THE SCOPE AND INDEPENDENCE OF INTERNAL
AUDITING IN PUBLICLY QUOTED COMPANIES
IN KENYA

By

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A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILMENT OF
THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTER
OF BUSINESS AND ADMINISTRATION OF THE UNIVERSITY
OF NAIROBI

JUNE 1988

DECLARATION

THIS PROJECT IS MY ORIGINAL WORK AND HAS NOT BEEN PRESENTED FOR A DEGREE IN ANY OTHER UNIVERSITY.

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THIS PROJECT HAS BEEN SUBMITTED FOR EXAMINATION WITH MY APPROVAL AS UNIVERSITY SUPERVISOR.

V.O. KAMASARA

ACKNOWLEDGEMENTS

I would like to thank all those people who contributed either directly or indirectly to the successful completion of this research project. It may not be possible to list all those who helped, but my special thanks go to:

1. My Father and Mother, Mr. Mugo Munga and Mrs. Wanjiru Mugo whose inspirations and efforts have contributed to my education so far.

2. My Supervisor, Mr. V.O. Kamasara, Lecturer, Department of Accounting, Faculty of Commerce without whose wise guidance and constant advice this research project would not be complete.

3. My wife, Mrs. Wamaitha Karimi, first for her timely inspirations and efforts in proof-reading my work before and after typing sometimes up to the wee hours of the night; secondly for the encouragements she used to give me despite the fact that I had little time to spend with the family.

4. All staff members of the Faculty of Commerce who helped me in one way or another, specifically Prof. Kimura, Dr. K'Obonyo, Mr. Angima, Mr. Mbeche and Mr. Karanja.

5. All my colleagues who spent their valuable time trying to bring my work up to the expected standard, specifically, Mrs. Njeri Muriuki for her special knowledge in library services and Messrs. Onuong'a, Opondo, and Kanywuiro for their critical and analytical minds.

6. All Heads of Internal Audit Departments who agreed to participate in the research project and whose results are incorporated herein.

7. Mrs. Joyce Muthama for putting up with my difficult conditions and demands in typing the manuscript.

Finally I bear the full responsibility for the work and any factual errors that may be in the project writing.

TABLE OF CONTENTS

ABSTRACT

This research study was set up to examine issues relating to internal auditing in publicly quoted companies in Kenya. The study investigated into the scope and independence of internal audit function in the publicly quoted companies in Kenya.

Internal auditing appeared to be a new issue in the Kenyan situation but it had existed without being subjected to any academic research. It had been researched on in other countries such as United States of America, Britain, and Germany.

A structured questionnaire was used to tap information regarding the above issues from the heads of internal audit departments in the publicly quoted companies.

The results of the study indicated that the scope of internal auditing is wide enough to cover not only financial/accounting data but also the data from the other operations of the organisation. Independence from operations or objectivity was found to be quite high in the companies that maintained internal audit function. Independence of function or organisation status was found to be moderately high. A lot of internal audit department heads still report to the head of finance/accounting department. A good number of the respondents said that they report to both the head of finance/accounting department and the chief executive officer.

The study also concluded that the accounting discipline still remained the source of internal audit staff. The researcher recommended the employment of data processing specialists in the internal audit departments due to the high rate of computerisation in the areas of audit.

CHAPTER ONE

INTRODUCTION

1.1 Background

Over time the term auditing has been defined differently by various individuals and organisations to suit the purpose of the audit or the operations the audit is focused on. The American Accounting Association's Committee on Basic Auditing concepts has defined auditing as:

> A systematic process of objectively obtaining and evaluating evidence regarding assertions about economic actions and events to ascertain the degree of correspondence between those assertions and established criteria and communicating results to interested users. (The accounting Review Supplement to Vol. 47, 1972 p. 18).

From this definition, it is evident that auditing is a process that encompasses two steps, that is, investigation and reporting. Investigation is what the above definition refers to as a systematic process of obtaining and evaluating evidence as regards the business aspect in question, whereas, reporting is the communication of results to interested parties. This definition is wide enough to encompass the various types of audits.

Generally there are three major types of audits which are differentiated by their respective purposes and the operations they are focused on. These are:

statutory or external audit, public sector or government audit and internal audit.

External audit refers to financial statements audit performed by public accountants who are hired from outside the organisation being audited. External audit has an aim of expressing an opinion on the truth and fairness of such financial statements according to the stipulations of the Companies Act, Cap. 486.

Government auditing involves the examination of various records and financial statements by government auditors (controller and auditor general) with an aim of establishing that government's resources are utilized according to the approved procedures.

Internal auditing is the predominant focus of this study. In its Statement of Responsibilities for the Internal Auditor (1971), the Institute of Internal Auditors defined internal auditing as:

> An independent appraisal activity within an organisation for the review of operations as a service to management. It is a managerial control which functions by measuring and evaluating the effectiveness of other controls. (Chambers: 1982; Research on Internal Auditing, 107).

This definition is still applicable today as it has been adopted by various authors such as Nwoko (1985), Mogere (1984), Ricchiute (1982) and Joshi (1981). For the purpose of this study the above definition will be adopted.

As reported by Thompson (1982:30) internal auditing was in organisations before the advent of the external auditor. Internal audit activities have been identified in organisations as ancient as the Egyptian and Inca civilizations as far back as 3500 B.C.

