

**EVALUATION OF FACTORS AFFECTING INTERNAL AUDIT
EFFECTIVENESS IN KIRINYAGA COUNTY GOVERNMENT**

KABOI MILTON NYAGA

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DECLARATION

This thesis is my original work and has not been presented to any other university or institution for award of a degree.

Signature: _____

Date _____

Student: Kaboi Milton Nyaga

B211-02-0085-2015

Approval

This thesis has been submitted for defense with our approval as the student University supervisors.

Signature: _____

Date _____

Dr. David Kiragu (PhD)

Department of Accounting and Finance

Dedan Kimathi University of Technology, Kenya

Signature: _____

Date _____

Dr. Riro G. K. (PhD)

Department of Accounting and Finance

Dedan Kimathi University of Technology, Kenya

DEDICATION

To my beloved parents, wife and children for their unwavering support and encouragement in life and in my studies. I wish them God's Blessings.

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ABBREVIATIONS AND ACRONYMS

| | |
|----------------|--|
| ACCA | - Association of Chartered Certified Accountants |
| CAE | - Chief Audit Executive |
| CIIA | - Chartered Institute of Internal Auditors |
| CPA | - Certified Public Accountants |
| CIA | - Certificate in Auditing |
| FIFA | - Fédération International Football Association |
| ICMA | - Institute of Cost and Management Accounting |
| IA | - Internal Audit |
| IAF | - Internal Audit Function |
| IIA | - Institute of Internal Auditors |
| IIARF | - Institute of Internal Auditors Research Foundation |
| ICT | - Information Communication Technology |
| IMF | - International Monetary Fund |
| INTOSAI | - International Organisation of Supreme Audit Institutions |
| ISPPIA | - International Standards for the Professional Practice of Internal Auditing |
| OECD | - Organisation for Economic Cooperation and Development |
| PFM | - Public Financial Management |
| SPSS | - Statistical Package for Social Sciences |
| TI | - Transparency International |
| UN | - United Nations |
| UNDP | - United Nations Development Programme |
| VIF | - Variance Inflation Factor |

ABSTRACT

Internal audit, as a function is supposed to provide reasonable assurance of the existence of efficient and effective systems and procedures that support achievement of devolved governments' objectives worldwide. The Kirinyaga County Government in Kenya is one such affected of County governments which have had qualified audit reports since the year 2013 indicating breakdown in internal audit effectiveness. This study therefore sought to evaluate the factors that affect internal audit effectiveness in Kirinyaga County Government. The study was guided by three objectives; to assess the relationship between internal audit work environment, internal audit independence, monitoring of internal audit and internal audit effectiveness in the County. Agency, insurance, contingency and leading credibility theories were used to establish rationale for internal auditing. The study used descriptive research design. The target population was all the forty six (46) employees of Kirinyaga County Directorate of Internal Audit. Primary data was collected using self-administered questionnaire. Secondary data was collected from reports of the Auditor General, newspapers, The County Strategic Plan, Reports of the County Governments Transition Authority and literature review in relevant journals, magazines and other publications. A pilot study was conducted to enhance the validity and reliability of the data collection instrument. Cronbach alpha coefficient of 0.7 was used to test the reliability of the data collection instrument. Data for analysis was obtained from 41 respondents out of the targeted 46 achieving 89.1% response rate. Results were presented using frequency distribution tables while bi-variate linear regression and multiple linear regressions were used to study the relationship between internal audit effectiveness and the independent variables. The results indicated that internal audit work environment, independence and monitoring of internal audit had positive and significant effect on internal audit effectiveness in the County Government when considered singly and when combined. The results further indicated that internal audit function is not adequately supervised by audit committee and internal audit plans are not regularly reviewed. The study recommends that the County Audit Committee should adequately supervise and regularly appraise internal audit plans and activities and enhance internal audit work environment, independence and monitoring of internal audits for effectiveness. Future research could focus on evaluating the factors that affect internal audit effectiveness in the national government.

CHAPTER ONE

INTRODUCTION

1.1 Background of the study

The recent global accounting scandals, economic meltdown, increasing organisational complexities, awareness of and demand for transparency and accountability have resulted in expanding interest in internal audit effectiveness and factors which affect it. Effective internal auditing leads to sound financial management, transparency and accountability in organisations ensuring protection of organisational assets and value addition to organisational goal achievement from cost reduction and better resource usage (Sakour, & Laila, 2015). Alongside this development, the first two decades of the twenty first century have witnessed unabated political, regulatory, economic and technological changes impacting on operational, tactical and strategic capabilities of organisations (George, Theofanis & konstantinos, 2016). In this regard, no organisation today operate in a comfort zone of the routine and rule of thumb, but in a highly dynamic and turbulent operational, tactical and strategic environment.

The results of these changes have been increased organisational risks, possibilities of fraud and financial instability. In this environment, implementation of an effective internal auditing system is paramount to able to continuously evaluate, provide assurance and advice to managers on internal control, risk management and corporate governance (Tsipouridou & Spathis, 2014; Vinary & Skaerbaek, 2014). Implementation of an effective internal auditing function requires thorough knowledge among managers of the factors that affect that effectiveness otherwise it will be deficient Endaya & Hanefah, (2013).

In the absence of effective internal auditing, poor internal control, poor risk management, bad governance, lack of transparency and accountability could become easily entrenched in an organisation (Shamshuddin & Bharathii , 2014, IARF, 2014)). This would provide individuals with fraudulent, corrupt and exploitative inclinations to take advantage of organisations at

stakeholders expense thus the need for internal auditing effectiveness and sound knowledge of factors which enhance or impend it (Udeh and Nwadiolor, 2016).

The importance of internal auditing and the factors which affect it in Kenya's public sector was clearly recognised and established by the enactment of the Public Financial Management Act, 2012. This law require each county government in Kenya to establish effective internal audit arrangement and an audit committee to oversight it. The objective is to have efficient, effective, transparent and accountable financial and public resource management (Kenya Law Reports, 2012).

In addition to above, unmet income and expenditure budgets in organisations, financial performance warnings and restatement of financial statements have been on the increase. This has necessitated more efficient and effective managerial intervention mechanisms (Klynveld, Peat Marwick, Goerdeler, KPMG, 2007). Effective internal auditing is foremost among available choices. The need for internal auditing effectiveness and knowledge of factors that affect it therefore becomes paramount in such environment (Vinary & Skaerbaek, 2014; Tsipouridou & Spathis, 2014). However, despite the growing and expanding role and profile of internal auditing, factors which affect its effectiveness have attracted little attention from scholars in both public sector (Cohen and Sayag, (2010): Shamshuddin, & Bharathii, 2014). This is particularly so in developing countries' local governments (Alzeban & Gwilliam, 2014) in Africa. Kenyas' devolved government system is no exception (Ariga, & Gathogo, 2016).

While internal auditing is playing its modern value adding role in developed countries, the pace of its uptake in developing countries has been slow and in some cases nonexistent (Dellai & Omri, 2016). This has resulted in lack of interest and research focus on factors which affect its effectiveness in these countries. The consequence has been limited contribution of the function to the much desired asset preservation and value addition to achievement of organisational objectives in these countries (Sakour & Laila, 2015). In light of the above, Arena & Azzone, (2010); Chaveerug, (2011); Sarens & Abdolmohammadi, 2011; Salvioni, Bosetti & Almici, 2013;) have called for future research focusing on factors which affect internal audit effectiveness in organisations in order to enhance the contribution of internal audit to

organisational goal achievement. In this regard, very few studies have been conducted on factors affecting internal audit effectiveness in developing countries (Mihret, James & Joseph, 2010). It is against this and other evidence below that this study evaluated factors that affect internal audit effectiveness in the Kirinyaga County Government in Kenya.

Unegbu and Kida, (2011) observes that need for knowledge on factors which affect effectiveness of internal audit in public sector in African is acute and indispensable today. The effectiveness of the function affects performance and improvement in public sector productivity and public service delivery. However, according to Bota and Palfi, (2009); IIA, (2010) and Spertus, Eagle, Krumholz, Normand, (2010), few empirical studies exist on factors which affect internal audit. Consequently, they have not been adequately identified, evaluated, documented, appreciated and therefore more research is necessary in this area. Badara & Saidain, (2013) called for more research on internal audit effectiveness in the public sector and more so in devolved government level.

The Financial Reporting Council, United Kingdom, (2014) observes that risk management, corporate governance, internal control and systems are most effective when implemented in conjunction with checks and balances inherent in internal auditing. The Chartered Institute of Internal Auditors, (2015) and Ackermann, (2015) adds that an effective internal audit provides oversight, insight and foresight on internal control, corporate governance and risk management activities of an organisation. This new mandate has expanded the operational, tactical, strategic role and opportunities for internal audit in organisations today. The implication has been a paradigm shift of internal auditing from being merely a compliance focused service, to a broader management focused service to organisations (Feizizadeh, 2012).

According to Alzeban and Gwilliam, (2012) the impact and benefits of the expanded role and growth of internal auditing are, however, yet to be fully appreciated, embraced and enjoyed in the developing countries' public sector. Kenya is no exception. Al-Matari, Al-Swidi & Fadzil, 2014; Li, Park & Bao, 2014; Sarens & Abdolmohammadi, 2011), observes that in these countries, internal auditing as a managerial function is either in its infancy or nonexistent as an academic agenda. Furthermore, where it exist in these countries, it is starved of resources and its

visibility is poor (Barac, Coetzee, & Staden, 2016). Consequently, factors that affect its effectiveness are therefore yet to be fully identified, evaluated, understood and their impact appreciated and appropriately managed in the developing countries and their devolved governments.

The Institute of Internal Auditors Research Foundation, IIARF, (2011) defines internal auditing as an independent, objective assurance and consulting activity, designed to add value and improve an organisation's operations. Its purpose is to assist organizations achieve set objectives by providing an orderly, disciplined method of assessing and improving the effectiveness of internal control, governance and risk management processes. Internal auditing is therefore a key pillar of modern management which makes it important that organisational executives appreciate the significance of factors that affect its effectiveness. Pizzini, Lin & Ziegenfuss, (2015) adds that IA provides organisational executives with an unbiased view of the appropriateness organisational risk management, governance and control mechanisms. It also acts as a catalyst and foundation for a strong risk and compliance culture in organisations. In this environment a clear appreciation and management of the factors that affect internal audit effectiveness enables the function to fulfil its mission.

According to Kaplan Financial Knowledge Bank, (2016) the role of internal audit in an organisation is as summarised below:

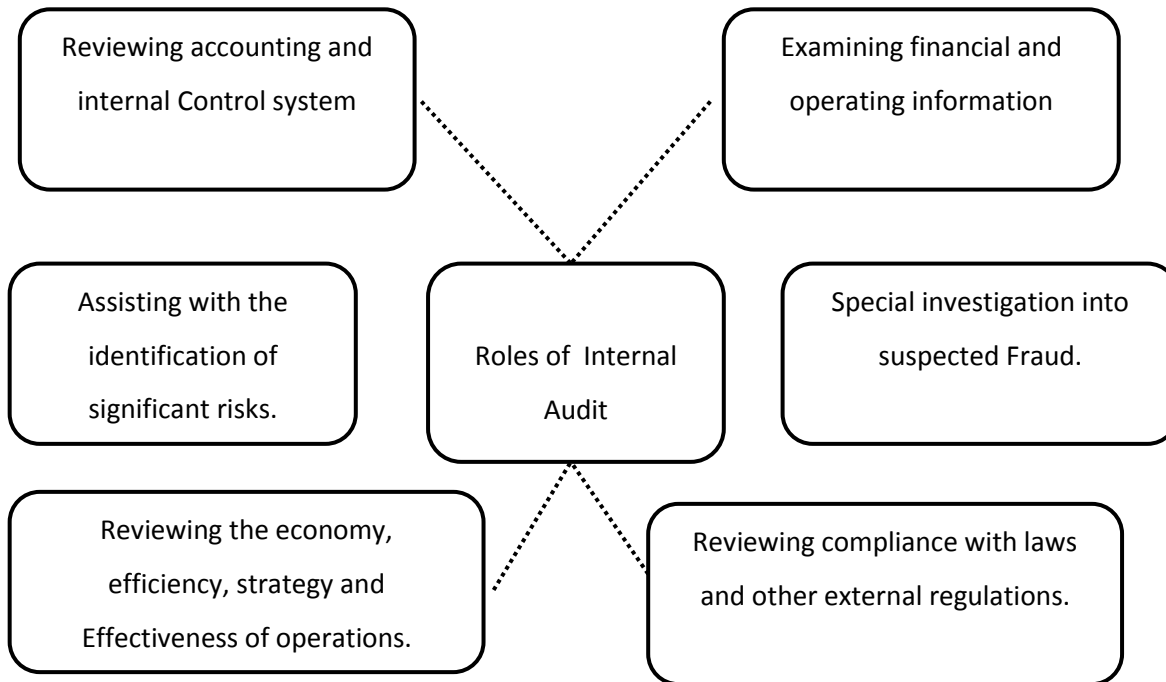


Figure 1.1: Role of internal Audit: Source: Kaplan Financial Knowledge Bank, 2016.

On basis of the above roles of internal audit, the need for knowledge of factors affecting its effectiveness becomes pervasive and paramount and a key area of concern among managers, scholars, investing public and regulatory authorities. The roles would be achieved best only if organisational managers identify, appreciate and appropriately manage factors that drive internal audit effectiveness in their organisations (Institute of Internal Auditors, 2012).

Maruszewska & Biary, (2013) defined internal audit effectiveness as a yardstick or measure used to check and confirm whether the goals of internal auditing activity have been accomplished. It is therefore of significance to all stakeholders in of internal auditing. Arena & Azzone, (2009) defined effectiveness of internal audit as the the ability to obtain the target results or the achievement of auditing objectives and goals. Earlier Mihret & Yismaw, (2007) had argued that internal audit effectiveness is the degree to which internal auditors meet their target objectives or intended outcome. However, Dellai et al, (2016) argued that internal audit effectiveness is a tricky concept as it has been little researched on in the accounting and auditing literature. It means the achievement of audit targets and therefore the growing interest in the factors that affect it. It is preservation of assets and value addition to organisational goal achievement (Gros,

Koch and Walleck, (2016). In this respect the COSO Integrated Internal Control Framework and IIA Standards, (2017) identify internal audit work environment, independence and monitoring among key factors for IA effectiveness thus the research focus

In spite of the above demonstrated evidence on the importance of internal audit effectiveness, previous studies (Li, Park & Bao, 2014; Al-Matari, Al-Swidi & Fadzil, 2014) indicate that the function is not yet entrenched as a contemporary risk, governance and control mechanism in developing countries relative to developed countries. Organisational executives attitude on the function in these countries is still, to say the least, lacklustre. Africa is no exception. In this regard, Barac, Coetzee & Van Staden, (2016) observed that only very limited research has been carried out to evaluate factors which affect its effectiveness in these countries.

1.2 Statement of the Problem

The core mandate of internal audit as a function is to protect assets and add value to organisational goal achievement. It achieves this by independently evaluating and providing assurance and advice to managers on efficiency and effectiveness of internal control, risk management and governance processes. By reviewing organisational operations, systems and strategies, internal auditors identify deficiencies and opportunities for improvements for optimal organisational productivity. Internal auditing as a function is therefore today at the heart of internal control, risk management and governance systems in organisations positioning themselves for excellence.

However, despite the growing profile and expanding operational, tactical and strategic coverage of internal audit as a function, factors which affect its effectiveness in Kirinyaga County Government have not been evaluated and are therefore not appropriately managed. Ignorance about these factors and therefore lack of their appropriate management has rendered the County Directorate of Internal Audit ineffective and unable to optimally execute its core mandate of protecting public resources and adding value to county goal achievement. The consequence has been public resource misappropriation, waste, fraud, outright theft, misallocation, poor planning and disregard of public interest by county elected and appointed officials. This has resulted in suboptimal service delivery to county stakeholders. On basis of the above, Kirinyaga County

Government has had incessant qualified statutory audit reports since inception in 2013 on grounds of poor internal control, poor risk management and poor governance.

A qualified or negative statutory audit report is indicative of breakdown of, or dysfunctional internal auditing in an organisation. Management evaluation and appropriate handling of factors which affect internal audit effectiveness in the County Government could have ensured its optimal performance. It should have forestalled loss of public resources, poor service delivery and loss of reputation from negative or qualified statutory audit reports. In this respect, the COSO, IPPF and available literature models of internal control identify internal audit work environment, internal audit independence and monitoring of internal audit as key factors which affect or influence internal audit effectiveness. However, no study exists in available auditing literature evaluating factors which affect internal audit effectiveness in Kirinyaga county Government in Kenya. This study set out to fill this gap.

1.3 Purpose of the Study

The purpose of this study was to evaluate the factors that affect internal audit effectiveness in the Kirinyaga County Government.

1.4 Research Objectives

1.4.1 Main Objective

The main objective of the study was to evaluate the factors that affect internal audit effectiveness in the Kirinyaga County Government.

1.4.2 Specific Research Objectives

The study was guided by the following specific objectives:

- i. To evaluate the effects of internal audit work environment on internal audit effectiveness in Kirinyaga County Government
- ii. To assess the effects of internal audit independence on internal audit effectiveness in Kirinyaga County Government.
- iii. To assess the effects of monitoring of internal audit on internal audit effectiveness in Kirinyaga County Government.

1.5 Research Questions

- i. How does internal audit work environment affect internal audit effectiveness in the Kirinyaga County Government?
- ii. How does internal audit independence affect internal audit effectiveness in Kirinyaga County Government?
- iii. How does monitoring of internal audit performance affect internal audit effectiveness in Kirinyaga County Government?

