in inventory control				
37	Is rendered ineffective by the collusion between management, accountant and auditors				
38	Occasionally suffers ICT(IT) failures				





## **APPENDIX 2**

### **INTERVIEW GUIDE FOR MANAGEMENT AND ACCOUNTANT**

KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY, KUMASI

INSTITUTE OF DISTANCE LEARNING  
TOPIC

AN ASSESSMENT OF THE EFFECTIVENESS OF THE INTERNAL CONTROL SYSTEMS AT  
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This is part of an MBA research project looking at the effectiveness of internal control system in mitigating fraud and embezzlement at PBC LTD. Thank you for your cooperation

**SAMUEL ODURO TEMENG**

Research Student

Department of accounting and finance KNUST School  
of Business

KNUST, Kumasi Contact:

Mobile: + August, 2019

### **INTERVIEW QUESTIONS**

1. Do you think PBC Ltd has sufficient Internal Control Measures in Place?
2. If there are from question 1 above, how effective are the Internal Control Measures put in place at PBC Ltd?
3. Is there any reason to suggest that the Internal Control Measures in place are beneficial?
4. What some of the challenges do you encounter in the implementation of the Internal Control Measures?

# AN ASSESSMENT OF THE EFFECTIVENESS OF THE INTERNAL CONTROL SYSTEMS AT PBC LIMITED IN THE WESTERN NORTH REGION OF GHANA

*by Samuel Oduro Temeng*

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