In the Egyptian civilization Scribes had to be present when grain was received and measured out. One Scribe recorded the amount of grain received in the central storehouse while the other tallied the amount of grain emptied into the warehouse. These two independent counts were later checked against each other through an 'audit' process.

In the Inca civilization, inventory records were kept in the form of knots tied in leather thongs by the overseer of the storehouse. The king maintained a staff of travelling auditors (known as 'Knot Counters') who would appear on a surprise basis and would inventory the contents against the contents of the knotted thongs. The travelling auditors were authorised by the king to dicapitate any storehouse overseer found to be short of his inventory.

Those early auditors were agents of the governing body which was headed by the king. Over time, as society and organisations have evolved, the role of the internal auditor has been defined differently but he remains an agent of the governing body of the organisation. It is only during the last 150 years that major developments in internal auditing have occurred.

During the last 150 years, the world over (mainly the developed countries) has experienced the growth of large companies some of which have expanded beyond the national boundaries of their mother countries. As Bigg and Davies (1965:1) put it, the companies continue to acquire enormous sizes and operations through acquisitions and amalgamations and public ownership. This has led to the expansion of the span of control such that management cannot be in constant touch with operations for control purposes and for significant decision making resulting in defalcations and improperly maintained records (Stettler; 1980:81).

To solve the problem top management delegates control duties to individuals (internal auditors) within the organisation (Nwoko: 1985). Those individuals specialise in the audit services of a particular company, hence they audit the activities of the company on a continuous basis as opposed to external audit which is done once a year.

As Davies (1956: 227) puts it, in the small business the objectives of internal auditing are attained by management itself exercising a check on its controls. He goes further to say that as the business expands and operations become more complex the management delegates this function to a specialist group (internal auditors) which acts on behalf of management as a checkpoint on the business control.

According to Kaffen (1983), Chambers (1982), and Ostlund (1975) internal auditing is particularly beneficial to management in situations which are difficult to control. Complex operations, diversified operations, geographically distributed operations and large scale operations are typical situations in which management may not be able to obtain reassurance that control measures are providing them with a reliable picture (Chambers: 1982:107).

Before 1941, each company used to operate its own internal audit function uniquely. According to Cunningham (1955) internal auditor's work was clerical in nature; they were just audit clerks. With the writing of the first book in internal auditing (by Victor Z. Brink) and the formation of the Institute of Internal Auditors in USA, internal auditing started taking new dimensions. The Institute later spread all over the world (mainly in the developed world). The institute developed the concepts and basic standards of practice to be followed by its members.

It was in 1947 that the Institute issued its first edition of the Statement of Responsibilities which emphasized more on financial/accounting matters as the duties of the internal auditor. Due to changing conditions, the Statement of Responsibilities was reviewed in 1957 and 1971. The 1971 review suggests the audit of all operations of the organisation; that is, operational auditing. These changes may have resulted from the increased managerial problems, especially after the second world war, leading to more delegation of duties by management. Management is too much occupied with formulation of policies and procedures and reviewing and interpreting reports on operations; hence internal controls evaluation duties are left to the internal audit department.

Internal controls are involved in all operations of an organisation. Internal auditing is a part of internal controls but it differs from other controls in that it is charged with the responsibility of measuring and evaluating the adequacy and effectiveness of other controls (Chambers: 1982). As Deloitte Haskins + Sells (1978: 1) put it, the main purpose of internal auditing is to assure top management that internal controls are appropriate to the organisation and are also effective in their operation. Since internal controls are involved in all operations of the organisation, it follows that internal auditors should audit all the activities of the organisation. However, this does not happen in all organisations. According to Chambers (1982: 107):

> In many organisations internal audit provides a service only at certain levels, in certain functional areas, or certain operating units but not in others. Where this is so, the inference is that elsewhere management are obtaining their own reassurance about the quality of information flow to them.

As Jain (1974: 135) puts it, the scope of internal auditing is largely dependent on the needs and perceptions of the top management of a particular organisation. The scope of internal auditing, therefore, differs from one organisation to another. The scope of internal auditing has changed over time. Today's internal auditor goes beyond financial/accounting matters to audit other operational activities of the organisation.

According to Onyango and Smith (1987), Mogere (1984), Ricchiute (1982), Thompson (1982), Joshi (1981), Chambers (1980 and 1982), and Deloitte Haskins + Sells (1978), prevention and detection of errors and fraud remains as important as ever, but internal audit can also be used for carrying out audits of the operations of the business by examining the economy, efficiency, and effectiveness of its activities. This will improve the overall performance of the organisation.

An 'international' survey by the Institute of Internal Auditors found that over 80 percent of internal audit departments were examining all organisational activities by 1975 (Chambers: 1980: 275).

This may not have been achieved in all parts of the world, especially the unsurveyed parts (for example, the whole of Africa was not included in the survey).

To be effective in his work, the internal auditor needs to be independent of the operations and line managers of the function being audited. To be independent of the operations the internal auditor should never audit any activity carried out by him.

To have the independence of mind in his work the internal auditor should be responsible to an officer of a higher rank than the level of his audit (Ostlund: 1975). Deloitte Haskins + Sells (1978: 1) say that the internal audit department should be responsible to the Board of Directors (BOD) as the BOD is the one responsible for an effective system of internal control. This will enhance the taking of the necessary independent action.

1.2 Statement of the Problem

In the dynamic world of today management problems are enormous. Thus management devotes most of its time finding solutions to and administering those problems. This forces management to be further away from the operations as it is very busy formulating policies and procedures, and reviewing and interpreting reports on operations. Management has no alternative, but to rely on internal control to provide operating data and the assurance that management policies are being executed faithfully.