1.6 Significance of the Study

It was expected that the results of this study will leverage the effectiveness of Kirinyaga County Directorate of Internal Audit by enhancing its vigilance on internal control, risk management and corporate governance capabilities. The results of the study were expected to provide valuable information to the Kirinyaga County Government on factors which affect their internal audit effectiveness. This knowledge would lead to improved internal audit work environment, internal audit independence and monitoring of internal auditing for higher objective achievement in the County. The study results would inform the County Government on the factors to work on in relation to internal audit effectiveness for the County to safeguard public resources and avoid future adverse external audit reports. The results of the study are also expected to assist the County Government to comply with Section 155 of Public Financial Management Act, (2012) requirement for establishment of efficient and effective internal audit arrangements and audit committee. In light of these legal demands, it is imperative that the Kirinyaga County Government, be aware of the factors which affect their internal audit effectiveness. The study also contributes to improved public resource management and protection by elected leaders and appointed officials in the County.

The research results would be of significance to policy makers in public sector internal audit effectiveness improvement strategy and in continuously monitoring and appraising the function. The study results would enable the County and public entity executives to take corrective action on deficient internal audit function by knowing factors that affect its effectiveness and appropriately managing them. The researcher expects to influence executives in the Kirinyaga County Government and other organisations to appreciate the consulting role of internal audit on

its effectiveness by providing information on the factors that influence it. It could also assist the internal audit function in both public and the private sector to understand their positions better so that necessary adjustments could be made to enhance their contribution to greater public interest.

The research results will provide vital support to multilateral and bilateral donor agencies such as the World Bank, UN agencies like UNDP and others who support county governments in Kenya financially and in public financial management. The study is also significant to scholars and researchers as it contributes to the extant literature on factors affecting internal audit effectiveness in county governments in Kenya.

1.7 Scope of the Study

The study was carried out in the Kirinyaga County Government Directorate of Internal Audit in the Republic of Kenya. The purpose was to evaluate factors that affect internal audit effectiveness in the county. The respondents comprised forty one of the targeted forty six employees of the directorate and the study covered the period 2013 to 2016. Data was collected using Likert scale based closed ended questionnaire and analysed using the Statistical Package for Social Sciences Version 20. The study focused on and evaluated the effects of three predictor variables, internal audit work environment, internal audit independence and monitoring of internal audit on the functions' effectiveness in the county. The variables selection was informed by the COSO, IPPF models of internal control and literature review. The rationale for implementation of internal audit was informed by agency, information, contingency and lending credibility theories.

1.8 Limitations of the Study

In the first instance not all targeted respondents responded to the data collection instrument. Secondly, the study was carried out only in Kirinyaga County Government and only on the staff in the County Directorate of Internal Audit as they were considered the most knowledgeable in the subject matter. The evaluation of factors evaluation affect internal audit effectiveness were from the internal side of the County only and this has inherent limitations in terms of accuracy and quantity of data provided.

1.9 Assumptions of the Study

The assumptions underlying the study included; the target population provided accurate responses for the study; the data collection instrument was reasonably reliable, valid and measured the desired constructs; the study respondents answered questions correctly and truthfully; Kirinyaga County Government would find the recommendations of the study valuable and implement them.

1.10 Definition of Terms

Audit:-An audit is a systematic, independent and documented process for obtaining audit evidence (records, statements of fact or other information which are relevant and verifiable) and evaluating it objectively to determine the extent to which the audit criteria (set of policies, rules, procedures or requirements) are fulfilled (ISO 19011:2011).

Internal Audit: -Internal auditing is an independent, objective assurance and consulting activity designed to add value and enhance organizational performance. It assists an organisation achieves its objectives by providing a systematic, disciplined approach to evaluate and boost the effectiveness of risk management, control and governance processes (The Institute of Internal Auditors Research Foundation-International Professional Practices Framework (IPPF), (2011)).

County government: - Is a second tier constitutional administrative unit in Kenya comprising county executive and a county assembly. (The Constitution of Kenya, 2010)

Audit Committee: - This refers to a committee of an entity board whose role typically focuses on robust financial reporting and on measures used to manage financial and business risk and for compliance with regulatory, ethical, and legal frameworks (Millichamp & Taylor, 2012).

Public Finance: - is a branch of economics that deals with the central and local government revenues, expenditure and their stewardship (Mudida, 2011).

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter reviewed existing literature on factors which affect internal audit effectiveness in public sector and private sector. The chapter expound the theories in support of use of internal auditing, reviewed empirical literature, critiqued the empirical studies, identified research gaps and developed conceptual and operational frameworks on internal audit effectiveness.

2.2 Theoretical Literature Review

The study used agency, information, contingency and lending credibility theories to explain the rationale of internal auditing, its value to society and importance of its effectiveness.

2.2.1 Agency Theory

This theory foremost assumes existence of a two party relationship in an organisation, owners of capital or shareholders and their agents, the directors as stewards (Yalew, (2015). The theory assumes information asymmetry and that the less-informed party, the shareholders, have a need for information for monitoring the conduct of the better-informed directors or managers. The theory assumes that the directors have considerable advantage over shareholders. The former are possessive of more and better information about the performance and value of an organisation. This situation is commonly a source of conflict of interest between the shareholders and directors as their agents.

The agency model suggests that as a result of probability of information asymmetry and self-interest, principals lack reasons to trust their agents. Over the years, the principals have chosen auditing to resolve their concerns and to align the interests of agents with theirs. They expect auditing to reduce the scope for information asymmetry and opportunistic behaviour by agents (The Institute of chartered Accountants in England and Wales, 2012). Auditing has therefore been one source of information to the principals, providing them with independent assurance about performance and value of their organisation (Volosin, 2007).

The theory champions resolving conflicts in agency relationships including between shareholders as principals and their agents, directors such as local government executives. The theory addresses two problems. The first is the conflict of interest between a principal and his agent, whereby the shareholders are unable to trust and verify the actions of his directors. The second is the difference between shareholders and directors appetite for risk taking. This variance in risk tolerance means each may take variant decisions to the detriment of the other.

This situation whereby principals lack reasons to trust their agents because of information asymmetry and conflict of interest is critical to understanding the need for auditing as a solution to agency problem in corporate bodies (The Association Chartered Accountants (ACCA), (2015). The theory, in conjunction with other intervention techniques like internal auditing, financial reporting and external auditing, helps to maintain cost-efficient relationships between resource owners and managers. It premises that, managers will not always act in the best interest of the resource owners hence the need for an independent check by an auditor on the work of the former. The agency theory has costs implications but helps to explain the need for existence of internal audit in organisations. It applies to explanation of the size and scope of internal audit activities, such as financial versus operational auditing. The internal audit function operated by the organisational managers must therefore be effective to serve its add value proposition in organisations.

2.2.2 The Information Theory

Soltani, 2007 observed that investors and organisational managers place dependence on internal auditors to provide information useful in identifying and assessing risk. This is the case even if the audit opinion does nothing other than confirm the investor's expectations and beliefs about their decisions. Volosin, (2007) agrees and argues that this theory allocates an important duty to the auditor of availing information that adds credibility to the financial statements. He observes that in a situation of uncertainty, the need for internal auditing has several possible reasons. This includes the typical belief that an audit enhances the credibility and reliability of data in financial statements and provides assurance to users for their decisions. The need for auditing exist when the auditor acts as an assurance that managers have produced reliable and credible information

for decision making of users. Elder, Beasley, & Arens, (2010) agrees and states that the method mostly used for obtaining reliable information or information risk reduction by users is to have an audit performed independently . An effective internal audit would therefore ensure credibility of information.

2.2.3 Contingency Theory

The goal of an audit is to check the appropriateness of an entity's policies, information, procedures and practices to give confidence for business decisions by auditees. In Kenya, Section 155, of the Public Financial Management, (PFM), Act, (2012) requires that each county government establish internal audit arrangements and an audit committee. In practice, irrespective of the audit subject, a wide range of contingent or circumstantial factors (organisational, professional, legal or non-legal; controllable or uncontrollable) always affect an organisations final internal audit results Badara & Saidin (2014). This is because audit circumstances differ and no two organisations are identical in context. The contingency theory enables an auditor to take these factors into account during the audit process including in the .Kirinyaga County Government.

The theory asserts that there is no fixed or customary method by which organisations can directed, controlled or audited,. These organisational functions, the theory says, depend on various external and internal factors at particular times and their impact is never identical or constant. Consequently, the implementation of internal audit is affected by these environmental factors. This justifies application of contingency theory in internal audits as they are implemented in differing audit circumstances. This is in recognition that audit activities and their results are dependent on variable contingent factors.

In addition, an audit activity in practice faces many contingencies in planning, execution and reporting dynamics including changes in business lines, unexpected employee changes. This is in addition to changes in legislation and changes in audit team membership such as ad hoc teams, changing available technology, organisation systems, and timelines. Audit activities may therefore be loosely structured, highly dynamic and should take changing circumstances into consideration to get the work completed. The theory also apply to an audit team's structure and

composition because audit partners use a dynamic mix of structure and contingency to get the output rolling out expeditiously. To be effective an internal audit function should therefore demonstrate appreciation and use of the contingency concept.

2.2.4 Lending Credibility Theory

A positive audit report is the most common method used by owners and other stakeholders to gain insight into the credibility of financial statements presented by corporate directors in order to minimise the probability of information asymmetry (Salehih, 2010, Volosin, (2007) observed that audited financial statements enhance stakeholders credibility and confidence in management's stewardship. The business world comprises diverse stakeholders affected by, or who participate in, the financial reporting requirements of the regulatory agencies. These interest groups include organisational owners, management, employees, government, creditors, and others. The users and therefore recipients of the audited financial statements are the owners, comprising investors with comparatively small stake and large institutional investors such as insurance companies, social security institutions and banks. Their investment or divestiture decisions are normally anchored on the audited financial statements and the due diligence of managers who have an obligation to act in the best interest of their principals.

An internal auditor is appointed by the entity managers as clients, works and presents his opinion to them. The main purpose of financial statements audit is for the auditor to enhance credibility faith on the effectiveness of risk management, internal control, governance and strategic objectives. This builds confidence in the soundness of management performance. It also helps to reduce the probability of the fraudulent practice of creative accounting intended to package an entity in a more positive picture than the actual.

2.3 Empirical Literature Review

The fast paced global economic changes, technological advancement, expanding and complex regulatory environment, corporate scandals, increased management discretion, competitive pressures and the recent global financial crisis have elevated global interest in factors of internal audit effectiveness (Bota, 2009, Ebissa, 2015, Dellai et al, 2016, Dibia, 2016, Shamsuddin et al, 2016). These changes have in recent years expanded the need for knowledge on factors that affect internal audit effectiveness to enhance added value creation in organisations.

Indeed, the above situation has ignited raging debate as to whether internal auditing is effectively being used in checking the efficient and effective functioning of risk management, internal control, and corporate governance in organisations (Alzeban & Sawan, 2013). These changes have led to demands for a paradigm shift for internal auditing from being merely a compliance testing tool, to a modern management decision support and advisory instrument (Deloitte, 2011, IIA, 2012, Soh & Bennie, 2011). It should embrace an expanded role and opportunities in operational, tactical and strategic activities to effectively serve its added value proposition in organisations. The function is therefore gaining appreciation in organisations, albeit gradually in developing countries, as an integral part of modern organizational structure on basis of its value adding service to internal control, risk management and corporate governance systems (Cohen et al 2010, Ebissa, 2015). However, the existing auditing literature has few studies done on the topic. In this regard this study was undertaken to enhance literature on the factors which affect internal audit effectiveness the Kirinyaga County Government and other relevant situations.

Despite its expanding role and growing value adding profile in developed countries, internal audit function appear not to have achieved its intended objectives in Kenya's county governments and more so that of Kirinyaga. This is demonstrated by the numerous qualified external audit reports by Office of the Auditor General, Kenya, (2016), for among others, the County Governments of Kirinyaga, Kakamega, Bungoma, Mombasa and Nairobi. In addition, the recent corporate failure of private and publicly supported entities in Kenya such as Uchumi Supermarkets, Mumias Sugar Company, Chase Bank, Triton petroleum and others (Okoth, 2016), have cast serious doubt on internal auditing effectiveness in both private and public sectors in Kenya.

In light of the above, internal auditing, as a function in Kenya, has not won the appreciation of the investing public, managers, regulatory authorities and the public as a relevant, reliable and indispensable partner towards goal achievement. This casts serious doubts on function's contribution and effectiveness, (Ebissa, 2015) thus the importance of evaluating the factors that affect its effectiveness.

Despite its recognised value adding role and contribution to risk management, internal control and corporate governance, decisive studies on factors for successful internal audit are few and spaced especially in public sector (Shamsuddin and Barathii, 2014). Furthermore, fewer studies exist on the subject relative to external audit. Only a handful of researchers have investigated the aspect in developing countries (Mihret and Yismaw, 2007-Ethiopia; Ahmad et al., 2009-Malaysia; Alzeban and Gwilliam 2014-Saudi Arabia; Sakour and Laila 2015)- Lybia). The purpose of this study was therefore to evaluate the factors that affect internal audit effectiveness in the Kirinyaga County Government- Kenya to enrich the scant existing literature on the subject.

While internal audit is a legal requirement for county governments in Kenya, its effectiveness in the Kirinyaga County Government appears to be challenged given the qualified external audit reports since 2013 by the audit general. These reports implicitly indicate existence of factors that hinder internal audit effectiveness in the County as its goal should be to contribute to effective management leading to favourable external audit reports. In this regard, Mihret and Yismaw, (2007), Arena and Azzone, (2009), Cohen and Sayag, (2010) in their studies on internal audit in corporate governance systems reveal that internal auditors are facing many challenges that diminish their effectiveness. They propose that future research attention on determinants of internal auditor's effectiveness. Accordingly, the Committee of Sponsoring Organisations of the Treadway Commission, (COSO), Integrated Internal Control Framework, (2013) and the Institute of Internal Auditors, (IIA) International Standards for Professional Practice in Internal Auditing, (IIA, ISPPIA, 2017), identify internal audit work environment, internal audit independence and sufficient monitoring of its activities as among the key drivers of effectiveness internal audit in organisations.

This study therefore add to understanding determinants of internal audit effectiveness by empirically testing and reviewing extant literature on the relationship of internal audit working environment, internal audit independence and monitoring of internal audit and its effectiveness in the Kirinyaga County Government.

2.3.1 Internal Audit Work Environment

This refers to the organisational climate or context in which internal audit as an organisational function operates. It comprises elements such as management support, internal audit charter, budgetary allocation, ISPPIA Standards, ethical values, technology, audit committee oversight, organisational status, regulatory context and risk exposure (IIA & INTOSAI, 2017) . Work environment or organisational climate has profound impact on the performance and productivity of employees including internal auditors. In organisations where management appreciates the importance of sound control environment and the mechanisms that evaluate and report on its effectiveness, internal auditors work seamlessly, with evidence gathering and their communication made easy (Barisic & Tusek, 2016).It is therefore necessary that management should set right and unambiguous tone at the top and across the organisation, to ensure acceptance of and support of internal audit organisation wide (Chartered Institute of Internal Auditors, 2017). This has impacts on the benefits both obtain from this relationship.

The Institute of Internal Auditors, (2016) recognise observance of the International Standards for the Professional Practice of Internal Auditing (ISPPIA) as crucial work environment element for achievement of internal audit effectiveness. While organisational variations may impact on the practice of internal auditing in different environments, observance of ISPPIA is essential in meeting the obligations the internal audit function. The standards contribute to internal audit effectiveness by: providing auditors with the mandatory practice of the International Professional Practices Framework (IPPF), identifying for auditors a wide range of value-adding internal auditing activities, providing yardsticks for the evaluation of internal audit performance and enabling best practices in organisational processes and operations. In conjunction ISPPIA and the Code of Ethics encompass all the mandatory requirement of the International Professional Practices Framework for effective internal auditing. Non conformance with ISPPIA results in deficient and ineffective internal auditing.

Mihret and Yismaw, (2007) posit that management support and quality control of internal audit are two important work environment elements that impact on internal audit effectiveness. Insufficient management support is manifested in management failure to respond to internal

audit findings, recommendations and insufficient allocation of resources weakening the functions capabilities in many organisations.

Morgan, (2009) observes that organizations view internal auditor's as a tool for improving their effectiveness in resource management but the function often operate under poor working conditions. These include poor remuneration, obsolete and inadequate office equipment, diminishing budgetary allocation, unclear career paths, little or non-existent investment in training and development and lack of appropriate auditing technology. Cattrysse, (2014) agrees and identifies poor working conditions as a major challenge that creates unfavourable working environment that limits internal audit effectiveness. Absence of enabling internal audit work environment in Kirinyaga County was therefore a matter of interest for this study.

Krishnan and Visvanathan, (2013) identify poor reporting structures as a major audit environment challenge that negatively impact on internal audit effectiveness. Their study reveals lack of responsibilities over effective internal audit reporting and over the reporting of fraud in organisations. In some cases, they claim, internal auditors do not report to appropriately senior authorities who make their work not be taken seriously; this diminishes their effectiveness.

Goodwin, (2014) cites management hostility as a negative influence on internal audit effectiveness resulting in denial of resources to the function. This is prompted by organisational managers viewing internal audit as a necessary evil probably imposed through legislative demand or on insistence of external audit recommendations. His study also found that seventy two per cent,(72%) of internal auditors were lacked independence and management consent to probe decisions by top the executives. He cites instances whereby executives intimidated internal audit executives to get sneak preview of audit reports before presentation to audit committees.

Dittenhofer, (2011) identified four work environment attributes which he argues make an internal audit activity more useful, efficient and effective and which could improve management perception of its value adding capabilities. These include: adequate interaction with the organisation, structural status, and expansion of operational, tactical and strategic coverage, methods and use of information technology. Paape, (2011) cited professional certification, ,

experience, internal audit strategy, subordination to the audit committee and operating responsibilities as necessities for internal audit effectiveness.

On their part, Arena and Azzone, (2009) links internal audit effectiveness to activities and processes performed, auditor competencies, sufficiency of resource allocation, and processes performed. Gupta, Parveen, Duane, Kennedy, & Weaver, (2009) identified assessment of inherent organisational complexity, knowledge of client needs, positive rapport with client, existence of a vision and mission, a process view of the IAF, implementation of an internal audit business model, strategic planning and using information technology as enablers of internal audit work environment and effectiveness. Roth, (2014) added matching of internal audit objectives to organisational objectives, risk assessment of the audit universe and extensive staff expertise as significant attributes for internal audit effectiveness.

From their work on IAF value adding and effectiveness attributes, Cooper, Barry J., Leung, Philomena, & Wong, Grace 2006, citing global best practices for internal auditing, identified: using quality control, understanding customers, using internal audit as a service to management, professional satisfied staff complement, focusing on the business and its controls, embedding consultancy to internal auditing, communication with audit committee, use of information technology and a. Dusoruth, (2016) found that to cultivate effectiveness, internal audit must implement, strategic discussions with the different members of organisational management to lead to a synergy with the various departments. Such meetings should cover: appropriateness of governance framework, opinions and expert views on planned products and services, process reviews, championing and educating management about enterprise risk management and other governance practices before they are implemented. Pro-activeness, creativity, innovation rather than reactions is the key thing.

The International Standard for the Professional Practice of Internal Auditing, 1000, (2017) require design and implementation of a dynamic internal audit charter for internal audit effectiveness. The charter should formally define the mission, authority, and duties of internal audit activity for effectiveness. The charter must conform to the core principles of IPPF, mission of IA in the organisation, Code of Ethics and the definition of IA. It must be a formalised document identifying the purpose, status, reporting channels, authority, and access to records,

structure, physical properties and duties of internal audit. The charter should be periodically reviewed by the chief audit executive and presented to senior manager and the board for authorisation.

Badara et al,(2013), George, et al, (2015) identified control environment as affecting the effectiveness of every aspect of an organisation including its internal audit. It reflects the fundamental thinking and policies of organisational management towards the significance of internal audit in an economic unit. It is the basis for the other components of internal control (Sudsomboon & Ussahawanitchakit, 2009). It targets reduction of irregularities, fraudulent and creative accounting activities within organisations (Amudo & Inanga, 2009). Providing of a proper control environment for a local government is therefore essential to the effectiveness of their internal audit operations of service delivery to the public.

Rudhania, Vokshib, Hashani, ((2017) observes that internal auditors fail to accomplish their desired effectiveness due to lack of management support, inadequate resources and poor relationships in the organization. These are the ingredients of work environment. In view of the foregoing literature on importance of work environment to internal audit effectiveness, the study evaluated the relationship between the two variables in the Kirinyaga County Government. The internal audit work environment was labelled X_1 in the linear regression model used in chapter four for evaluating the effects of the study variables on the effectiveness of internal audit in the county.

2.3.2 Internal Audit independence

The International Standard for the Professional Practice of Internal Auditing, 1100, (2017) requires that to be effective, internal auditing activity must be independent. Internal auditors must practice objectivity in execution of their mandate. Independence essentially means freedom from interference by audit stakeholders that could lead to auditor bias while testing, reporting and making recommendations for specific organisational improvement (Mustika, (2015). Internal auditors must therefore avoid conditions that could threaten their ability to work in an unbiased manner. The standard further calls for chief audit executive's unrestricted access to management and the board. Functional reporting should be to the audit committee or board and administrative

reporting to the chief executive officer. Annually he should confirm to the board in writing, the independence of the function.

Subramaniam and Stewart, (2010) observes that the value and credibility of auditors' work, and therefore effectiveness, is rooted in the basic assumption of independence of mind and appearance in his engagements. Kaplan Financial Knowledge Bank, (2012) supported this view and argues that auditor's independence is a major factor in internal audit effectiveness as it positions the function to work without bias and or favouritism. It is compromised where ethical threats-self-interest, self-review, familiarity, intimidation and advocacy are accommodated. This could lead to doubt of lack of bias in internal auditors opinion diminishing the worth of its work. If the function lacks independence, then, it would be unable to perform to the expectation of its stakeholders (Kadondi, 2012). Independence should therefore be practiced at the individual, engagement, functional, and organizational levels. Alzeban and Sawan, (2013) agree and identify internal auditors' independence as paramount to their effectiveness.

According to Lawrence, (2013) in countries where the role of internal audit is highly valued, functional reporting by internal audit has shifted from senior officers in organizations to audit committees' of the boards. Internal auditors assignment reports are valued, only if, internal auditor practices independence and is perceived to be independent. Warga, (2014) argued that independence enables internal auditors to operate without interference thereby providing unbiased feedback to management on how to continuously enhance effective control policies. Internal auditors will fail to achieve this objective if they lack independence. Dibia, (2016) opined that while total independence is impossible given that internal auditors are employees, a free frame of mind is essential for internal auditors in making critiques and tough recommendations without fear or favour.

MacRae & Gils, (2014) revealed that independence enable auditors to conduct work without interference by the stakeholders. This contributes to the reliability of auditors' opinion and the auditees' confidence to rely on the reported results. Independence is strongly impacted by how a CAE is appointed, possibilities of termination and has a direct impact on internal audit effectiveness. Independence prevents internal auditors from subordinating their judgment and conclusion on audit matters to that of any stakeholder. It is rooted and anchored on integrity and

objective approach to an audit. Alzeban and Sawan, (2013) posit that it may be achieved through mechanisms such as freedom of access to records, full access to employees, strict appointment and removal of CAE, internal audit budget approval only by the board and prohibition from performance of executive duties.

The IIA Code of Ethics, (IIA, 2009b) fundamental principles require internal auditors to display strict independence when collecting, analysing and communicating his opinion on his work. Internal auditor should neither participate in, nor accept anything, or conceal material facts that may distort his opinion. The IIA therefore takes a very serious view on internal auditor’s independence of mind and appearance.

Kaplan Financial Services, 2016) on their part asserts that internal audit independence is partly achieved by having an appropriate structure within which internal auditors function and also by the internal auditor observance of acceptable ethical and work standards. They also identify the inherent risk to befall an organisation if internal auditors are not independent as shown in figure 2.1 below.



Figurer 2.1: Risks from lack of independence. Source: Kaplan Financial Services, 2016.

Despite the demonstrated importance of independence in contributing to internal audit effectiveness, over the years, only scant research exist on internal audit independence in county governments in Kenya. The area is under-researched and more so in developing countries (Alzeban & Sawan, (2013), Stewart & Subramaniam, (2010)). This study therefore, among other things, evaluated the effect of independence on internal audit effectiveness in Kirinyaga County Government to enrich existing literature on the subject. Internal audit independence as a was labelled X_2 in the linear regression model used in chapter four for evaluating the effects of the study variables on the effectiveness of internal audit in the county

2.3. 4. Monitoring of internal audit effectiveness

Using fundamental research methodology, Chrisina & Chritina, (2010) found that internal auditing is gradually finding its place in organisations with added operational coverage. Consequently, continues monitoring of its performance against its responsibilities and objectives if significant for gauging its effectiveness To position the importance of internal audit appropriately, Institute of Internal Auditors, ISPPIA 1300, (2017) require the CAE to design and implement a dynamic quality assurance and improvement program covering all aspects of the activity. The program should be used to evaluate internal audit compliance with standards, ethical provisions, efficiency and effectiveness and identify improvement opportunities. IIA, ISPPIA 2500, (2017) require the chief audit executive to to monitor the disposition of results communicated to management and also monitor results of consulting engagements. Institute of Internal Auditors, ISPPIA 2500-A1 (2017) requires the CAE to establish a follow-up process to check and ensure that management decisions fully executed or that management accepts the risk of not taking action. Institute of Internal Auditors, ISPPIA 2500- C1, (2017) requires internal audit to vet results of consulting engagements to ensure value for money to client. The Organisation for Economic Cooperation and Development, (OECD), (2012) asserts that monitoring activity seeks to check progress against planned targets and trigger corrective action in case of shortfall.

Monitoring of internal audit therefore refers to obtaining feedback and taking action, if need be and improvements on performance position and deficiencies of an activity in an organisation. This ensures enhanced contribution of internal audit to organisational goal achievement. Dibia, (2016) observes that monitoring of internal audit effectiveness is essential to ensuring it provides value to an organisation economically, efficiently and with best professional practice. George et al, (2011), Badara and Saidin, (2013) support monitoring of internal audit activity in order to check the quality and performance effectiveness of the over time.

Monitoring provides confidence to management and auditors that the internal audits opinion, recommendations and reviews are reasonably determined (Theofanis et al, 2011). Amudo and Inanga, (2009) observed that monitoring ensures sound operation of internal control system and therefore internal audit as part. Monitoring the function performance indicates whether audit procedures audit policies designed and implemented by management on it, are being observed by the audit team. This provides assurance that the findings of audit assignments and other reviews are of acceptable quality.

In addition, monitoring of internal audit operations (planning, execution and conclusions) leads to effective operation of internal control system (Amudo and Inanga, 2009). It determines whether internal audit management policies and procedures are carried out effectively by functional personnel. Millichamp, (2008), suggests that monitoring of audit activity may be achieved through among other methods, peer and hot reviews. Further, IA should develop and implement a follow-up mechanism to check on effective implementation of internal audit recommendations.

The Chartered Institute of Internal Auditors, (2015) asserts that to keep the internal audit function effective, the audit committee should periodically assess the reliability of internal audit function, their results including the depth and scope of internal audit reports. This should cover occasional external assessment of the function preferably every five years. The committee should also assess the competence and objectivity of external reviewer or review team and effectively checking the adequacy and expeditious execution of corrective actions following the external quality assessment.

The Institute further states that audit committees can monitor internal audit effectiveness by confirming that the function: examines the right things; goes deep enough to find out challenges and their root causes; communicates to the audit committee expeditiously; provides credible conclusions; demonstrates independence and objectivity; offers advice or insight from evidence and experience; provides clear, concise and digestible reports to managers; achieves its set objectives; could be doing more useful work; uses its resources and tools effectively; demonstrate effective planning, evidence collection, reporting and implementation. In view of the above, this study aimed, among others, at evaluating how monitoring of internal audit affects its effectiveness in Kirinyaga County Government in Kenya. Monitoring of internal audit independence as a variable was labelled X_3 in the linear regression model used in chapter four for evaluating the effects of the study variables on the effectiveness of internal audit in the county

2.4 Critique of Literature and Research Gap

In the first instance, none of the literature available for review locally and internationally related directly to factors affecting internal audit in the Kirinyaga County Government in Kenya. A wide search of existing literature on internal audit did not yield any formalised or documented material on factors of internal audit in the County. In addition, studies carried out in Kenya touching on factors of internal audit effectiveness in local authorities were county for governments other than that of Kirinyaga (Ariga & Gathogo, 2016-Nakuru, Kiptum & Muturi, 2016- Elgeyo Marakwet). There is therefore no particular and independent study found in the reviewed literature dealing with the subject matter about the Kirinyaga County Government.

The review of empirical literature indicates that globally, only a few studies exist on factors that affect internal audit effectiveness. Literature reviewed also indicated lack of convergence among researchers on the factors affecting internal audit effectiveness. Many of the studies have contrasting findings as to the factors that influence internal audit effectiveness. While some have prioritised internal audit work environment as most critical, others prefer management support, independence, yet others single out internal audit monitoring, communication, technical competence, management support and sufficient resourcing. Secondly, majority of the cited studies were carried out in countries other than Kenya with obvious cultural and environmental diversities. Factors affecting internal audit effectiveness in each could therefore differ.

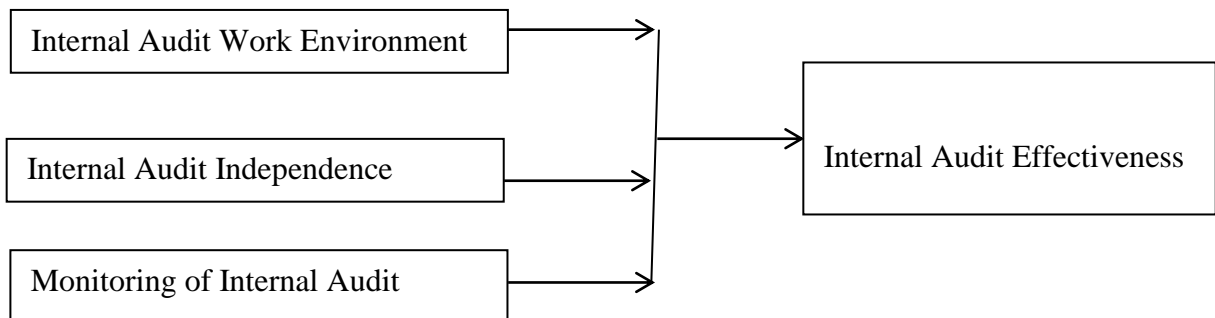
Thirdly, while a few studies ranked the identified factors in the order of priority for implementation consideration by organisations for more successful internal audit activity, majority of the studies identified the factors generally without prioritisation.

This study also attempted to establish whether the factors identified in previous studies are the only ones affecting internal audit effectiveness in the County Governments of Kirinyaga or others are also at play.

Some of the studies empirically studied were for the corporate rather than local governments such as the Kirinyaga County Government. Based on the foregoing discussions, it became necessary and even imperative for this study to be carried out specifically on factors affecting effectiveness in the Kirinyaga County Government to find out the situation obtaining there.

2.5 Conceptual Framework

This is a diagrammatic representation of the relationship between the variables under study. It shows the correlation between the independent variables and the dependent variable. This study used a three independent variables model to investigate factors of internal audit effectiveness in the Kirinyaga County Government. The variables selection was informed by COSO, ISSPIA Frameworks and literature review. These included internal audit working environment, internal audit independence, and monitoring of internal audit performance as depicted by figure 2.2 below.



Independent variables

Dependant variable

Figure 2.2: Conceptual framework for evaluation of factors that impact on internal audit effectiveness in the Kirinyaga County Government.

2.6 Operational Framework.

The operational framework presents the measuring parameters of the independent and dependent variables. It indicates how the researcher measured the existence or the degree of relationship of the concepts and variables. The study operational framework is presented in Figure 2.3:

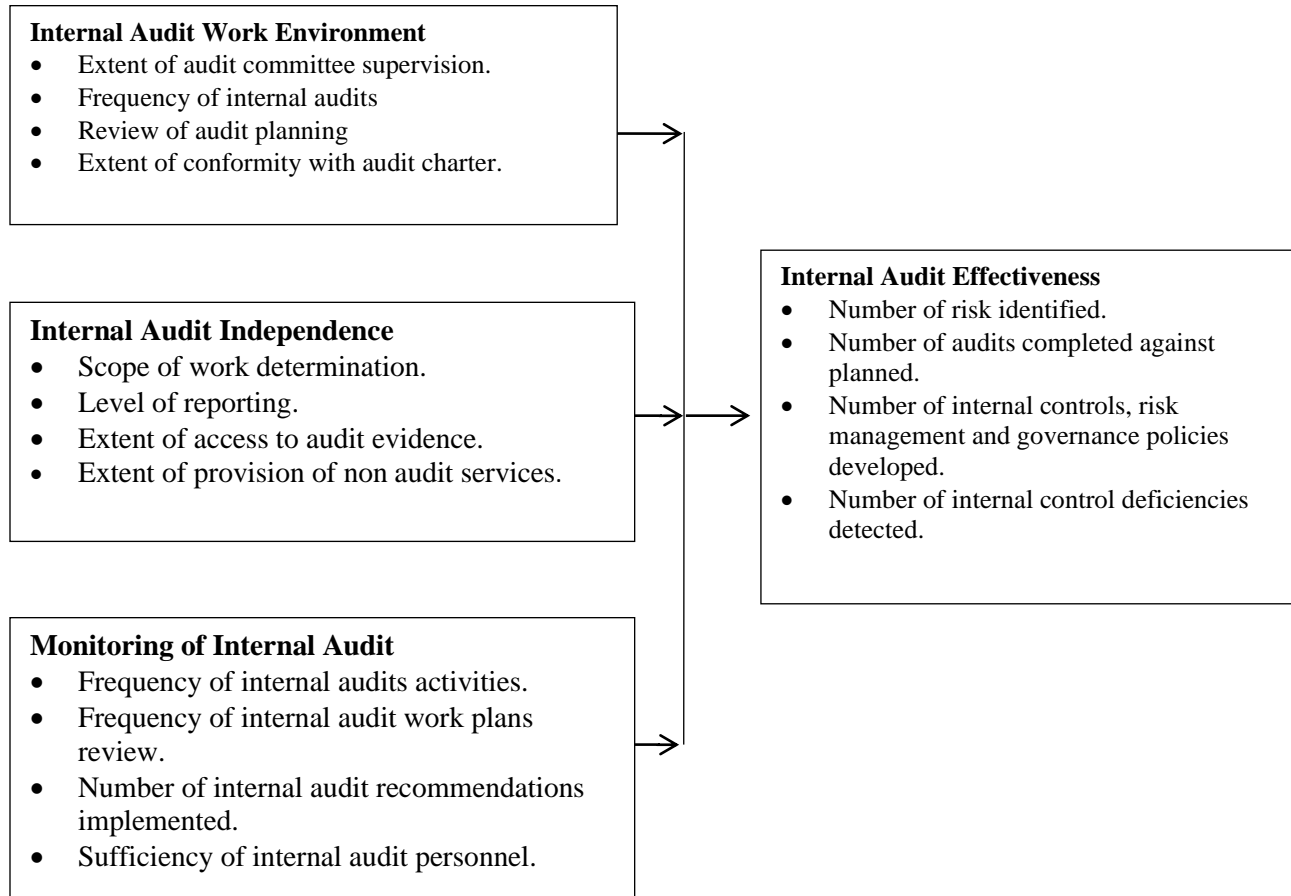


Figure 2.3: Operational framework for evaluation of factors that affect internal audit effectiveness in the Kirinyaga County Government.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter describes the research design, target population, data collection, analysis and presentation.