Internal auditing is a part of internal control but it differs from the other controls in that it is charged with the responsibility of measuring and evaluating the adequacy and effectiveness of other controls (Chambers 1982). Therefore, internal auditing is the most important part of internal control.

Research studies carried out in other parts of the world indicate that the scope of internal auditing has changed over time. Historically, the major effort of internal auditing has been devoted to accounting and financial data. Surveys carried out by the Institute of Internal Auditors indicate that today's internal auditor does not only concern himself with accounting and financial data; he goes beyond the books of accounts to evaluate the operations behind the accounting numbers (Chambers: 1980).

Since today's internal auditor is concerned with all the activities of the organisation, it is appropriate for him to report to the top management (BOD). This will make him independent of the line managers of the functions being audited. It is also important that the internal auditor should be independent of the activities he is auditing; that is, he should never audit what he had authority and/or responsibility to execute. This is the concept of objectivity.

Objectivity and organisation status (levels of reporting) are the two variables used to measure the level of the degree of independence of the internal auditors.

Whereas some studies on the scope and independence of internal auditing have been done in other parts of the world, no such studies have been conducted in Kenya. Kenya is not yet a member of the Institute of Internal Auditors and hence the results of the Institute's surveys do not incorporate the Kenyan situation.

Most of the members of the Institute are from developed countries whereas Kenya is a developing country. The purpose of this study therefore is to find out what the situation is like in Kenya.

1.3 Objectives of the Study

This study has three objectives:-

(1) To determine the scope of internal auditing in publicly quoted companies in Kenya, that is, to investigate whether internal audit function in those companies goes beyond the books of accounts to evaluate the operations behind the accounting figures.

(2) To determine the degree of independence accorded to internal auditors in publicly quoted companies in Kenya. This will be achieved by investigating whether internal auditors are objective in their

work and the organisation status accorded to them in those companies.

(3) To investigate whether there is any significant relationship between any two of the following four variables; scope, independence, age and size of internal audit department.

1.4 Importance of the Study

This study is expected to be of importance to the following groups of people:

(1) Managers - the study will hopefully increase their awareness as regards the importance of scope and independence of the internal audit function. The managers may, therefore, use the results of the study to improve the situation of internal audit in their respective companies to achieve a higher level of effectiveness in internal audit departments. Those without such departments may use the results of the study to design them.

(2) Internal Auditors - They could use the results of the study to make their role better in their respective organisations.

(3) External Auditors - They could use the results of the study as a guide in designing internal audit systems for their clients.

(4) Academicians - The study will serve as a base for further research mainly due to the fact that this is a very 'green' area with many unresolved issues. This area of study is also quite new in developing countries like Kenya.

1.5 Overview of the Project

The project is made up of five chapters including the present one. In chapter two, the literature relating to scope of internal auditing is explored. In the same chapter operational auditing, Responsibility and Authority, and independence in internal auditing are discussed.

In chapter three the project research design is discussed in further details. The findings of the study and the analysis are presented in chapter four. Finally the project is concluded in chapter five where a summary of the study, conclusions and recommendations, limitations of the study, and suggestions for further research are discussed.

CHAPTER TWO

LITERATURE REVIEW

2.1 Scope and Objective of Internal Audit

The scope of the internal auditor's work is largely dependent on the instructions he receives from the top management. According to Jain (1974: 135), being an agent of management the internal auditor has to operate within the parameters set by the controlling management. The management sets the parameters by defining the role of the internal auditor, that is, what he is expected to audit and thus by implication what he is not expected to audit. Thus, the scope of internal auditing differs from one company to another according to the needs and perceptions of the different management.

In some organisations the scope of internal auditing may be too limited while in others the scope may be too wide. Where the scope of internal auditing is limited Abernethy (1970: 23) says that it is wise for the internal auditor to have his duties clearly stated in writing so that there can be no question of his being held responsible for any shortcomings outside the range of his instructions.

According to Thompson (1982), Davies (1956), and Cunningham (1955)the major effort of internal auditing has been devoted to accounting and financial data in the past. The purpose of internal auditing was the prevention and detection of errors and fraud (Cunningham, 1955: 51). Thompson (1982: 31) says that in late 19th and early 20th centuries the internal auditor's duties consisted of such routines as checking arithmetic computations, effecting reconcilliations of accounts, analysis of internal accounts against supporting documentation, and review of entries on a pre- and post-transaction basis against the supporting documentation of entry. Therefore, the internal auditor was just a 'checker'.

Before 1941 there was no uniformity in the requirements of internal auditor, each company operated its own internal audit uniquely (Cunningham, 1955: 51). Cunningham (1955: 52) further says that it was around this time (1941) that concepts began to crystallise and basic standards of practice were developed. This resulted from the formation of the Institute of Internal Auditors and the writing of the first book in internal auditing (by Victor Z. Brink) in 1941.

In 1947 the Institute of Internal Auditors issued the first edition of its Statement of Responsibilities which defined the duties of the internal auditor as follows:

> Internal auditing.... deals primarily with accounting and financial matters but... may also properly deal with matters of an operating nature. (Chambers, 1980: 275).

The internal audit function was, therefore, still dominated by accounting and financial matters. In 1957 the Institute of Internal Auditors reviewed its Statement of Responsibilities which led to the definition of the internal auditor's duties as follows:

> Internal auditing....(reviews) accounting, financial and other operations... (Chambers, 1980: 275)

By this time (1957) there was a balance between the audit of financial / accounting matters and the audit of other operations (which is now referred to as operational auditing). This new view of internal auditing coincided with the recommendations of Walker et al. (1957) and Davies (1956). They had recommended that attention should not be confined to accounting/finance department, but should be extended to every function involving protection of assets, revenues and costs. Their recommendation was based on the increase in environmental problems which management itself needed to handle especially after the second world war.

After the war, management were highly involved in clearing the damages caused by the war to bring the companies back to their normal standing. Many management theories and techniques came up during and after the war such as operations research, modern motivation theories, computers, modern marketing theories and modern communication techniques. The new techniques came up with their own problems which management needed to consider. For instance competition became more vigorous due to the rapid technological breakthroughs. This resulted in high rate of delegation of managerial duties, hence the need for better internal audit systems was realised.

In 1968 a research study by Adams A.A. concluded that internal auditing should not be restricted to items normally checked by external auditors: it could be extended to other operating matters. The same year (1968) the Institute of Internal Auditors carried out an 'international' survey which indicated that only one fifth of the internal audit departments restricted their audit interest to financial aspects (Chambers, 1980: 275). Probably these findings led to the review of the Statement of Responsibilities in 1971 which defined internal auditor's duties as follows:

> Internal auditing...(reviews) operations. (Chambers, 1980:275)

Therefore, by 1971 financial matters were simply regarded as one of the many operations, not meriting special mention. This is what is referred to as 'today's' internal auditing by such authors as Chambers (1982), Thompson (1982) and Joshi (1981).

This new view of internal auditing did not go without some criticisms. Cemach (1972: 390) argued that the internal auditor should concern himself with security (safeguarding of assets) and let the line managers manage the organisation. He further said that 'an hour spent doing what management should do means an hour less spent on what the internal auditor should do.'

In his argument Cemach does not state what management should do. He does not also define the term assets. In the real meaning of the word all activities of the organisation have something to do with the organisation's assets. It, therefore, follows that the internal auditor should concern himself with all the activities of the organisation in the process of safeguarding assets.

Cemach does not seem to appreciate the fact that administrative problems for management have increased with time leading to control by management being ineffective. This, in turn, has led to a high level of delegation of management duties which need to be monitored more closely by a specialised person, the internal auditor (Nwoko:1985, Walker et al:1957, and Davies:1956).

A similar argument was put forward by Perrin (1972: 73). He argued that the extension of internal auditing too much into operations may be seen as competition by the other specialists who provide service to the management such as systems analysts, data processing specialists, and quality control specialists. This is a more logical argument as this actually happens in organisations not only with internal auditors but also with other specialists for example accountants and marketers.

If all internal auditors supported the views of Morton (1975), then other specialists in the organisation would feel highly threatened. In the Accountants Digest of June 1975: 197, Morton said that:

> We must, by proving our worth to management, replace outside consultants in as many areas as possible. This means that we must include individuals with diverse backgrounds, training and experience in our staffs as opposed to a staff of only accounting oriented persons.

Morton's views coincided with the carrying out of another 'international' survey by the Institute of Internal Auditors in 1975. The survey indicated that 80 per cent of internal audit departments were examining all the organisation activities both in U.K. and 'internationally' (Chambers, 1980: 275).

The Institute of Internal Auditor's Statement of Responsibilities of Internal Auditors in 1971 (reviewed in 1975) gave the following as the objective of internal auditing:

> The objective of internal auditing is to assist all members of management in the effective discharge of their responsibilities by furnishing them with analyses, appraisals, recommendations and pertinent comments concerning activities reviewed. Internal auditors are concerned with any phase of business activity in which they can be of service to management. This involves going beyond the accounting and financial records to obtain a full understanding of the operations under review. (Richiute: 1982 Auditing Concepts and Standards, p. 30).

The objective is, therefore, to serve management from all its sides of the organisational activities if possible. Ricchiute (1982: 49) has also given the scope of work as defined by the Statement of Responsibilities. The scope of internal auditing should encompass the examination and evaluation of the adequacy and effectiveness of the organisation's system of internal control and the quality of performance in carrying out assigned responsibilities. The work is divided as follows:

(a) Reliability and Integrity of information - internal auditors should review the reliability and integrity of financial and operating information and the means used to identify, measure, classify and report such information.

(b) Compliance with policies, plans, procedures, laws, and regulations - internal auditors should review the systems established to ensure compliance with those policies, plans, procedures, laws and regulations which could have a significant impact on operations and reports and should determine whether the organisation is in compliance.

(c) Safeguarding of assets - internal auditors should review the means of safeguarding of assets and, as appropriate, verify the existence of assets.

(d) Economic and efficient use of resources - internal auditors should appraise the economy and efficiency with which resources are employed.

(e) Accomplishment of established objectives and goals for operations or programs - internal auditors should review operations or programs to ascertain whether results are consistent with objectives and goals and whether the operations or programs are being carried out as planned.

(f) Recommendations for operating improvements - where irregularities exist, the internal auditor must be creative in developing recommendations for improvements.

Conducting of special assignments which top management commission is given as a separate duty for the internal auditor by Deloitte Haskins + Sells (1978:1) in their manual on internal audit.