3.2 Research Design

This refers to the plan of how to answer the research question or how solve the problem under investigation. Its purpose was to enable the study to use evidential data collected from the field and extant literature to answer the research questions unambiguously (Saunders, Lewis & Thornhill, (2012)). Orodho, (2003) defines research design as the plan, outline, or scheme used to originate answers to research questions and problem. It is the structure within which research is conducted in order to generate answers to questions in the study or to investigate the research hypotheses. It is the gum that sticks together all the other elements in the study (Kombo and Tromp, 2006).

Kothari, (2003) defines research design as the blue print for gathering, measuring and evaluation of data. It provides the grand design or master plan used in gathering, manipulation and communication of research findings in order to answer the research questions. It is the blue print for getting a research completed. Willis, (2008) summarised the fundamentals of a research plan as an activity and time based scheme; always anchored in the research questions. It provides the guidelines for identification of sources and types of data; a structure for demonstrating the relationships among the study variables. It provides the programme for every research.

The study adopted descriptive research design to evaluate the factors which affect internal audit effectiveness in the Kirinyaga County Government. Kombo & Tromp, (2003) noted that the aim of descriptive research is presentation of facts of something, situation, phenomena or state of affairs as it exists. It gives meaning to the status, quality and standing of facts as they are. In this study this design described the factors affecting internal audit effectiveness in Kirinyaga County Government in terms beliefs, trends, practices and attitudes of employees. It does not make predictions and does not define cause and effect. However, it results in the development of important knowledge and answers to important human challenges. According to Orodho, (2009)

a descriptive survey design is a technique of gathering data by administering a questionnaire or interviewing target respondents. It is employed in gathering data about for research about people's opinions, habits, attitudes, education and social issues.

3.3 Target Population

This is the entire group of individuals or objects to which the researcher intends to finally generalise the findings of the study (Berg, 2001). It is the entire aggregation of individuals, objects or events with similar observable characteristics of interest to a researcher. The target population of the study consisted of all the forty six (46) staff members from the Directorate of Internal Audit of Kirinyaga County Government. The study employed a census survey whereby data was collected from respondent members of the target population. Census survey was preferred for this study since the number of internal audit staff in the county is relatively small and therefore sampling was unnecessary (Cooper & Schindler, 2011).

3.4 Data Collection

3.4.1 Data Collection Instrument

According to Blaxter, Hughes & Tight, (2006) a research instrument is a tool or means by which investigators measure variables or items of interest in the data-collection process. It translates research objectives into specific questions and answers for each question. It avails the data needed for hypothesis testing. Primary data was gathered using a self-administered questionnaire comprising closed ended questions. A questionnaire has advantages over other instruments because it can be administered cost effectively to a large population for data gathering. This enhances reliability and acceptability of research results. It minimises bias since the questionnaire is presented in paper form, confidentiality is upheld and respondents have sufficient time to provide well informed and reasoned responses (Kothari, 2006) and (Waiganjo, 2013)

3.4.2 Data Collection Procedure

The research questionnaire was distributed through a drop and pick method to all the targeted forty six employees of the County Directorate of Internal Audit. The researcher allowed the respondents to provide answers at their own pace and convenience thus picked the completed

questionnaires after one week. The intention was to accord respondents' adequate time to read, understand the questions and provide considered responses. This was expected to increase the response rate and provide well thought out feedback to the research questionnaire. The study targeted only County internal audit staff because they have immediate and direct knowledge of the factors that affect their capacity to deliver on their functions' mandate. Secondly, they possess first-hand experience of feedback from consumers of their opinion on possible improvements and therefore were expected to be the most resourceful on the study subject. This group was therefore considered best placed than any other possible source for providing the researcher with first hand data on factors affecting their function's effectiveness.

3.5 Pilot Study

According to Mugenda and Mugenda, (2003) and Kothari, (2008) a data collection instrument should be pretested with a using a representative sample to evaluate its validity and reliability. The data collection instrument was first piloted in the neighbouring County of Nyeri with ten selected respondents in order to detect any unnecessary contents or to add missing but important aspects.

3.5.1 Reliability of Data Collection Instrument

Orodho, (2009), states that reliability of a measurement instrument is the extent to which a particular measuring procedure gives similar results over a number of repeated trials. The purpose of testing instrument reliability is to evaluate its quality or fitness for the data collection purpose. It evaluates the steadiness or stability of measures or the internal consistency of a measurement instrument to minimise errors in data collection. The study ascertained the reliability of the data collection instrument, using test-retest technique. This was done by administering a test twice at two different points in time. A Spearman correlation coefficient was then computed. This test indicates the degree to which the two halves provide similar tests thus determining the internal consistency. According to Willis (2008) a minimum correlation coefficient of 0.65 is evidence that an instrument is reliable. Reliability is therefore the extent of consistency of a measuring instrument. A measuring instrument is reliable if it gives the similar results for repeated trials under the same conditions.

3.5.2 Validity of Data Collection Instrument

The process of development and validation of a research questionnaire mainly targeted at on reduction of error in the research measurement process Kimberlin & Winterstein, (2008). Accordingly, validity is concerned with the extent to which an instrument or test measures what it is intended or supposed to measure and performs as it is designed to perform Biddix, (2009). It the extent to which it works or performs as it is designed to. It is the correctness and reasonability of the data as it refers to getting result that accurately reflects the concept being measured, (Claire et al., 2006). It is not synonymous with reliability, which gives the degree to which a measuring instrument gives consistent results for test administered at different time to same group at under same conditions. In validity tests, similarity of measurement is not a requirement as is the case in reliability tests. However, reliability of a measurement may not always lead or translate to validity and vice versa.

In social sciences, researchers are most of the time uncertain that they are measuring the variables for which they designed their measurement procedure (Wills, 2008). Therefore, validity is the dependability and persuasiveness of inferences on basis of the research results. The questionnaire were reviewed by a statisticians who is a professional in data analysis for research, as recommended by Blaxter, Hughes and Tight, (2006) to ascertain that the questionnaire is designed to measure the specific objectives under study.

3.5.3 Reliability and Validity Test Results

A pilot study was conducted to find out if the respondents could answer the questions without difficulty. The reliability of the scale for the study was interpreted on basis of Cronbach's alpha. The alpha measure ranges from zero, meaning no internal consistency, to one, meaning complete internal consistency. The acceptable alpha coefficient should be at least 0.65 (Willis, 2008, Cohen and Sayag, 2010). Pilot test of this study gave the alpha values of all variables which were above 0.65 as shown in Table 3.1.

Table 3.1: Reliability Statistics

| Determinants | Number of items | Cronbach's Alpha |
|---------------------------------|------------------------|-------------------------|
| Internal Audit Work Environment | 4 | .922 |
| Internal audit independence | 4 | .782 |
| Monitoring of internal audit | 5 | .843 |
| Internal audit effectiveness | 4 | .887 |
| Staff Competence | 4 | .793 |

Internal audit work environment had alpha of 0.922, internal audit independence had 0.782, monitoring of internal audit had 0.843, internal audit effectiveness had 0.887 while Staff Competence had 0.793. This indicated strong internal consistency among measures of variables and that the data collection instrument was reliable and fit for the purposes of the study.

3.6 Data Analysis

3.6.1 Data analysis

Data analysis is the process of evaluating and computing certain measures or indices and looking for trends and patterns of relationships that exist among the research data groups (Kothari, 2008). In this study it involved estimating the values of unknown parameters of the population and testing of research questions for drawing inferences. Data analysis for the study was classified into descriptive analysis and inferential or statistical analysis. According to Zikmund, Babin, Carr & Griffin, (2010) data analysis is the application of logical reasoning to enable their insight, understanding or comprehension by researcher. It allows breaking down of data, determination of consistent trends over time, patterns, comparing one sector or measurement to another and summarizing of the significant details or information revealed by the study. Bryman, (2008) sees data analysis as comprising posing questions on what happened, what is happening, and what will happen (predictive analytics) to a phenomenon of interest. The purpose of data analysis is to enable the researcher to answer the research questions, solve problems, and derive important information (Brianna, 2017).

The collected data was cleaned and edited to ensure completeness, accuracy and consistency. The data was tabulated and processed using descriptive and inferential statistical analysis using statistical package for social sciences (SPSS) version 20 which is a tool, among others, for data analysis. The relationship between independent variables and the dependent variable was tested using Pearson's coefficient of correlation (r). The coefficient ranges from -1 to +1 where a 0 implies no linear correlation or association between the variables under consideration. The negative sign signifies negative correlation while the positive sign indicates positive correlation between variables.

The study employed linear regression to compute the degree of the association between individual, bivariat and multiple factors and the effectiveness of internal audit function. The Normality of internal audit effectiveness as a dependent variable was determined using a histogram. This helped to ascertain if data on the dependent variable was normally distributed. A normality check or test is used to fit a multiple regression model and to achieve this, data the about the dependent variable must exhibit normal distribution (Ghasemi & Zahedias, 2012).

3.6.2 Model Specification

In order to test whether independent variables in aggregation had significant effect on internal audit effectiveness in Kirinyaga County Government, multiple regression analysis was used. This was in order to answer the research questions. This technique is used to test whether a given aggregate of independent variables predict the behaviour of a given dependent variable (Mugenda and Mugenda, 2009). The regression model below was therefore used to test the association between the three independent variables and the dependent variable:

$$IAE(x) = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + e$$

Where;

IAE(x) = internal audit effectiveness index

β_0 = Intercept or constant. This represents the effectiveness of IA when every independent variable is zero.

β = regression coefficients

e = error term

X_1 - Internal audit work environment

X₂- Internal audit independence

X₃- Monitoring of internal audit

The model was adapted from prior research (Cohen & Sayag, 2010, Hairemariam, 2014, Ebissa 2015, Rudhani, Vokshib, & Hashani, 2017) on factors affecting internal audit effectiveness in order to test the research questions. This indicates the model is reliable and valid for purposes of data analysis and interpretation among researchers.

3.6.3 Measurement of variables

According to Arena and Azzone, (2009) the need for measurement of internal audit effectiveness is well accepted but there is no agreement among scholars on measurement constructs. Internal audit effectiveness has previously been measured using a multiplicity of factors. According to COSO, (2013) and the IPPF, (2012) internal control frameworks and literature review, several variables including internal audit work environment, internal audit charter, audit committee internal audit independence, competence of internal audit staff, management support, internal audit quality and monitoring of internal audit have been applied to evaluate internal audit effectiveness in organisations. However, recent studies on the subject, Kibia, (2014), George, Theofanis & Konstantinos, (2015), Dellai & Omri, (2016), Salehi, (2016), Tackie, Yiadom & Achina, (2016), Irodenko, (2017) reveal three factors, internal audit work environment, independence and monitoring of internal audit as most statistically significant to internal audit effectiveness. This indicates these factors are identified by researchers as key influences on internal audit effectiveness by (Institute of Internal Auditors, 2012) hence their selection for in this study. The other variables, audit committee, internal audit quality and management support are considered less statistically significant and appear in only one study each hence their exclusion from this study.

3.6.4 Dependent Variable

The dependent variable of this study was effectiveness of internal audit in Kirinyaga County Government in Kenya and this study focused on factors which affect it. In the face of increasing organisational complexity, business risk, economic instability and financial scandals, use of and the importance of internal audit effectiveness and knowledge of factors which affect it become critical for organisational goal achievement (Tsipouridou and Spathis, 2014; Vinary and Skaerbaek; 2014; Gbadago, 2015). Effective internal auditing positively impact on an entity's

control environment and the design, implementation and evaluation of internal control, risk management and governance processes (Klynveld Peat Marwick Goerdeler, KPMG, 2007). It is therefore important for the audit committees to regularly evaluate the effectiveness of internal auditing in their organisations to optimise its assurance and value adding services to goal achievement. In view of the above internal audit effectiveness was evaluated using the three variables namely internal audit work environment, independence and monitoring of internal audit as identified by COSO, (2013).

3.6.5 Independent variables.

The study focused on three independent variables predicted to have an impact on internal audit effectiveness in Kirinyaga County Government. These variables, informed by COSO, IPPF models and available literature, included internal audit work environment, internal audit independence and monitoring of internal audit. Internal audit work environment was evaluated using four elements derived from previous studies (Hailemariam, 2014, Alzeban & Gwilliam, 2014 Salehi, 2016,). These elements included extent of audit committee supervision, frequency of internal audits, number of reviews of audit plans and extent of conformity with audit charter. Internal audit independence was evaluated using four elements namely, scope of work determination, level of reporting, extent of access to audit evidence, extent of provision of non audit services as identified previously (Cohen & Sayag 2010, Kaplan Financial Knowledge Bank, 2012, Kimotho, 2014, Ebisa, 2015). Monitoring of internal audit was evaluated using four elements namely, frequency of internal audits activities, frequency of review internal audit work plans, number of internal audit recommendations implemented and sufficiency of internal audit personnel (Delai & Omri, 2016).

3.7 Data Presentation

The results were presented in form of tables, frequency distributions, graphs and charts. This method conserves space, reduces explanatory and descriptive narratives. It also facilitates the process of comparison.

3.8 Chapter Summary

This chapter provides information on research design, target population, proposed model for establishing relationship between independent and dependent variable, pilot testing and data analysis.

CHAPTER FOUR

DATA ANALYSIS AND INTERPRETATION

4.1 Introduction

This chapter contains analysis of data, data interpretation and research findings presentation. The broad objective of the study was to evaluate factors that influence internal audit effectiveness in Kirinyaga County Government. A self administered questionnaire tailor made for the study was employed in data collection from respondents working in the County Directorate of Internal Audit. Data was then coded, analyzed and the results obtained using descriptive and inferential statistics in light of the research objectives and questions. The findings were presented in form of frequency tables and their implications explained. Multiple regression analysis was used to determine the extent of the relationship between the independent and the dependent variables.

4.2 Response Rate

Data that was analyzed was obtained from forty one (41) respondents out of the targeted forty six (46) staff member working in internal audit department of the Kirinyaga County Government. Thus the response rate achieved was 89.1%. This is a response rate of above 80% which is referred to as very good according to (Mugenda and Mugenda, 2003).

Table 4.1: Response Rate

| Response | Targeted | Returned |
|-----------------------|-----------------|-----------------|
| Numbers (n) | 46 | 41 |
| Percentage (%) | 100 | 89.1 |

4.3 Demographic Information of the Respondents

This avails data about the research participants. It indicates whether participants in a given study are representative of the target population for generalization. In addition it was considered significant as the ability of the respondents to give satisfactory data on the study variables could be affected by their demographic background. This includes participant's level of educational, experience in the audit environment, functional specialization professional qualifications and the area of deployment in the audit function. Thus the background information of respondents has been presented below.

4.3.1 Respondents Gender

The study ascertained the gender composition of the personnel in the County Directorate of Internal Audit as below:

Table 4.2: Gender of Respondents of Kirinyaga County Government

| Gender of the respondents | Frequency (n) | Percent (%) |
|----------------------------------|----------------------|--------------------|
| Male | 31 | 75.6 |
| Female | 10 | 24.4 |
| Total | 41 | 100.0 |

Majority of the respondents (75.6%) working with Kirinyaga County Government internal audit department were male while female accounted for 24.4%. This could be attributed to the nature of professional qualification required to work with in audit which was until recently had been dominated by male.

4.3.2 Age of the Respondents

This study established the age category of the personnel in the County Directorate of Internal Audit as below:

Table 4.3: Age Category of the Respondents

| Age of the Respondents | Frequency (n) | Percent (%) |
|-------------------------------|----------------------|--------------------|
| 20-29 | 12 | 29.3 |
| 30-39 | 11 | 26.8 |
| 40-49 | 14 | 34.1 |
| 50-59 | 4 | 9.8 |
| Total | 41 | 100.0 |

As shown by Table 4.3, 29.3% of the respondents were between age 20-29 years, 26.8% of the respondents were aged 30-39 years, 34.1% were aged between 40-49 years while 9.8% were between 50 - 59 years. This is an indication that age is not a factor to consider in order for one to

work in internal audit department as long as the person meets the minimum requirement with regards to professional and academic qualification.

4.3.3 Education Level of Respondents

Details on the respondent's education levels were gathered to establish the respondents' capacity to understand intended purpose and complete the questionnaire reasonably and with ease. The results are presented in the Table 4.4

Table 4.4: Education Level of Respondents

| Education Level of Respondents | Frequency (n) | Percent (%) |
|---------------------------------------|----------------------|--------------------|
| Certificate | 3 | 7.3 |
| Diploma | 7 | 17.1 |
| Degree | 17 | 41.5 |
| Master Degree | 14 | 34.1 |
| Total | 41 | 100.0 |

The above results indicate that 7.3% of the total respondents stated that they possessed certificate, 17.1% diploma, and 41.5% degree while 34.1% alluded that they possessed master degree of education. The results show that most of the staff working in County Directorate of Internal Audit had attained undergraduate and master's degrees. In light of these results, regarding the educational levels, it is fair to allude that the respondents were well educated. This means that they could read and understand the questions asked by the researcher as well as provide detailed and in depth information to strengthen and validate the results of the study.

4.3.4 Respondents Functional Specialization

The study also established the functional specialization of the internal audit staff in Kirinyaga County Government. The results were as shown in table 4.5 below.

Table 4.5: Respondents Functional Specialization

| Area of specialization | Frequency (n) | Percent (%) |
|-------------------------------|----------------------|--------------------|
| Internal Auditing | 13 | 31.7 |
| Accounting | 11 | 26.8 |
| Economics | 7 | 17.1 |
| Management | 6 | 14.6 |
| Others | 4 | 9.8 |
| Total | 41 | 100.0 |

As shown in Table 4.5, 31.7% of the staff working in internal audit department in Kirinyaga County Government had specialised in internal auditing, 26.8% specialised in accounting, 17.1% in economics, 14.6% in management while 9.8% specialised in other areas. The findings reveals that other than employees who specialised in accounting and auditing other specialisations are also considered as long as the person has prerequisite professional qualification.

4.3.5 Professional Qualification

The study ascertained the professional qualification of the internal audit staff in county government and the findings were as below:

Table 4.6: Professional qualification

| Professional qualification | Frequency (n) | Percent (%) |
|-----------------------------------|----------------------|--------------------|
| CIA | 4 | 9.8 |
| CPA | 32 | 78.0 |
| Others | 5 | 12.2 |
| Total | 41 | 100.0 |

The study revealed that 9.8% had CIA professional qualifications, 78.0% had CPA qualification while 12.2% had other professional qualifications. The finding of the study that majority of the staff working in internal audit department in Kirinyaga County Government had CPA qualification can be attributed to the fact that for a person to practice as an auditor in Kenya he/she must have CPA qualification hence employers consider such qualification as minimum requirement for most of the employees working in audit.

4.3.6 Work Experience in Audit

The researcher sought to understand how long the respondents had worked in audit department. The researcher considered this information relevant given that the longer the period they had worked in audit department, the more familiar they would be able to rate the internal audit effectiveness and give suggestions on possible ways of improving internal audit effectiveness.

Table 4.7: Work experience in audit

| Audit staff work experience | Frequency (n) | Percent (%) |
|------------------------------------|----------------------|--------------------|
| 0-5 | 17 | 41.4 |
| 6-10 | 9 | 22.0 |
| 10 and Above | 15 | 36.6 |
| Total | 41 | 100.0 |

Based on Table 4.7 above, majority of the respondents are experienced due to their long service in the audit department with 58.4% with more than five years audit experience in the County. In this case, given that more than 50% of the total respondents had more than 5 years in service in the County audit function, it is expected that the respondents had in-depth information regarding the operation of the internal audit system in Kirinyaga County Government and were able to rate the effectiveness of the Directorate.

4.3.7 Activities Carried by Internal Audit

The study sought to establish activities carried by internal audit department in Kirinyaga County Government. The results were as depicted in table 4.8 below:

Table 4.8: Activities are carried by internal audit

| Activities are carried by internal audit | Frequency (n) | Percent (%) |
|---|----------------------|--------------------|
| Internal Control evaluation | 33 | 80.5 |
| Risk evaluation | 6 | 14.6 |
| Governance evaluation | 2 | 4.9 |
| Total | 41 | 100.0 |

Table 4.9, shows that 80% of the study respondents mostly undertook internal control evaluation audits, 14.6% focused on risk evaluation while 4.9% dealt with governance evaluation. The finding of the study that majority of the staff working in Kirinyaga County Government Directorate of Internal Audit undertake internal control evaluation. This is an indication that internal audit main responsibility is to examine the books and operations to verify whether the laid down policy, procedure, guidelines, legal and regulatory framework are adhered to while conducting County business. The Directorate is yet to embrace the modern risk based approach to internal auditing.

4.3.8 Functional Composition of Respondents

The study revealed the functional composition of the forty one respondents working in the County Directorate of Internal audit as shown in table 4.9 below.

Table 4.9 Functional Composition of Respondents

| Functional composition of respondents | Frequency (n) | percent (%) |
|---------------------------------------|---------------|--------------|
| Director of internal audit | 1 | 2.4 |
| Audit managers | 3 | 7.3 |
| Audit supervisors | 6 | 14.7 |
| Internal auditors | 31 | 75.6 |
| Total | 41 | 100.0 |

Table 4.9 shows that the county Directorate of Internal Audit has one director who is the chief internal auditor comprising 2.4% of respondents; three audit managers comprising 7.3% of respondents, six audit supervisors comprising 14.7% of respondents and 31 internal auditors comprising 75.6% of respondents.

4.4 Test of Regression Assumptions

Before running a regression model, pre-estimation and post estimation tests were done. The pre-estimation tests conducted for this study were the multicollinearity test and Pearson correlation. The post estimation test conducted was the normality test. These tests were carried out to avoid spurious regression results.

4.4.1 Multicollinearity Test Results

Multicollinearity occurs when more than two predictor variables are inter-correlated, Kothari (2008). This is an undesirable situation where the correlations among the independent variables are strong as it increases the standard errors of the coefficients. To test for multicollinearity, Variance Inflation Factor (VIF) or tolerance, a diagnostic method was used to detect the extent of the problem in the study multiple regression model. The VIF statistic of a predictor in a model indicates the magnitude of the error variance for the unique effect of a predictor (Baguley, 2012).

Using the VIF method, a tolerance level of less than 0.20 and a VIF of more than 5 indicates a presence of multicollinearity. If two or more variables have a Variance Inflation Factor (VIF) of 5 or greater than 5, one of these variables should be removed from the regression analysis as this indicates presence of multicollinearity (Martz 2013).

Table 4.9: Multicollinearity Test Results

| Model | Independent variables | Collinearity Statistics | |
|-------|---------------------------------|-------------------------|-------|
| | | Tolerance | VIF |
| | (Constant) | | |
| 1 | Internal Audit Work Environment | .838 | 1.194 |
| | Internal audit independence | .973 | 1.027 |
| | Monitoring of internal audit | .858 | 1.165 |

From Table 4.9 there is no tolerance of less than 0.2 and no VIF with a value of 5 or greater and therefore no presence of multicollinearity.

4.4.2 Linearity Test

The research used the technique of correlation to evaluate the extent of relationship between two variables. Determination of a coefficient of correlation yields a statistic that ranges from -1 to +1. This statistic is called a correlation coefficient (r) which indicates the relationship between the two variables. Essentially the stronger the correlation the greater the coefficient between any two variables being compared (Carver et al., 2009). The researcher carried out correlation analysis between the independent and dependent variables of the study using Pearson correlation coefficient. This tested existence of interdependency between independent variables (internal

audit work environment, internal audit independence and monitoring of internal audit) and dependent variable (internal audit effectiveness) in Kirinyaga County Government-Kenya. In order to conduct correlation analysis the set of items that measured each variable were aggregated by computing the average. The findings of the analysis are as indicated in table 4:10 below.

Table 4.10: Correlation analysis

| Variables | Measure | Internal audit effectiveness | Internal audit work environment | Internal audit independence | Monitoring of internal audit |
|---------------------------------|---------------------|-------------------------------------|--|------------------------------------|-------------------------------------|
| Internal audit effectiveness | Pearson Correlation | 1 | | | |
| | Sig. (2-tailed) | | | | |
| Internal Audit Work Environment | Pearson Correlation | .556** | 1 | | |
| | Sig. (2-tailed) | .000 | | | |
| Internal audit independence | Pearson Correlation | .398* | .155 | 1 | |
| | Sig. (2-tailed) | .010 | .334 | | |
| Monitoring of internal audit | Pearson Correlation | .427** | .373* | .009 | 1 |
| | Sig. (2-tailed) | .005 | .016 | .955 | |

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

From the correlation matrix, all the independent variables had a positive association with the dependent variable. Internal audit work environment was positively and significantly related to internal audit effectiveness $r = 0.556$, p value $0.000 < 0.05$ at 0.05 significance level. Internal

audit independence was positively and significantly related to internal audit effectiveness $r = 0.398$, p value $0.010 < 0.05$. Monitoring of internal audit was positively and significantly related to internal audit effectiveness $r = 0.427$, p value $0.005 < 0.05$. Staff Competence was positively and significantly related to internal audit effectiveness $r = 0.372$, p value $.015 < 0.05$. The correlation analysis findings therefore revealed that, internal audit work environment, internal audit independence, monitoring of internal audit and staff competence significantly influence internal audit effectiveness.

4.4.3 Normality Test on Internal Audit Effectiveness

To test for normality, the study employed the graphical method. The results from the graphical method are presented in the Figure 4.1 below, indicating that the residuals are normally distributed.

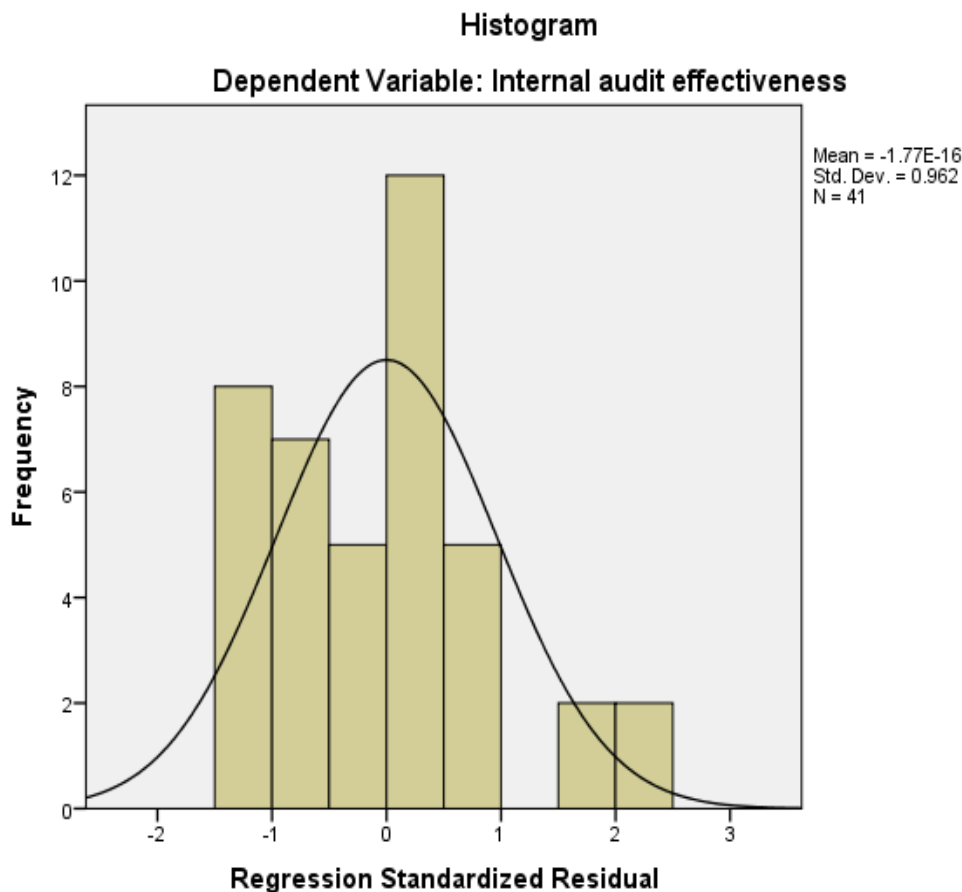


Figure 4.1: Histogram for Internal Audit Effectiveness

4.5 Internal Audit Effectiveness

The Institute of Internal Auditors, (2012) opined that effective auditing is a cornerstone of good public sector management. It enables independent, objective analysis and evaluation of efficient, accountable and effective utilization of resources for objective achievement. In this regard, the study sought to establish the effectiveness of internal audit in the Kirinyaga County Government. Table 4.11 show the results of this assessment.

Table 4.11: Internal audit effectiveness

| Internal audit effectiveness | N | Mean | Std. Error | Std. Deviation |
|--|-----------|-------------|-------------------|-----------------------|
| Number of risks identified has been increasing. | 41 | 2.2195 | .15025 | .96209 |
| Number of internal audits completed has increased under current internal auditing regime. | 41 | 2.7805 | .17639 | 1.12943 |
| Internal control, risk management and governance policies have increased under current internal auditing. | 41 | 3.0244 | .16560 | 1.06037 |
| Corporate governance, internal control and risk management deficiencies detected have increased under current internal auditing. | 41 | 3.0732 | .17597 | 1.12673 |
| Valid N (listwise) | 41 | | | |

Table 4.11, reveals that corporate governance deficiencies detected have increased under current internal audit regime was rated highest with a mean score of 3.07 (SD=1.13) followed by Internal control, risk management and governance policies with a mean score 3.02 (SD=1.06). The number of internal audits completed has increased under current internal auditing regime had a mean score of 2.78 (SD= 1.13) while number of risks identified have been increasing had a mean score of 2.22 (SD= 0.96). The study revealed that corporate governance, internal control and risk management deficiencies detected have increased under current internal auditing.

Udeh & Nwadiolor, (2016) reveals that in situations of poor corporate governance, the absence of, or a weak and ineffective internal audit mechanism could mean, individuals with questionable and fraudulent conduct, could take advantage of inherent deficiencies public sector for undue personal advantage. In this regard, a vibrant and dynamic internal auditing system is necessary to provide checks and balances and assurance to stakeholders that public resources are mobilised, appropriated and applied for the right and intended purpose. According to Shamsuddin and Bharathii, (2014) an effective internal audit roots for good corporate governance, prudent financial management, transparency and accountability.

The need for internal audit effectiveness brings with it the necessity for organizations to continuously identify, evaluate and appropriately manage the factors that affect its effectiveness if it is to serve its modern value adding proposition and advisory role. Similarly, Al-Shbail & Turki, (2017) echoes the necessity for organizations to identify, evaluate and appropriately manage factors which influence internal audit effectiveness in organizations. The study therefore concludes that internal audit work environment, independence and effective continuous monitoring, staff competence and review of internal audit are essential components of sound systems of risk management, corporate governance and internal control in organisations.

4.6 Internal Audit Work Environment and Internal Audit Effectiveness.

The first objective studied the relationship between internal audit work environment and internal audit effectiveness in Kirinyaga County Government. Descriptive statistics and bivariate linear regression analysis were done to determine the effect of each element of internal audit work environment and internal audit effectiveness. Tables 4.12 to 4.15 show the effect of each element of internal audit work environment and effectiveness of internal audit in Kirinyaga County Government.

Table 4.12: Descriptive Statistic for Internal Audit Work Environment

| Internal audit work environment | N | Mean | Std. Error | Std. Deviation |
|---|-----------|-------------|-------------------|-----------------------|
| Internal audit function is supervised by audit committee. | 41 | 2.7317 | .19451 | 1.24548 |
| Internal audits are carried out frequently. | 41 | 3.2195 | .17290 | 1.10707 |
| Internal audit plans are reviewed regularly. | 41 | 2.9512 | .17091 | 1.09433 |
| The County Government operates within internal audit charter. | 41 | 3.1220 | .14054 | .89986 |
| Valid N (listwise) | 41 | | | |

As shown in Table 4.12, internal audits are carried out frequently was ranked highest with a mean score of 3.22 (SD=1.11) followed by County Government operates within internal audit charter with a mean score 3.12 (SD=.90). Internal audit plans are reviewed regularly had a mean score of 2.95 (SD= 1.09) while internal audit function is supervised by audit committee had a mean score of 2.73 (SD= 1.25). The study therefore revealed that internal audit function is not adequately supervised by audit committee and internal audit plans are not regularly reviewed which may have contributed to challenges leading to qualified audit reports by Auditor General. Even though the study revealed that internal audits were carried out frequently and County Government operates within internal audit charter much needs to be done to ensure that the internal audit function is adequately supervised by audit committee and that audit plans are regularly reviewed to build desired effectiveness.

Table 4.13: Model Summary for Internal Audit Work Environment

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|--------------|-------------------|-----------------|--------------------------|-----------------------------------|
| 1 | .556 ^a | .310 | .292 | 1.16767 |

a. Predictors: (Constant), Internal Audit Work Environment

From the regression results in Table 4.13, the R value was 0.556 indicating that there is a relationship between internal audit work environments and internal audit effectiveness of in

Kirinyaga County Government. The R squared (R^2) value of 0.310 shows that 31.0 percent of the effectiveness of internal audit in the Kirinyaga County Government is explained by internal audit work environment. The remaining 69.0 percent is explained by other factors.

Table 4.14: ANOVA for Internal Audit Work Environment

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|-------|------------|----------------|----|-------------|--------|-------------------|
| 1 | Regression | 23.850 | 1 | 23.850 | 17.492 | .000 ^b |
| | Residual | 53.174 | 39 | 1.363 | | |
| | Total | 77.024 | 40 | | | |

a. Dependent Variable: Internal audit effectiveness

b. Predictors: (Constant), Internal Audit Work Environment

The model indicated there is a (statistically) significant difference among the population means with F ratio = 17.492 at p value $0.000 < 0.05$. This is an indication that internal audit work environment when considered singly has significant effect on effectiveness of internal audit.

Table 4.15: Regression Coefficients of Internal Audit Work Environment

| Model | Unstandardized | | Standardized | | t | Sig. |
|---------------------------------|----------------|------------|--------------|--|-------|------|
| | Coefficients | | Coefficients | | | |
| | B | Std. Error | Beta | | | |
| (Constant) | .046 | .551 | | | .084 | .933 |
| Internal Audit Work Environment | .762 | .182 | .556 | | 4.182 | .000 |

a. Dependent Variable: Internal audit effectiveness

Internal audit work environment had positive and significant effect on effectiveness of internal audit in the Kirinyaga County Government with $\beta = 0.762$ at p value 0.000 which is less than 0.05. The indication was that as the Internal Audit Work Environment is enhanced by one unit, internal audit effectiveness increases by 0.762. The bivariate regression equation for this study can be stated as: $Y = 0.046 + 0.762X_1 + e$. Where $X_1 =$ Internal Audit Work Environment.

The finding of the study that internal audit work environment is a factor that affect its internal audit effectiveness in Kirinyaga County Government further confirms earlier assertions by ISPPIA, (2016) which opined that one of the key elements for effectiveness of internal audit is its working environment. Krishnan & Visvanathan, (2013) agrees and identify poor reporting structures as a major work environment challenge that negatively impact on internal audit effectiveness. Goodwin, (2014) also agrees and cites management hostility as a negative influence on internal audit effectiveness resulting in denial of resources to the function. This study therefore conclude that in order to enhance internal audit effectiveness in Kirinyaga County, internal audit work environment must be reviewed considering every aspect of the internal audit function.