As Chambers (1980: 274) puts it, the scope of internal auditing has changed from a check on detailed compliance with laid down accounting procedures on behalf of the chief accountant to an aid of management in achieving efficiency and effectiveness in all its operations. In addition Thompson (1982: 31) says that 'unlike his predecessor who was the major part of control function, today's internal auditor is the evaluator of controls of the organisation.'

It should be noted that safeguarding of assets through the prevention and detection of loss remains a basic purpose of internal auditing. As Chambers (1980: 277) puts it, management certainly still expect the internal auditor to be effective in detecting material error and fraud.

As discussed above, the scope of internal audit is changing fast. Just as organisations are under constant pressure to make the best use of their resources, so must their internal audit departments be equally flexible. This will ensure that the organisations will operate with good balance between internal control and organisational efficiency and effectiveness. The past emphasis on financial matters should be dropped and all functional areas audited.

It is possible for financial matters to appear quite alright but the operations behind these financial matters are not alright, that is, the economy, efficiency and effectiveness of such operations are not alright. This may be related to the collapsing of organisations which show stable financial positions through the financial statements, for example the recent collapse of financial institutions in Kenya. Therefore, it is quite logical and necessary for the internal auditor to go beyond the financial data and examine the operations which eventually lead to such financial data.

Since control measures exist in all functional areas then all departments can benefit from internal audit as internal auditors are specialists in controls. The only problem in going beyond financial data is lack of broadly qualified people to carry out such an audit. Nevertheless, it is possible to make use of other specialists or employ some in the internal audit department. This would replace outside consultants who may be more expensive to the organisation. The internal auditors (consisting of specialists in other fields other than accounting) would even do the job better than outside consultants as they (internal auditors) specialise in the operations of one company.

As mentioned earlier, the scope of internal auditing differs from one organisation to another due to the differences in management teams. One wonders whether this should be the case. It is as if there are no standards of practice that define the scope of internal auditing. The standards are there (in the Statement of Responsibility discussed earlier) but they are not enforceable as opposed to those of external auditing and financial accounting. A major reason why these standards are not enforceable is that it has not been resolved whether or not internal auditing is a profession by its own. Another reason is that the Institute of Internal Auditors has not made its views well known in various parts of the world, especially in the developing world. It has tended to concentrate more in USA and European countries.

Since the need to widen the scope of internal auditing is being realised with time, then this is the time that the Institute of Internal Auditors tried to enforce its standards of practice through such bodies as stock exchanges, external auditors, and law making bodies (Companies Acts).

2.2 Operational Auditing

As discussed in the last section, the horizon of internal auditing has expanded beyond the traditional accounting and financial activities to include other organisational activities. In their article, Onyango and Smith (1987: 23) say that:

> when financial reporting is effectively used as a management tool, the internal audit service can be directed to take its examination beyond financial records into the operational activities they describe.

At this stage internal audit service becomes operational audit. This will require acquisition of other skills as regards the other organisational activities being considered. It should be noted at this point that the operational auditor is not different from the internal auditor. It is the activities being performed at a point in time that make somebody internal or operational auditor. When performing accounting and financial records audit, one may be referred to as the internal auditor. He changes to operational auditor when he starts auditing other non-accounting activities.

Operational auditing concentrates on the economic acquisition of resources (people, materials, and finances); efficient combination of such resources to achieve a given task on output; and effectiveness or the achievement of organisational objectives. As Onyango and Smith (1987: 24) put it, operational performance is judged by comparing it with relevant yardsticks which could be internal or external to the organisation; for example engineering estimates (internal) and competitors performance (external).

As Koontz et al (1984: 582) put it, there is no persuasive reason why the concept of internal auditing should not be broadened in practice. Perhaps the only limiting factors are the ability of an enterprise to afford so broad an audit, the difficulty of obtaining people who can do a broad type of audit, and the very practical consideration that individuals may not like to be reported on. In support of the broadening of the internal audit practice Chambers (1982: 108) says that:

> All functions of an enterprise must be managed, and all can benefit from an independent, objective review... we cannot, therefore, limit internal audit to a review of management process in accounting/financial areas only.

According to Stettler (1980: 88) in operational auditing, the auditor becomes a part of the management, taking a management approach in choosing operating areas to be reviewed and in evaluating the method of operation and the controls that are present. He focuses on key areas of risk, and works by exception, that is, areas performing at acceptable levels are excluded from further scrutiny so that time is not wasted.

For the operational auditor to be effective in his work, top management support becomes of crucial importance. He should be allowed to have access to all records and books and all parts (and personnel) of the organisation if he is expected to be effective. Based on some research studies carried out by other people, Koontz et al (1984: 583) concludes that:

> where the broad form of operational audit has been employed constructively and where auditors operate as a group of internal management consultants with a view to helping operating managers, its acceptance has understandably been very high.

With such kind of understanding, internal auditing will be highly effective. This will enhance the achievement of organisational objectives as the internal auditors and line managers will be working as a team.

2.3 Responsibility and Authority

The nature, extent of activities, and organisational status and relationships of internal audit department with other departments differ from one organisation to another, depending on the perceptions and needs of the different top management. It is the top management that establishes the scope of the responsibilities of internal auditing. On this issue Stettler (1980:94) says that:

> The responsibilities of internal auditing in the organisation should be clearly established by management policy. The related authority should provide the internal auditor

> full access to all organisations's records, properties and personnel to the subject under review. The internal auditor should be free to review and appraise policies, procedures, plans and records. In performing his functions, an internal auditor has no direct responsibility for nor authority over any of the activities which he reviews.