4.7 Internal Audit Independence and Internal Audit Effectiveness

Objective two of the study sought to explore the relationship between internal audit independence and internal audit effectiveness in the Kirinyaga County Government. Descriptive statistic and bivariate linear regression analysis were done to determine the effect of each factor of internal audit independence and effectiveness of internal audit. Tables 4.16 to 4.19 shows the effect of each element of internal audit independence and effectiveness of internal audit in the Kirinyaga County Government

Table 4.16: Descriptive Statistic for Internal Audit Independence

| Internal audit independence | N | Mean | Std. Error | Std. Deviation |
|---|-----------|-------------|-------------------|-----------------------|
| Management determines the scope of internal audit work. | 41 | 2.6098 | .21207 | 1.35790 |
| Internal audit function work and report findings directly to the audit committee. | 41 | 2.7317 | .21249 | 1.36060 |
| Internal audit function has unhindered access to audit evidence. | 41 | 2.9024 | .19382 | 1.24107 |
| Internal auditors function performs duties other than auditing. | 41 | 2.7561 | .19375 | 1.24057 |
| Valid N (listwise) | 41 | | | |

As shown in Table 4.16, Internal audit function has unhindered access to audit evidence was rated highest with a mean score of 2.90 (SD=1.24) followed by internal auditors function perform duties other than auditing with a mean score 2.76 (SD=1.24). Internal audit function work and report findings directly to the audit committee had a mean score of 2.73 (SD= 1.36) while management determines the scope of internal audit work had a mean score of 2.61 (SD= 1.36). The finding of the study revealed that there could be elements of restricted access by internal audit to audit evidence. This indicates the function is less than independent in evidence collection and analysis. The results indicate a situation where internal auditor staffs were assigned duties other than auditing which may adversely affect their scope and impair independence. Mustika, (2015), opined that to be effective internal auditors must avoid conditions that could threaten their ability to work in an unbiased manner.

Table 4.17: Model Summary for Internal Audit Independence

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------------------|----------|-------------------|----------------------------|
| 1 | .398 ^a | .158 | .137 | 1.28945 |

a. Predictors: (Constant), Internal audit independence

From the regression results in Table 4.17, the R value was 0.398 indicating that there is co-relationship between internal audit independence and effectiveness of internal audit in Kirinyaga County Government. The R squared (R^2) value of 0.158 shows that 15.8 percent of the effectiveness of internal audit in the Kirinyaga County Government is explained by internal audit independence. The remaining 84.2 percent is explained by other factors

Table 4.18: ANOVA for Internal Audit Independence

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|-------|------------|----------------|----|-------------|-------|-------------------|
| | Regression | 12.180 | 1 | 12.180 | 7.325 | .010 ^b |
| 1 | Residual | 64.844 | 39 | 1.663 | | |
| | Total | 77.024 | 40 | | | |

a. Dependent Variable: Internal audit effectiveness

b. Predictors: (Constant), Internal audit independence

The model was significant with the F ratio = 7.325 at p value $0.010 < 0.05$. This is an indication that internal audit independence when considered singly has significant effect on effectiveness of internal audit.

Table 4.19: Regression Coefficients of Internal Audit Independence

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|-------|-----------------------------|-----------------------------|------------|---------------------------|-------|------|
| | | B | Std. Error | Beta | | |
| | (Constant) | .367 | .714 | | .514 | .610 |
| 1 | Internal audit independence | .589 | .218 | .398 | 2.707 | .010 |

a. Dependent Variable: Internal audit effectiveness

Internal audit independence had positive and significant effect on effectiveness of internal audit in the Kirinyaga County Government with $\beta = 0.589$ at p value 0.010 which is less than 0.05. The indication was that as the Internal audit independence is enhanced by one unit, Internal audit effectiveness increases by 0.589. The bivariate regression equation for this study can be stated as: $Y = 0.367 + 0.589X_2 + e$. Where $X_2 =$ Internal audit independence.

The finding that internal audit independence is a factor that effect effectiveness of internal audit in the Kirinyaga County Government supports International Standards for the Professional Practice of Internal Auditing, 1100, (2017). This standard demand that, to be effective, internal auditing activity must be independent and internal auditors must be objective in performing their work. According to Mustika, (2015), internal auditors' independence essentially means freedom from interference by stakeholders that could lead to bias while reporting and when making recommendations for organizational improvement. The Chartered Institute of Internal Auditors, United Kingdom, (2015) opined that the role of internal auditing is to provide independent assurance to executives that an organization's risk management, governance, internal control, ethical processes and strategic orientations are being operated effectively. According to the Institute of Internal Auditor -Australia, (2014) organizations should establish an independent internal audit function to provide continuous review of the effectiveness of risk management, control, and governance processes. Kaplan Financial Knowledge Bank, (2012) argues that auditor's independence is a major factor in internal audit effectiveness as it positions the function to work without bias and/or favouritism. MacRae and Gils, (2014) noted that independence

allows internal audit to conduct work without interference by the entity under audit thereby contributing to the accuracy of auditors work and the management ability to rely on the reported results. Therefore county government should ensure that internal audit department has autonomous in its operations.

4.8 Monitoring of Internal Audit and Internal Audit Effectiveness

Objective three of the study sought to evaluate relationship between monitoring of internal audit and internal audit effectiveness in the Kirinyaga County Government. Descriptive statistic and bivariate linear regression analysis were used to determine the effect of each factor of monitoring and internal audit and effectiveness of internal audit. Table 4.19 to 4.22 shows the effect of each element of monitoring and internal audit and effectiveness of internal audit in the Kirinyaga County Government

Table 4.20: Descriptive Statistic for Monitoring and Internal Audit

| Monitoring and internal audit | N | Mean | Std. Error | Std. Deviation |
|---|-----------|-------------|-------------------|-----------------------|
| Internal audits activities are frequently appraised by the audit committee. | 41 | 2.2195 | .21672 | 1.38766 |
| Internal audit work plans are frequently reviewed by audit committee | 41 | 2.5366 | .21555 | 1.38017 |
| Internal audit recommendations implemented have been increasing | 41 | 2.9268 | .16151 | 1.03417 |
| Internal audit function has sufficient number of qualified personnel. | 41 | 2.7317 | .13536 | .86673 |
| Internal audit function has adequate experienced staff | 41 | 3.0976 | .15929 | 1.01992 |
| Valid N (listwise) | 41 | | | |

As shown in Table 4.20, Internal audit function has adequate experienced staff was rated highest with a mean score of 3.10 (SD=1.02) followed by Internal audit recommendations implemented

have been increasing with a mean score 2.93 (SD=1.03). Internal audit function has sufficient number of qualified personnel had a mean score of 2.73 (SD= 0.87), Internal audit work plans are frequently reviewed by audit committee had a mean score of 2.54 (SD=1.38) while Internal audits activities are frequently appraised by the audit committee had a mean score of 2.22 (SD= 1.39).

The finding revealed that internal audits activities are not frequently appraised by the audit committee and are inadequately staffed and lacks sufficient qualified personnel. This was an indication that monitoring of internal audit was ineffective and needs to be enhanced. The Chartered Institute of Internal Auditors, (2015) asserts that to keep the internal audit function effective, the audit committee should periodically evaluate the quality of internal audit function and their findings including the breadth and depth of internal audit reports. According to Millichamp and Taylor, (2012) one purpose of an audit committee is to enhance the effectiveness and dynamism of an entity's internal audit function. This is achieved by reviewing and reporting on internal audit appointments, independence, charter, audit programme, adequacy of resourcing, risk based internal auditing, status in organizational hierarchy, reporting and co-ordination between external and internal auditors. Monitoring determines whether or not internal audit policies and procedures designed and implemented by management are being carried out effectively by internal audit personnel.

Table 4.21: Model Summary for Monitoring of Internal Audit

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|--------------|-------------------|-----------------|--------------------------|-----------------------------------|
| 1 | .427 ^a | .183 | .162 | 1.27047 |

a. Predictors: (Constant), Monitoring of internal audit

From the regression results in Table 4.21, the R value was 0.427 indicating that there is a relationship between monitoring of internal audit and effectiveness of internal audit in the Kirinyaga County Government. The R squared (R^2) value of 0.183 shows that 18.3 percent of the effectiveness of internal audit in the Kirinyaga County Government is explained by monitoring of internal audit. The remaining 81.7 percent is explained by other factors

Table 4.22: ANOVA for Monitoring of Internal Audit

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|-------|------------|----------------|----|-------------|-------|-------------------|
| 1 | Regression | 14.075 | 1 | 14.075 | 8.720 | .005 ^b |
| | Residual | 62.949 | 39 | 1.614 | | |
| | Total | 77.024 | 40 | | | |

a. Dependent Variable: Internal audit effectiveness

b. Predictors: (Constant), Monitoring of internal audit

The model was significant with the F ratio = 8.720 at p value $0.005 < 0.05$. This is an indication that monitoring of internal audit when considered singly has significant effect on effectiveness of internal audit.

Table 4.23: Regression Coefficients of Monitoring of Internal Audit

| Model variable | Unstandardized Coefficients | | Standardized Coefficients | | t | Sig. |
|------------------------------|-----------------------------|------------|---------------------------|--|-------|------|
| | B | Std. Error | Beta | | | |
| (Constant) | .876 | .496 | | | 1.764 | .086 |
| Monitoring of internal audit | .459 | .155 | .427 | | 2.953 | .005 |

a. Dependent Variable: Internal audit effectiveness

Monitoring of internal audit had positive and significant effect on effectiveness of internal audit in the Kirinyaga County Government with $\beta = 0.459$ at p value 0.005 which is less than 0.05. The indication was that as the monitoring of internal audit is enhanced by one unit, internal audit effectiveness increases by 0.459. The bivariate regression equation for this study can be stated as: $Y = 0.876 + 0.459X_3 + e$ where $X_3 =$ monitoring of internal audit

The finding of the study that monitoring of internal audit is a factor that effect effectiveness of internal audit in the Kirinyaga County Government asserts earlier finding by Theofanis et al,

(2011) and Badara and Saidin, (2013). These argued that internal control mechanism such as internal audit should be adequately monitored to assess their quality and effectiveness of the system's performance over time. Dibia, (2016), observed that monitoring of internal audit effectiveness is essential to ensuring it provides added value to an organisation economically, efficiently and with best professional practice. Amudo and Inanga, (2009) agrees by observing that monitoring of internal control performance ensures its effective functioning. The study revealed that monitoring internal audit performance is therefore important as it determines whether or not management policies and procedures on internal audit are being carried out effectively by employees.

Table 4.26: Regression Coefficients of Internal Audit Independence

| Model | Unstandardized Coefficients | | Standardized Coefficients | | Sig. |
|---------------------------------|-----------------------------|------------|---------------------------|-------|------|
| | B | Std. Error | Beta | t | |
| 1 (Constant) | .376 | .714 | | .514 | .610 |
| Internal audit Staff Competence | .689 | .218 | .398 | 2.707 | .010 |

a. Dependent Variable: Internal audit effectiveness

Internal audit staff competence had positive and significant effect on effectiveness of internal audit in the Kirinyaga County Government with $\beta = 0.689$ at p value 0.010 which is less than 0.05. The indication was that as the Internal audit staff competence is enhanced by one unit, Internal audit effectiveness increases by 0.689. The bivariate regression equation for this study can be stated as: $Y = 0.376 + 0.689X_4 + e$. Where $X_4 =$ Internal audit Staff Competence.

4.9 Multiple Regression of Internal Audit Effectiveness in Kirinyaga County

The researcher carried out multiple regression analysis between the independent and dependent variables of the study. In order to conduct multiple regression analysis the set of items that measured each independent variable were aggregated by computing the average. Multiple regression analysis was then used to test whether there existed interdependency between independent variables (Internal Audit Work Environment, Internal audit independence and Monitoring of internal audit, Internal audit staff competence) and dependent variable (Internal

audit effectiveness). The findings of the multiple regression analysis for each of the three independent variables are discussed in Table 4.26 to Table 4.28.

Table 4.24: Model fitness of internal audit effectiveness

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------------------|----------|-------------------|----------------------------|
| 1 | .545 ^a | .297 | .240 | 1.03311 |

a. Predictors: (Constant), Monitoring of internal audit, Internal audit independence, Internal Audit Work Environment, Staff competence.

From the regression results above, the R value was 0.545 indicating that there is a positive relationship between internal audit work environment, internal audit independence, staff competence and monitoring of internal audit effectiveness factors of Kirinyaga County. The R squared (R^2) value of 0.297 shows that 29.7 percent of the internal audit effectiveness factors of Kirinyaga County is explained by internal audit factors. The remaining 70.3 percent is explained by other factors

Table 4.25: ANOVA for Internal Audit Effectiveness Factors of Kirinyaga County

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|-------|------------|----------------|----|-------------|-------|-------------------|
| | Regression | 16.705 | 3 | 5.568 | 5.217 | .004 ^b |
| 1 | Residual | 39.490 | 37 | 1.067 | | |
| | Total | 56.195 | 40 | | | |

a. Dependent Variable: Internal audit effectiveness

b. Predictors: (Constant), Monitoring of internal audit, Internal audit independence, Internal Audit Work Environment.

The model was significant with the F ratio = 5.217 at p value $0.004 < 0.05$. This is an indication that internal audit work environment, internal audit independence and monitoring of internal audit when combined had significant effect on effectiveness of internal audit.

Table 4.26: Coefficients of Internal Audit Effectiveness Factors of Kirinyaga County

| Model independent variables | Unstandardized Coefficients | | Standardized Coefficients | | Sig. |
|---------------------------------|-----------------------------|------------|---------------------------|-------|------|
| | B | Std. Error | Beta | t | |
| (Constant) | .249 | .857 | | .290 | .773 |
| Internal audit work environment | .451 | .169 | .384 | 2.673 | .011 |
| Internal audit independence | .336 | .137 | .352 | 2.458 | .019 |
| Monitoring of internal audit | .375 | .179 | .293 | 2.090 | .044 |
| Internal audit staff competence | .324 | .125 | .362 | 2.357 | .016 |

a. Dependent Variable: Internal audit effectiveness

Internal audit work environment, internal audit independence, monitoring of internal audit and internal audit staff competence had positive and significant effect on internal audit effectiveness in the Kirinyaga County with $\beta_1 = 0.451$ at p value 0.011, $\beta_2 = 0.336$ at p value 0.019 which is less than 0.05, $\beta_3 = 0.375$ at p value 0.044 which is less than 0.05 and $\beta_4 = 0.324$ at p value 0.016 which is less than 0.05. The regression equation for this study can be stated as:

$$Y = -0.249 + 0.451X_1 + 0.336X_2 + 0.375X_3 + 0.324X_4 + e.$$

This implies that holding all factors constant, internal audit effectiveness in Kirinyaga County Government would be 0.249

The finding of the study is that the three variables, internal audit work environment, internal audit independence, monitoring of internal audit and staff competence factors had positive and significant effect on internal audit effectiveness of Kirinyaga County. This is consistent with the Committee of Sponsoring Organisations of the Treadway Commission, Integrated Internal Control Framework, (2013) and the Institute of Internal Auditors, International Standards for Professional Practice in Internal Auditing (2017). They all indicate that internal audit work environment, independence, technical competence and sufficient monitoring of its activities are among the key drivers of internal audit effectiveness in organisations.

The study revealed that internal audit work environment, internal audit independence, staff competence and monitoring of internal audit had major effect on internal audit effectiveness. Consequently, internal audit as a function should provide reasonable assurance of the existence of an efficient and effective system and procedures that support achievement of County governments' objectives. This can be achieved by provision of enabling work environment, ensuring internal audit independence, enhancing staff competence and sufficient monitoring of internal audit activities. A robust internal audit mechanism gives reasonable confidence to stakeholders of smooth operations, accountability and transparency by elected and appointed devolved government officials. They are assured about sound utilization of public resources (Jusoff, Othmans & Ahmad, 2009). Lenz, & Hahn, (2015) adds that an audit is an activity that organisational owners and management use to check and provide assurance that the assignments delegated to agents are being performed in a responsible and correct manner. To continuously and effectively provide the needed assurance factors which affect internal audit effectiveness should be identified, evaluated and appropriately managed.

This study has demonstrated the significance of internal audit work environment, internal audit independence, staff competence and sufficient monitoring of its activities to internal audit effectiveness. It is therefore pertinent that Kirinyaga County Government and other devolved governments should obtain deep understanding, appreciation and appropriately manage factors that enhance internal audit effectiveness. This is agreement with the Chartered Institute of Internal Auditors, (2013) assertion that modern organisations should design, establish and maintain sound internal audit mechanisms. The Institute of internal Auditors (2015), a dynamic, efficient and vibrant internal audit continuously examines, reports and make recommendations on internal controls, risk management and governance improvements. From the results of evaluations the County Directorate of Internal Audit should be alert to and exercise insight, oversight and foresight on factors that may enhance or impede its effectiveness.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter summarises the research undertaken, discusses the research findings, conclusions drawn, recommendations made and knowledge gained. It provides suggested areas for possible future research based on the analyzed data related to the general and specific objectives of the study.

5.2 Summary of the Findings

Overall, the study results revealed that internal audit work environment, internal audit independence, internal audit staff competence and monitoring of internal audit had positive and significant effect on internal audit effectiveness in the Kirinyaga County Government.

5.2.1 Internal Audit Work Environment and Internal Audit effectiveness.

The first objective of the study examined the relationship between internal audit working environment and internal audit effectiveness in the Kirinyaga County Government. To ascertain whether internal audit working environment influenced internal audit effectiveness, the researcher carried out both descriptive and bivariate regression analyses. At 5% level of significance the study regression results indicated positive and significant relationship between internal audit working environment and effectiveness of internal audit. This was the case when the work environment was considered alone and when combined with other factors in this study. The study results further indicated the County internal auditing activity is inadequately supervised by audit committee and internal audit plans are not regularly reviewed. This might have contributed to the internal control, risk and governance challenges noted by Auditor General, 2015 and 2016 for qualification of audit opinions.

5.2.2 Internal Audit Independence and Internal Audit Effectiveness

The second objective of the study explored the relationship between internal audit independence and internal audit effectiveness in the County Government. To ascertain existence of any relationship the researcher carried out bivariate and multiple regression analyses. The study

regression findings indicated that at 5% level of significance, a positive and significant relationship existed independence was considered and internal audit effectiveness. This was true when independence was considered alone and when combined with other factors. The findings of the descriptive statistic indicated that there were elements of restricted access to audit evidence and those internal audit staff carried out non audit work which might have limited their scope of audit and impaired audit independence. This has negative impact on internal audit performance and effectiveness (Millichamp, 2012).

5.2.3 Monitoring of Internal Audit and Internal Audit Effectiveness

The third objective of the study evaluated relationship of monitoring of internal audit and internal audit effectiveness in the Kirinyaga County Government. To ascertain the relationship between the two variables, the researcher carried out bivariate and multiple regression analyses. At 5% level of significance the regression results indicated worthwhile and significant relationship between two variables. This was the case when monitoring of internal audit was analysed alone and when combined with other factors considered in the study. The study findings further indicated County internal audit activities are neither frequently appraised by the audit committee nor do they have sufficient qualified personnel.

5.3 Conclusions of the Study

5.3.1 Internal Audit Work Environment and Internal Audit Effectiveness

The study revealed that internal audit working environment had positive and significant effect on internal audit effectiveness in the Kirinyaga County Government when considered singly and when combined with other factors under consideration. The study concludes that work environment is a factor that influences internal audit effectiveness. Even though the study revealed that internal audits were carried out frequently and County Government operates within internal audit charter, much need to be done to ensure that the function is adequately supervised by County audit committee and the plans are reviewed regularly as this may enhance effectiveness of internal audit the function.

5.3.2 Internal Audit Independence and Internal Audit Effectiveness

The study established that internal audit independence had positive and significant effect on internal audit effectiveness in Kirinyaga County government when considered singly and when combined with other factors under consideration. This study therefore concluded that the County government should ensure their Directorate of Internal Audit is autonomous and can access the audit evidence which they deem necessary in the course of their audit work. In addition, the internal audit staff should not be assigned duties other than auditing which may affect their scope and impair independence of internal audit activity.

5.3.3 Monitoring of Internal Audit and Internal Audit Effectiveness

The study findings accentuates that at 5% level of significance the regression results indicated a positive and significant association between monitoring of internal audit and internal audit effectiveness in the Kirinyaga County Government when considered singly and when combined with other factors under consideration. The findings of the descriptive statistic indicated that internal audit activities are not frequently appraised by the County audit committee; internal audit function does not have sufficient number of qualified personnel. This study therefore concludes that Kirinyaga County government should ensure that internal audit activities are frequently appraised by the audit committee. The County Government should employ sufficient number of qualified professional personnel.

5.3.5 Internal Audit Effectiveness

The study findings revealed that corporate governance, internal control and risk management deficiencies detected have increased under current internal auditing regime. The need for internal audit effectiveness brings with it the necessity for organizations to continuously identify, evaluate and appropriately manage the factors that affect its effectiveness if it is to serve its modern value adding proposition and advisory role. The study therefore concludes that effective and continuous monitoring and review of internal audit are essential ingredients of sound internal control and risk management.

5.4 Recommendations of the Study

The study results showed that internal audit working environment had positively oriented and significant effect on internal audit effectiveness in the Kirinyaga County Government. Following

these findings, this study recommends that the County government should enhance audit work environment to ensure that internal audits are carried out frequently and the audit plans are reviewed regularly.

The finding revealed that that internal audit independence had positively oriented and significant effect on internal audit effectiveness in Kirinyaga County government. Following this finding, this study recommends that County government should come up with policy to ensure that auditing staff can access relevant information they deem necessary without restriction and should be autonomous. Further, monitoring of internal audit had positive and significant effect on internal audit effectiveness in the Kirinyaga County Government. Following this finding, this study recommends that the County government should employ sufficient number of qualified personnel who should monitor the progress of every other department based on the earlier findings.

In addition, the finding of the study revealed that internal audit activities are not frequently appraised by the audit committee and it is not adequately supervised by audit committee. Following this finding, this study recommends establishment of a vibrant County audit committee to supervise and frequently appraise audit activities.

The study also found out that some staff members lack adequate education levels to support their effectiveness in the audit department. In this regard, the study recommends that the staff members are required to meet certain minimum education qualifications before being recruited in the department. They should also be encouraged to acquire professional qualifications and be involved in continuous training and staff development.

5.5 Suggestions for Enhancing Internal Audit Effectiveness in the County

The respondents were requested to suggest other possible ways of enhancing internal audit effectiveness in the county. The suggested ways include; more training for audit staffs, employment of adequate audit staff, effective mechanisms to follow up of the recommendation by audit committee, ability of internal auditors to produce reports without interference or pressure from top County executives. Audit findings should be communicated without free of undue bureaucracy. Internal auditor function should neither prepare nor install procedures or prepare records, the reporting structure should not present a conflict of interest with people

internal audit is meant to audit or areas of audit enquiry, acquisition of internal audit software, internal audit should work without interference from political wing and be accessible to all areas.

In addition, the respondents also made the following suggestions. The quality of internal audit work should be monitored by both internal and external stakeholders, there should be an increase in budgetary allocation for the audit function, wider decentralisation of internal audit to different County departments, increase of public awareness on the function and independence of the audit Directorate, undertake internal audit function benchmarking, enactment of an internal audit law by County Government, development of internal audit frame work or policy guidelines, greater adherence to audit charter, peer review of the Directorates' set up, independence and procedures, greater management support, conducive working environment, reduced interference by management, full implementation of a recommendations and County annual internal audit conference for elected and appointed County officials on emerging issues in auditing county government.

5.6 Areas for Further Studies

The study was carried in Kirinyaga County government Directorate of Internal Audit. The researcher suggests a study be carried out focusing on factors that affect internal audit effectiveness in all the county governments in Kenya to find out any similarities and differences with the results of this study. A similar study on national government ministries in Kenya should be put into consideration to enrich extant literature on these factors to build up congruence on them.

This study considered three variables, namely, internal audit work environment, internal audit independence and monitoring of internal audit. Future researchers should also focus on other types of composition variables such as technical competence, scope of work, management support and audit programme among other to establish their relationship with internal audit effectiveness in the County government and at national level. Finally, future researchers should find out the unique benefits that a County government can enjoy from establishing effective internal audit activity.

REFERENCES

- Abdullah, R., (2014). Redefining internal audit performance: Impact on corporate governance. *Research Online Theses*. Edith Cowan University
- Ackermann, C., (2015). The functioning of internal audit in category 'A' municipalities in South Africa. *University of Johannesburg*.
- Ahmad, N., Othman, R., and Jusoff, K., (2009). The effectiveness of Internal Audit in Malaysian Public Sector. *Journal of Modern Accounting and Auditing*, 5 (9) 52.
- Al-Matari, E.M., Al-Swidi, A.K. and Fadzil, F.H.B., (2014). The Effect of the Internal Audit and Firm Performance: A Proposed Research Framework. *International Review of Management and Marketing*, 4(1), pp. 34-41.
- AL-Shbail, M., & Turki A. A. T., (2017). A Theoretical Discussion of Internal Audit Effectiveness in Kuwaiti Industrial SMEs . *International Journal of Academic Research in Accounting, Finance and Management Sciences Vol. 7, No.1*, January 2017, pp. 107–116. P-ISSN: 2308-0337. E-ISSN: 2225-8329, © 2017 HRMARS www.hrmars.com.
- Alzeban A, Gwilliam D (2012). Perceptions of managers and internal auditors as to factors affecting the effectiveness of internal audit in the public sector context. *Paper presented at the 10th European Academic Conference on Internal Audit and Corporate Governance. University of Verona: Italy*. Retrieved from <http://www.iacmaster.it/iacgconference2012/>.
- Amudo, A. & Inanga, E. L. (2009). Evaluation of internal control systems: A case study from Uganda. *International Research Journal of Finance and Economics*, 3, 124 –144.
- Alzeban, A. & Gwilliam D., (2014). Factors affecting the internal audit effectiveness: A survey of the Saudi public sector. *Journal of International Accounting Auditing and Taxation*23(2):74-86.
- Arena, M., & Azzone, G., (2009). Identifying Organizational Drivers of Internal Audit Effectiveness. *International Journal of Auditing*, 13, pp. 43-60.
- Ariga, B., W. & Gathogo G., (2016).The Examination of the Effectiveness of Internal Audit in County Government of Nakuru. *IOSR Journal of Business and Management (IOSR-JBM) e-ISSN: 2278-487X, p-ISSN: 2319-7668. Volume 18, Issue 4 .Ver. II (Apr. 2016), PP 54-60* www.iosrjournals.org.
- Association of Chartered Certified Accountants (ACCA), (2015). *Advanced Auditing and Assurance*. Kaplan Publishing: United Kingdom.

- Badara, S., & Saidin, Z., (2013). Impact of Effective Internal Control System on the Internal Audit Effectiveness at Local Government Level. *Journal of Social and Development Sciences*.4 (1)16-23.
- Barac, K., Coetzee P., & Van Standen, (2016).Convergence towards Internal Audit Effectiveness in the BRICS countries. *Journal of Economic and Financial Science/JEF)* 9 (2), PP 609-629
- Barisic, I., & Tusek B., (2016). The importance of the supportive control environment for internal audit effectiveness – the case of Croatian companies. *Journal of Economic Research*. Vol. 29
- Berg, B. L., (2001). Qualitative Research Methods for the Social Sciences. *Publisher-Ally and Bacon, 2001*. ISBN 0205318479, 9780205318476
- Blaxter, L, Hughes C., & Tight M., (2006). How to Research. Third Edition. ISBN-10: 0 335 21746 X (pbk) 0 335 21747 8 (hbk) ISBN-13: 978 0 335 21746 5 (pbk) 978 0 335 21747 2 (hbk). *Lorraine Blaxter, Christina Hughes and Malcolm Tight 2006*.
- Bota-Avram, C, & Palfi, C., (2009). Measuring and Assessment of Internal Audit's Effectiveness. *Annals of Faculty Econ*. 3(1):784-790.
- Brianna, W., (2018). Data Analysis: Techniques and Methods. *Study.com*
- Bryman, A., (2008). Social research methods. *London: Oxford University Press*.
- Buguley, T., (2012). A Guide to Advanced Statistics for Behavioural Sciences. *Basingstoke: Palgrave*.
- Carver, C.S., Scheier, M.F., Miller, C.J., & Fulford, D. (2009). Optimism. In S.J. Lopez & C.R. Snyder (Eds.), *Oxford Handbook of Positive Psychology*, 2 nd Edition (pp. 303-311). *Oxford: Oxford University Press*.
- Cattrysse, J., (2014). Reflections on Corporate Governance and the Role of the Internal Auditor. Roularta Media Group. *Christina*.
- Chartered Institute of Internal Auditors, (2013). Effective Internal Audit in the Financial Services Sector Recommendations from the Committee on Internal Audit Guidance for Financial Services: How They Relate to the Global Institute of Internal Auditors' (The IIA) *International Standards for the Professional Practice of Internal Auditing (Standards)*. *Chartered Institute of Internal Auditors*. 13 Abbeville Mews, 88 Clapham Park Road, London. SW4 7BX tel 020 7498 0101 fax 020 7978 2492 email info@iia.org.uk
- Chartered Institute of Internal Auditors, (2017). Guidance on Effective Internal Audit in the Financial Services Sector. Second Edition. *Chartered Institute of Internal Auditors*, 13 Abbeville Mews 88 Clapham Park Road London SW4 7BXSeptember 2017. iia.org.uk

- Claire, C., & Ashraf, S., (2006). *Fundamentals of Social Research Methods: An African Perspective*. (4th Ed.). *Juta and Entity Ltd*.
- Cohen A., & Sayag, G., (2010). The Effectiveness of Internal Auditing: An Empirical Examination of its Determinants in Israeli Organisations, *Austr. Account. Rev.* 20(3),296-307
- Committee of Sponsoring Organisations, COSO, (2013). *Internal Control. Integrated Framework*. <http://www.coso.org>
- Committee of Sponsoring Organisations, COSO, (2017). *Enterprise Risk Management-Integrated Framework*. <http://www.coso.org>.
- Cooper, Barry J., Leung, Philomena and Wong, Grace 2006, The Asia Pacific literature review on internal auditing, *Managerial auditing journal*, vol. 21, no. 8, pp. 822-834.
- Dellai, H. & Omri M., (2016). Factors Affecting the Internal Audit Effectiveness in Tunisian Organizations. *Research Journal of Finance and Accounting*. www.iiste.org ISSN 2222-1697 (Paper) ISSN 2222-2847 (Online) Vol.7, No.16, 2016.
- Delloite, (2011). *Internal Audit in the Public Sector The Quiet Revolution: A Middle Eastern Point of View*. *Delloite Development, LLC. A Member of Delloitte Touche Tohmatsu Limited*.
- Delloitte, (2011). *The Tone at the Top. Ten Ways to Measure Effectiveness*. *Delloitte Development, LLC. A Member of Delloitte Touche Tohmatsu Limited*.
- Dibia, O. (2016). Perspectives on the internal audit function. *Journal of Accounting*. Igbinedion University
- Dusoruth, D., (2016). The changing role of Internal Audit. Changing the mind-set. *Africa Bank Limited*.
- Ebissa, T., (2015). Determinants of Internal Auditors Effectiveness: Case of Ethiopian Public Sectors (Sep 6, 2015). *International Journal of Advances in Management and Economics*, ISSN: 2278-3369. Available at SSRN: <https://ssrn.com/abstract=2759749>
- Endaya, A., and Hanefah, M., (2013). Internal Audit Effectiveness: An Approach Proposition to Develop the Theoretical Framework. *Research Journal of Finance and Accounting* 4, (10).
- Elder, J., Beasley, S., & Arens, A., (2010). *Auditing and Assurance Services: An Integrated Approach: Global Edition*, (13th Ed.). *Prentice-Hall, Englewood Cliffs*.

- Feizizadeh.A., (2012). Strengthening Internal Audit Effectiveness. *Indian Journal of Science and Technology*, 5 (5). *Indian Journal of Science and Technology Vol. 5 No. 5* (May 2012) ISSN: 0974- 6846
- Gbadago, F., (2015). Audit Expectation Gap and MBA Accounting Students Knowledge on Auditor(s)'s Responsibilities: Evidence from a Public University in Kumasi Ashanti Region of Ghana. *Journal of Accounting and Taxating*. 7(4), 53-61
- George D., Theofanis K., & Konstantinos A., (2015). Factors Associated with Internal Audit Effectiveness: Evidence from Greece. *Journal of Accounting and Taxation*. ISSN2141-6664 Vol. 7(7), pp. 113-122, July 2015 DOI: 10.5897/JAT 2015.0182 Article Number 9A53520542346664. <http://www.academicjournals.org/JAT>.
- Ghasemi A. & Zahedias S., (2012). Normality Test for Statistical Analysis. A guide for non Statisticians. *International Journal of Endocrinology Metabolism*.
- Goodwin, J. (2013). The relationship between the audit committee and the internal audit function: Evidence from Australia and New Zealand. *International Journal of Auditing* 7(2): 263-278.
- Goodwin, J. (2014). A comparison of internal audit in the private and public sectors. *Managerial Auditing Journal*, 19(5):640-650.
- Gros, M., Koch, S., & Wallek, C. (2016). Internal Audit Function Quality and Financial Reporting: Survey on German Listed Companies. *Journal of Finance and Accounting* www.iiste.org ISSN 2222-1697 (Paper) ISSN 2222-2847 (Online) Vol.7, No.16, 2016 220.
- Gupta, Parveen P., Duane B. Kennedy, & Samuel Weaver (Spring 2009), "Corporate Governance and Firm Value: Evidence from Canadian Capital Markets." *Corporate Ownership and Control*, vol. 6, Issue 3, pp. 293- 307
- Hailemariam, S., (2014). Determinants of internal audit effectiveness in the public sector, case study in selected Ethiopian public sector offices. Thesis. Jimma: *Jimma University*.
- International Organisations For Standardization, ISO, (2011). Guidelines for Auditing management Systems. Standards Catalogue.
- Institute of Internal Auditors-Australia, (2014). Achieving High Performance in Internal Audit. Sixth Edition - Insights from Audit Committee Chairs and Members. *PROTIVITI, Risk & Business Consulting Internal Audit*.
- Institute of Internal Auditors, (2010). Measuring internal audit effectiveness and efficiency. IPPF- Practice guide. *The Institute of Internal Auditors*. Altamonte Springs, Florida

- Institute of Internal Auditors, (2017). International Standard for the Professional Practice of Internal Auditing 1000, . *Institute of Internal Auditors*. Altamonte Springs, Florida.
- Institute of Internal Auditors, (2017). International Standard for the Professional Practice of Internal Auditing 1100. *Institute of Internal Auditors*. Altamonte Springs, Florida.
- Institute of Internal Auditors, (2017). International Standard for the Professional Practice of Internal Auditing 1300. *Institute of Internal Auditors*. Altamonte Springs, Florida.
- Institute of Internal Auditors, (2017). International Standard for the Professional Practice of Internal Auditing 2500. *Institute of Internal Auditors*. Altamonte Springs, Florida.
- Institute of Internal Auditors (2017). International Standard for the Professional Practice of Internal Auditing 2500-A1. *Institute of Internal Auditors*. Altamonte Springs, Florida.
- Institute of Internal Auditors (2017). International Standard for the Professional Practice of Internal Auditing 2500-C1. *Institute of Internal Auditors*. Altamonte Springs, Florida.
- Institute of Internal Auditors Research Foundation (IIARF) (2014). Internal audit around the world: a perspective on global regions, Research report. *IIARF*: Altamonte Springs, FL.
- Institute of Internal Auditors (2012). Supplemental Guidance: The Role of Auditing in Public Sector Governance. 2nd Edition. *The Institute of Internal Auditors*. Altamonte Springs, FL 32701 USA.
- Kaplan Financial Knowledge Bank, (2016). Audit and Compliance. Reporting on Internal Controls. *Kaplan Publishing Unit 2. The Business Centre. Molly Millars Lane. Wokingham Berkshire RG41 2QZ*. Email: publishing@kaplan.co.uk.
- Kenya Law Reports, (2010). The Constitution of Kenya. *National Council for Law Reporting. Government printer*
- Kenya Law Reports, (2012). The Public Financial Management Act, 2012. *National Council for Law Reporting. Nairobi: Government printer:*
- Kimberlin, C. L & Winterstein, (2008). Validity and reliability of measurement instruments used in research. *National Center for Biotechnology Information, U.S. National Library of Medicine 8600 Rockville Pike, Bethesda MD, 20894 USA*.
- Kiptum, D. K. , & Muturi W., (2017). Factors Affecting Effectiveness of Internal Control Systems in the County Governments in Kenya: The Case of Elgeyo Marakwet County. *International Journal of Management and Commerce Innovations ISSN 2348-7585 (Online) Vol. 4, Issue 2*, pp: (330-338), Month: October 2016 - March 2017, Available at: www.researchpublish.com Page 330.