Like Stettler (1980), Deloitte Haskins + Sells (1978: 5) hold the same view point. They recommend that the internal audit department should be given appropriate terms of reference which incorporates the agreed objectives to give the internal audit department its authority to use the necessary resources and to have adequate access to operational areas.

It is, therefore, clear that the effectiveness of an internal audit depends on the wishes of top management as they define the department's responsibilities and the related authority.

It should also be noted that the internal audit department's role is advisory in nature, that is, internal audit is a staff function and not a line function. On this issue Walker et al (1975: 519) say that internal audit is a staff function having no direct authority over other functions, that is, it has no 'executive authority'. In addition Gupta (1979) and Walter et al (1957) say that internal auditing is not a substitute for management, and the auditors have no authority to instruct anyone.

Since he has no direct authority over the line managers, the internal auditor reviews the activities and reports to the top management on any lack of conformity to the managerial policy. Research findings (as reported by Koontz et al; 1984: 583) indicate that in most cases where a broad form of internal auditing exists, it is made clear that the auditors do not have authority over activities being audited. The auditors are authorized only to function in information-gathering and advisory capacities. Koontz et al (1984: 584) further report that most of the internal auditors are directed to take up any deficiencies discovered in their audits with the immediate line manager involved before making any reports to top management.

2.4 Independence in Internal Auditing

Independence is one of the major factors that influence the effectiveness of an internal audit department. On independence Ricchiute (1982: 3) says that:

> An internal auditor must be independent of both the personnel and operational activities of an organisation, otherwise the integrity of an internal auditor's conclusions would be suspect.

This is what various authors refer to as independence of function and independence from operations. A study by Rittenberg and Davis (1977) concluded that the external auditors typically adjusted their audit scope in light of the independence of internal auditors.

The Institute of Internal Auditors' Statement of Responsibilities identifies organisation status and objectivity as the primary means for achieving independence from personnel and activities, respectively (Ricchiute; 1982: 30-32).

2.4.1 <u>Organisation status</u>

The Statement of Responsibilities (as reported by Ricchiute: 1982) discusses organisational status as follows:

> The organisational status of the internal auditing function and the support accorded to it by management are major determinants of its range and value. The head of the internal auditing function, therefore, should be responsible to an officer whose authority is sufficient to assure both a broader base of audit coverage and the adequate consideration of an effective action on the audit findings and recommendation.

Out of their research study, Uecker et al (1981: 466) concluded that:

> In the context of material distortions of the financial statements as a rational act, the higher the level in the organisation to which the internal auditor reports, the greater the potential loss (to the guilty party) from detection of an irregularity

> because higher levels of authority have greater power to impose sanctions.

According to Thompson (1982) and Ostlund (1975) the internal auditor will be more effective in his work if he reports to an officer of a higher rank than the level of his audit. This will give him the independence of mind in carrying out his work. A study by Uecker et al (1981) classified the internal auditor as 'high aggressive' if he reported to the Board of Directors and as 'low aggressive' otherwise. If the internal auditor reports only to the manager of the function or department audited, the incentive for that manager to implement the recommendations is greatly diminished. Thompson (1982: 31) recommends that the internal auditor should communicate both to the manager of the function audited and a higher ranking officer. This will motivate the auditee to act on the recommendations of the internal auditor promptly.

In a research study by Adams (1968) internal auditors reported that their assigned place in the organisation structure allowed latitude for system wide operation and independence of mental attitude. Other studies by such researchers as Abdel-Khalik et al (1983), Rittenberg and Davis (1977), Stanford Research Institute (1977), and Institute of Internal Auditors (1975) indicate that the administrative level to which the head of the internal audit department reports is an important factor in assessing the independence of the internal audit function. It is an indication of the extent of their ability to act independently of the individuals responsible for the function(s) being audited.

Out of his experience in the banking industry Ostlund (1975: 70) had the following to say:

> The internal auditor must be completely independent of those charged with regular operations of the organisations. He must not make policies, but he must have access to all areas of the bank, and he must have the full support, confidence and respect of top management and the shareholders representatives, the board of directors.

Therefore the chief internal auditor should be responsible to an organisational level above the level subject to his audit so that he may be seen to be independent. This will also give him unimpended access to all parts of the organisation and the freedom to critically evaluate the performance of management as a whole.

'International' surveys by the Institute of Internal Auditors indicate that chief internal auditors increasingly report to vice-president/director level or higher - 45 percent in 1968 and 54 percent in 1975 (Chambers; 1980: 278). 'Worldwide' there was a decline in the proportion of chief internal auditors reporting within finance - 73 percent in 1968 and 58 percent in 1975, but in U.K. 89 percent still reported within finance in 1975 (Chambers: 1980: 278). Another study (1978) of internal audit practice in USA (as reported by Koontz et al; 1984: 583) in 169 manufacturing companies and 115 non-manufacturing companies found that the internal audit practice has been considerably broadened and in many companies auditors have been given regular contacts with senior levels of management and even with audit committees of boards of directors.

The essence of internal auditing is to serve as a watchdog for the top management (the master). The highest level of management is the Board of Directors. They are the people responsible for anything that goes right or wrong in an organisation. Since the internal auditor is the evaluator of compliance, efficiency and effectiveness of organisational performance; it is only logical that he should directly report to the Board of Directors or to a member of the Board. This will give the Board members an up to date information as to what is happening in the organisation.

Of late, audit committees have come up in various organisations. These committees are normally composed of non-executive directors. To enhance the independence of the internal auditor further, he should be reporting to such an audit committee if it exists. With such an arrangement, the internal auditor can report on all managers of the organisation effectively as his independence of mind is not jeopardized by any functional manager. This arrangement, would also lead to prompt action — being taken on internal auditor's recommendations as he reports to an officer of higher authority than the manager(s) being audited. Thus this type of arrangement highly enhances the internal auditor's independence of function.

2.4.2 Objectivity

The Statement of Responsibilities (as reported by Ricchiute; 1982) discusses objectivity as follows:

> Objectivity is essential to the audit function. Therefore, internal auditors should not develop and install procedures, prepare records, or engage in any other activity which they would normally review and appraise and which could reasonably be construed to compromise the independence of the internal auditor. The internal auditor's responsibility need not be adversely affected, however, by determining and recommending standards of control to be applied in the developments of the systems and procedures to be reviewed.

In an earlier section we saw that the internal auditor is a part of internal controls but he oversees the other controls. It is, therefore, only logical that he does not design or implement control systems that he will later evaluate as this would result in conflict of interests.

As Chambers (1982: 104) puts it, there is a temptation for management to assign to internal audit the responsibility for conducting some of the most important internal checks such as pre-audit of payments before they are made. Chambers (1982: 104) further says that the rationale is that internal audit department is equipped to perform this work independently and competently. Internal auditors cannot then turn around and audit what they are themselves responsible of executing - objectivity would be impaired. Surveys by the Institute of Internal Auditors showed that the proportion of internal audit departments that had regular responsibilities for certain line control or accounting functions had dropped from 41 percent in 1968 to 27% in 1975 in U.S.A. but in U.K. two thirds of internal audit departments still carried out regular internal checks in 1975 despite examining all organisational activities (Chambers; 1980: 276).

Chambers (1982) and Anderson (1977), however, agree that the internal auditors should be consulted about proposed changes and their advice should actually be sought regarding the control element in any proposed changes as they are independent assessors of the adequacy of control procedures. On the same issue Chambers (1982: 105) says that it is not conceptually correct. He says that:

> If these recommendations are implemented, it cannot be said that the audit department will necessarily be so objective on its return visit when the system reflects material amendments in control procedures originally suggested in the auditor's earlier audit report.

Chambers (1982: 106) goes further to suggest precautionary measures the internal auditor can take to safeguard his objectivity, for example, staffing return audit visits with different audit personnel. But in essence there remains a threat to subsequent objectivity (in subsequent audit visits) in the recommendations made. Chambers (1982: 106) concludes by the following remarks:

> This is however an acceptable threat as it is much more constructive of the auditor to make recommendations than merely to issue a certificate which specifies in general terms whether or not the systems of control were found to be satisfactory.

Out of his research study Rittenberg (1977) ended up with the same conclusion as Chambers (1982) as regards recommendations on new systems by the internal auditors (as reported by Rittenberg and Davis; 1977: 55). On the same issue of recommendations by internal auditors Tony Wilson (1987: 7) says the following:

> The auditor or accountant who can put forward a solution at the same time as reporting a problem shines out as a welcome and valuable

> member of management team. Unfortunately there are still some who seem to regard their job as being to act as retrievers who wag their tails as they drop dead birds at your feet, but don't tell you what to do with them.

As far as external auditors are concerned, research studies by Margheim (1986), Schneider (1984) and Clark et al (1979) indicate that objectivity is one of the dominant factors considered by external auditors in evaluating the effectiveness of an internal audit department. Objectivity in internal audit, therefore, benefits both the organisation and the external auditors.

It is very logical and necessary for the internal auditors to be independent of the functions they are auditing. This means that the internal auditors should never audit what they have the responsibility of executing. Thus they should never design and/or implement systems that they will later evaluate nor should they be assigned any line function or day to day internal check routine which will later be subject to their evaluation. This enhances their being objective in giving their recommendations on areas audited.

The problem arises when the internal auditors are called upon to suggest controls on new or changes in systems which will later be subject to their audit. In such a situation the internal auditor cannot be expected to be fully objective in subsequent audit visits.

Being a human being, the internal auditor will obviously be reluctant to give recommendations on weaknesses existing in the system he had recommended earlier. As discussed earlier, this problem may be minimised by manning subsequent audit visits by different people from those who made the earlier recommendations. The internal auditor may be seen as a specialist in controls, hence he is the best person to give such recommendations. The situation would even be worse if such controls are not instituted in new or changes in systems.

Since the internal auditor deals with all the activities of the organisation, he is in a position to view the organisation from a systems point of view. Each and every control instituted will affect more than one functional area of the organisation. The internal auditor is in the best position to adjust that control measure to maximise its benefits to the organisation in totality as opposed to a functional manager who is more interested in better results for his department and not for the organisation as a whole.

We cannot therefore avoid the internal auditor's recommendations in new or changes in systems which will later be subject to his evaluation. It is, however, the duty of the internal auditor to maintain a high degree of objectivity in his work. He should try to avoid as much as possible any activity that would jeopardize his objectivity. If necessary he can go ahead and explain to the top management as to why he should not undertake some duties that are delegated to him. Where the top management understands what the situation should be like the internal auditor will achieve a higher degree of objectivity in his work. Otherwise he has no alternative but to follow the orders of his master, the top management.