- Klynveld, Peat Marwick, Goerdeler, (2007). *The Evolving Role of Internal Audit. Value Creation and Preservation from an Internal Audit Perspective. KPMG Australian Partnership.*
- Kombo, D. K., & Tromp D.L.A., (2006). *Proposal and Thesis Writing: An Introduction. ISBN:996608133X. Paulines Publications Africa. - Nairobi:*
- Kothari, C. R., (2003). *Research Methodology. Methods and Techniques. ISBN (13):978-81-224-2488-1. Published by Himanshu. New Delhi. New Age International Publishers.*
- Kothari, C. R., (2006). *Research Methodology. Methods and Techniques. Published by Himanshu Pub, New Delhi (2006). New Age International Publishers*
- Kothari, C. R. (2008). *Research Methodology, Methods and Techniques (2nd ed., pp. 109-110). New Delhi New Age International (P) Limited.*
- Krishnan G. V., Visvanathan. G, & Yu W., (2013). *Do Auditor-Provided Tax Services Enhance or Impair the Value Relevance of Earnings? The Journal of the American Taxation Association: Spring 2013, Vol. 35, No. 1, pp. 1-19. <https://doi.org/10.2308/atax-50270>*
- Lawrence, B., (2013). *Institutional Strategy. Journal of Management, 25(2), 161-188.*
- Lenz, R. & Hahn, U. (2015). *A synthesis of empirical internal audit effectiveness literature pointing to new research opportunities. Managerial Auditing Journal, 30(1), pp. 5-33.*
- Li, S., Park, S.H. & Bao, R.S. (2014). *How much can we trust the Financial Report? International Journal of Emerging Markets, 9(1), pp. 33 -53.*
- MacRae, E., & Gils, V., (2014). *Nine Elements Required for Internal Audit Effectiveness in Public Sector- A Global Assessment Based on The IIA 2010 Global Internal Audit Survey. Managerial Auditing Journal, 16(8), 443 – 450.*
- Maruszewska, E. W. & Bialy W., (2013). *Internal Audit–An Evaluation of Audit Effectiveness in a Polish Coal Mine. - 8th Research/Expert Conference with International Participations. "Quality 2013".*
- Martz, E., (2013). *Handling Multicollinearity in Regression Analysis. Manitab Incorporated*
- Mihret, G., & Yismaw, W., (2007). *Internal Audit Effectiveness: An Ethiopian Public Sector Case Study. Managerial Auditing Journal, 22 (5), 470– 84.*
- Millichamp, A. H. and Taylor, J. R. (2008). *Auditing, 9 th edition, Book power.*
- Millichamp, H. & Taylor, A., (2012). *Auditing (10th ed.). Cengage Learning. United Kingdom. ISBN 978-1-4080-44087. Online-www.cengage.co. uk*
- Morgan, S. L. (2009). *Risk based performance audit project planning. Guam: APIPA.*

Mudida R., (2003). *Modern Economics. Focus Publications.* ISBN: 99668827742

SKU: 2020203001175.

Mugenda, A & Mugenda, O. (2009). *Research Methods: Quantitative and Qualitative Approaches. Acts Press.* Nairobi, Kenya.

Mustika A., C., (2015). Factors Affecting The Internal Audit Effectiveness. *Jurnal Akuntansi and Auditing. Volume 12/No. 2 Tahun 2015 : 110-122.*

Office of the Auditor General, Kenya, (2016). *Report of the Auditor General on the Financial Statements of County Government of Kirinyaga for the Year ended 30 June 2015. A Publication of the Office of The Auditor General, Kenya.*

Okoth E., (2016) Banking woes Dim Economic Prospects. *Daily Nation Newspaper, April 12, 2016.* pp 41-42

Organisation for Cooperation Economic Development, OCED, (2007) *Glossary of statistical terms.* Available from : www.stats.oecd.org/glossary. [Accessed: 23th, May, 2018.

Orodho, A.J. (2003) *Essentials of Educational and Social Science Research Methods. Mazola Publishers, Nairobi.*

Orodho, A., (2009). *Element of Education and Social Sciences Reserach Methods. Maseno: Kanezja Publisher.*

Paape, L., (2011). *Corporate governance: The impact on the role, position, and scope of services of the internal audit function. Erasmus Research Institute of Management Erasmus University, Netherlands.*

Pizzini, M., Lin, S., & Ziegenfuss, D., (2015). The Impact of Internal Audit Function Quality and Contribution on Audit Delay. *Auditing: A Journal of Practice & Theory, 34(1), 25-58.*

Roth, S., (2014). *Internal Auditing: How It Should Function at a College or University – and More. National Association of College and University Business Officers.*

Rudhani L. H., Vokshib N. B., & Hashani S., (2017). Factors Contributing to the Effectiveness of Internal Audit: Case Study of Internal Audit in the Public Sector in Kosovo. *Journal of Accounting, Finance and Auditing Studies. 3/4 (2017) 91-108.* <http://www.jafas.org>.

Salehi, M., (2010). Evaluating Effectiveness of External Auditors' Report: Empirical Evidence from Iran. *Pak. J. Commer. Soc. Sci.4 (1), 69-83.*

Salehi, M., (2016). Investigation of Factors Affecting Internal Audit Effectiveness in the Company. A Case Study of Iran. *Review of European Studies Vol. 8. No., 2, 2016.*

ISSN- 1918. 7173. E. ISSN 1918-7181. *Published by Canadian Center of Science and Education.*

- Sakour, A., & Laila, N., (2015). Internal Audit Effectiveness in Libyan Public Enterprises: An Approach to the Development of a Theoretical Framework. *Global Business and Management Research: An International Journal*, 7(2).
- Salvioni, D.M., Bosetti, L. & Almici, A. (2013). Board independence and internal committees in the BRICs. *Chinese Business Review*, 12(8), pp. 521-529.
- Saunders, M., Lewis, P. & Thornhill, A. (2012). "Research Methods for Business Students" 6th edition. *Pearson Education Limited*
- Sarens, G. & Abdolmohammadi, M.J. (2011). Factors associated with convergence of internal auditing practices. *Journal of Accounting in Emerging Economies*, 1(2), pp. 104-122.
- Shamsuddin, A., & Bharathii D., (2014). Factors that Determine the Effectiveness of Internal Audit Functions in the Malaysian Public Sectors. *International Journal of Business, Economics and Law*, Vol. 5, Issue 1 (Dec.) ISSN 2289-1552.
- Soh, D.S.B. & Martinov-Bennie, N. 2011. The internal audit function: Perceptions of internal audit roles, effectiveness and evaluation. *Managerial Auditing Journal*, 26(7):605–622.
- Soltani, B., 2007. *Auditing: An International Approach*. Harlow: Prentice Hall, Financial Times. ISBN-13: 978-0273657736 ISBN-10: 0273657739
- Spertus, J. A., Eagle, K. A., Krumholz, H. M., Mitchell, K. R. & Normand, S. L. (2010). American College of Cardiology American Heart Association New Insights into the Methodology of Performance Measurement. *Journal of the American College of Cardiology*, 56(21), 1768- 1780
- Sudsomboon, S., & Ussahawanitchakit, P.(2009). Professional Audit Competencies: The Effects On Thai's CPAS Audit Quality, Reputation, and Success. *Review of Business Research*, 9(3), 66 – 85.
- Subramaniam N., Stewart J., (2010) Internal Audit Independence and Objectivity: Emerging Research Opportunities. *Managerial Auditing Journal*. ISSN 0268-6902. Emerald Publishing. <http://w.w.w.emeraldgroupublishing.com>.
- Tackie G., Yiadom E. M., Achina S. O., (2016). Determinants of Internal Audit Effectiveness in Decentralized Local Government Administrative Systems. *International Journal of Business and Management* ISSN 1833-3850 (Print), Vol 11, No 11. (2016). ISSN 1833-8119 (Online) Email: ijbm@ccsenet.org. Canadian Center of Science and Education.

- The Financial Reporting Council, United Kingdom, FRC, (2014). UK corporate Governance Code. © *The Financial Reporting Council Limited*. Registered in England number 2486368. Registered Office: 8th Floor, 125 London Wall, London EC2Y 5AS.
- The IIA and The International Organization of Supreme Audit Institutions (INTOSAI), (2016). A Comparison of Authoritative Guidance. *The Institute of Internal Auditors*.
- The International Professional Practices Framework (IPPF), (2011). Definition of Internal Auditing. *The Institute of Internal Auditors Research Foundation*. Florida, USA, January 2011.
- The Institute of Internal Auditors Research Foundation, (2011). *International Professional Practices Framework (IPPF)*, Altamonte Springs. Florida, U.S.A.
- The Institute of Internal Auditors, (2009b). Code of Ethics-Certified Internal Auditor. *Institute of Internal Auditors*. Available at: <http://www.theiia.org/certification/certified-internal-auditor/>.
- The Institute of Internal Auditors (IIA), Global, (2012). The standards for the Professional Practice of Internal auditing. *The Institute of Internal Auditors, Research Foundation*. Altamonte Springs: Florida USA.
- The Institute of Internal Auditors Global, (2012). Supplemental Guidance: Value proposition of Internal Auditing and the Internal Audit Capability Model. *The Institute of Internal Auditors*. Altamonte Springs: Flo. USA.
- The Institute of Internal Auditors (IIA), Global, (2017). International Standards for the Professional Practice of Internal Auditing (Standards). *The Institute of Internal Auditors, Research Foundation*. Altamonte Springs: USA
- Tsipouridou, M., & Spathis C., (2014). Audit Opinion and Earnings Management: *Evidence from Greece*. *Account. Forum* 38(1), 38-54.
- Udeh S.N., & Nweke C., (2016). Role of Effective Internal Audit in Public Accountability: A Model for APC-Led Government in Nigeria. ISSN: 2230-9926. *International Journal of Development Research Vol. 06, Issue, 07, pp.8780-8795*.
- Unegbu A.O. and Kida M.I. (2011), Effectiveness of internal audit as instrument of improving public sector management. *Journal of Emerging trends in Economics and Management Sciences (JETEMS)* 2(4), 302-309.
- Vinary, E., & Skaerbaek, P., (2014). The Uncertainties of Risk Management. *Accounting, Audit. Accountability J.* 27(3), 489-526.
- Volosin, E., (2007). The Theories of Audit Expectations and the Expectations Gap Course. *Issues in Auditing. Catalog Number V116911*. ISBN (eBook) 9783640192045 ISBN (Book) 9783640192311. Munich, GRIN Verlag, <http://www.grin.com/en/e-book/116911>.

- Waiganjo, E.W., (2013). Effect of competitive strategies on the relationship between strategic HRM and firm performance of corporate organizations in Kenya, *Unpublished PhD, Thesis JKUAT, Kenya.*
- Willis, L. E., (2008). Against Financial Literacy Education. *Iowa Law Review, Vol. 94, 2008; U of Penn Law School, Public Law Research Paper No. 08-10; Loyola-LA Legal Studies Paper No. 2008-13.* Available at SSRN: <https://ssrn.com/abstract=1105384>.
- Yalew A., (2015). Determinants of Internal Audit Effectiveness. Empirical Study on the Construction and Business Bank. School of Graduate Studies. *St. Mary's University, Addis Ababa, Ethiopia.*
- Zikmund, W. G., Babin, B. J., Carr, J. C., & Griffin, M. (2010). *Business Research Methods (8th ed.)*. Mason, OH: South-Western Cengage Learning.

APPENDICES

Appendix I: Letter of Introduction

Letter of introduction.

Dedan Kimathi University of Technology

School of Business and Economics

School of Graduate Studies

Department of Business Studies

Dear Participant:

The aim of the attached questionnaire is to evaluate information on factors which affect internal audit (IA) effectiveness in the Kirinyaga County Government. This is in order to enable me complete my Master's Degree Research Thesis in partial fulfilment of Dedan Kimathi University of Technology School of Business and Management requirements. The questionnaires are distributed to the Kirinyaga County Government Internal Audit Unit staff. The results of the study are expected to contribute in identifying factors which affect internal audit effectiveness in the Kirinyaga County Government.

The conclusions of the study will be drawn in aggregate terms, without any reference to specific office or individual respondents. Please, do not write your name on the questionnaire. I would also like to assure you that the information you provided will be treated as strictly confidential and used only for the purpose of this research.

Your honest and thoughtful response is valuable.

Thank you in advance for your support and participation.

With best regards,

Kaboi Milton Nyaga,

Mobile: +254- 692886,

Email: Mkaboih2008@yahoo.com.

Appendix II: Questionnaire

SECTION A. GENERAL INFORMATION

Please indicate your choice by putting a “√” tick mark in the boxes provided or indicate Yes or No.

1. What is your gender/sex?

- Male
- Female

2. What is your age (in years)?

- 20 – 29
- 30 – 39
- 40 – 49
- 50 – 59

3. What is your Level of Education?

- Certificate
- Diploma
- Degree
- Master Degree

4. Which is your specialisation?

- Internal auditing
- Accounting
- Economics
- Management
- Others

5. Which professional certificate do you hold?

- CIA
- CPA
- ICMA
- Others

6. For how many years have you practiced internal audit?

- 0-5
- 6-10
- 10 and above

7. What activities are carried by internal audit function?

- Compliance evaluation
- Identification of risk
- Governance evaluation

SECTION B. INTERNAL AUDIT WORK ENVIRONMENT

The following statements relate to the Internal Audit Work Environment. Kindly tick the extent to which the statement apply to the Kirinyaga County Government.

| | | Not at all | To a very small extent | To a small extent | To a large extent | To a very large extent |
|---|---|-------------------|-------------------------------|--------------------------|--------------------------|-------------------------------|
| | | 1 | 2 | 3 | 4 | 5 |
| 1 | Internal audit function is supervised by audit committee. | | | | | |
| 2 | Internal audits are carried out frequently. | | | | | |
| 3 | Internal audit plans are reviewed regularly. | | | | | |
| 4 | The County Government operates within internal audit charter. | | | | | |

SECTION C. INTERNAL AUDIT INDEPENDENCE

The following statements relate to the internal audit independence. Kindly tick the extent to which the statement apply to the Kirinyaga County Government.

| | | Not at all | To a very small extent | To a small extent | To a large extent | To a very large extent |
|---|---|---------------|---------------------------------|-------------------------|-------------------------|---------------------------------|
| | | 1 | 2 | 3 | 4 | 5 |
| 1 | Management determines the scope of internal audit work. | | | | | |
| 2 | Internal audit function work and report findings directly to the Board. | | | | | |
| 3 | Internal audit function has unhindered access to audit evidence. | | | | | |
| 4 | Internal auditor function perform duties other than auditing. | | | | | |

SECTION D. MONITORING OF INTERNAL AUDIT

The following statements relate to the monitoring of internal audit. Kindly tick the extent to which the statement apply to the Kirinyaga County Government.

| | | Not at all | To a very small extent | To a small extent | To a large extent | To a very large extent |
|---|--|---------------|---------------------------------|-------------------------|-------------------------|---------------------------------|
| | | 1 | 2 | 3 | 4 | 5 |
| 1 | The directorate of internal audit has sufficient personnel with desirable level of general education | | | | | |
| 2 | The country facilitates sufficient training and development programmes for internal auditors | | | | | |
| 3 | The directorate has sufficient number of professionally qualified personnel | | | | | |
| 4 | The directorate has adequate number of experienced internal auditors | | | | | |

Section E. INTERNAL AUDIT EFFECTIVENESS

The following statements relate to the internal audit effectiveness. Kindly tick the extent to which the statement apply to the Kirinyaga County Government.

| | | Not at all | To a very small extent | To a small extent | To a large extent | To a very large extent |
|---|--|---------------|---------------------------------|-------------------------|-------------------------|---------------------------------|
| | | 1 | 2 | 3 | 4 | 5 |
| 1 | Number of risks identified have been increasing. | | | | | |

| | | | | | | |
|---|---|--|--|--|--|--|
| 2 | Number of internal audits completed has increased under current internal auditing. | | | | | |
| 3 | Internal control, risk management and governance policies have increased under current internal auditing. | | | | | |
| 4 | Internal control deficiencies detected have increased under current internal auditing. | | | | | |

SECTION F. Other Possible ways of improving internal audit effectiveness

- 1.....
-
- 2.....
-
- 3.....
-
- 4.....
-

Appendix III: Work Plan

| Activities/ Time | December 2017 | January 2017 | February 2017 | March 2018 |
|--|------------------|-----------------|------------------|---------------|
| Thesis Submission | | | | |
| Corrections to Thesis | | | | |
| Final Defence | | | | |
| Corrections and Report Writing | | | | |
| Submission and Clearing from University | | | | |

Appendix III: Location of Kirinyaga County in Kenya