CHAPTER THREE

RESEARCH DESIGN

3.1 Population

The population of interest in this study was made up of all the fifty five (55) companies that were quoted on the Nairobi Stock Exchange (NSE) as at 31st March 1988*. A cut-off date was selected because the number of companies quoted on NSE varies over time, that is, some join while others quit the NSE.

This study was limited to publicly quoted companies due to two reasons. First, since these companies are public in nature, they are easier to deal with as opposed to private companies, partnerships, and sole proprietorships. As such publicly quoted companies were not expected to be as restrictive as the others in revealing information for academic research purposes.

Secondly, publicly quoted companies (as opposed to others) are answerable to a larger number of people (the shareholders) as regards the economy, efficiency and effectiveness of a company's operations. As such they would be expected to have internal audit departments which are up to date. For example, in United Kingdom it has been suggested that all public companies should be required to maintain internal

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* See Appendix 2

audit function (Chambers: 1980: 274).

In Kenya a similar suggestion was launched by Joshi (1981: 15) in his article on 'Effective Internal Auditing' in 'The Accountant'. He suggested that the Companies Act should be modified to make internal audit mandatory for companies having a paid up share capital exceeding 2.5 million shillings and for all companies listed with the stock exchange. He also suggested that the Act should explicitly define the scope of internal audit and should include not only financial audit but also the operational audit.

It is also true that the literacy rate in Kenya is increasing which implies that the shareholders are becoming more and more aware of their rights to question various company operations and/or undertakings. This in turn increases the need for internal audit function for evaluating the economy, efficiency and effectiveness of such company operations and/or undertakings. Management cannot do this evaluation effectively as they are occupied with formulation of policies and precedures, and interpreting reports on operations.

3.2 Sample

All the publicly quoted companies were included in the sample. It was found feasible to study the whole population since the companies quoted in NSE were only fifty five (55) in total. Moreover not all publicly quoted companies were expected to have internal audit departments as some of them were branches or subsidiaries of multinational companies whose internal audit departments are at their head offices. Again, not all the publicly quoted companies were expected to cooperate by filling the questionnaire, hence the necessity to use a census.

3.3 Research Instrument

Data for this study was collected by means of a structured questionnaire*. Only one questionnaire was used to collect all the data related to the issue under study. The questionnaire was designed to obtain information from the chief internal auditors or internal audit managers of the companies under study.

The questionnaire used in this study was made up of three questions. Questions one and two were just 'discussion' opening questions while question three carried the thrust of the study. Question three itself was divided into five (5) parts. Questions 3a, 3b and 3e were designed to measure the scope of internal auditing, that is, whether the internal auditors go beyond the books of accounts to evaluate the operations behind the accounting figures. Question 3e was made up of statements describing the scope of

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*See Appendix 1 for the particulars of the questionnaire.

internal auditing which were recommended by the Institute of Internal Auditors in its Statement of Responsibilities, 1971 (reviewed in 1975).

Questions 3c and 3d were designed to measure the degree of independence accorded to internal auditors in the companies under study, that is, independence of function and independence of operations. The internal auditor is independent of the function when he reports his findings to an officer of higher rank than the manager of the function being audited. He is independent of the operations if he does not audit any operation that he has authority and/or responsibility for executing.

In this study the Likert-type scale was used to score the responses as regards the issues under study. In questions 3a, 3c and 3e scores of 5, 4, 3, 2, and 1 were assigned to "to a greater extent", "to a great extent", "to a moderate extent", "to a small extent", and "to no extent". In questions 3b and 3d scores of 1, 2, 3, 4, and 5 were assigned to "to a greater extent", "to a great extent", "to a moderate extent", "to a small extent", and "to no extent".

For ease of data analysis the statements in questions 3b and 3d and their scores were laterally inverted (from positive to negative) so that their scores could be consistent with those of questions

3a, 3c, and 3e. For example, a score of 4 in the following statement (from question 3d) "internal auditors receive cash from debtors" was taken to be the same as a score of 2 in the following statement, "internal auditors do not receive cash from debtors."

This disperity was found to be necessary for the ease of understanding of the questions by the respondents. For each statement the respondents were requested to tick in the box that suitably described the extent to which the statements were applicable in their particular cases.

The type of questionnaire used in this study has been used in previous research studies in social sciences. In auditing two studies at hand were carried out by Muragu (1981) - A Survey on the Need and Scope for Independent Audit of Management by Certified Public Accountants in Kenya and by Rittenberg and Davis (1977) - The Roles of Internal and External Auditors in Auditing EDP systems.

3.4 Data Collection Procedure

After the final draft of the questionnaire was ready the 1986 telephone directory was used to obtain the physical location, address, and telephone numbers of the companies quoted on the NSE. This was necessary because the "drop and pick later" method of questionnaire distribution was used for all companies within the boundaries of the City of Nairobi. The method had some merit as the respondents had adequate time to think about the questions and provide well researched answers. Furthermore, respondents were requested to give dates as to when the questionnaires would be picked, hence the response rate was expected to be high.

For the companies outside the city of Nairobi the mail method of questionnaire distribution was used. A stamped self-addressed envelope was enclosed to increase the response rate. In both cases follow-up by telephone was used to hasten the filling of the questionnaire by those respondents who were taking their time.

Of the 55 publicly quoted companies 44 of them were found to be within the City of Nairobi while 11 were outside. Thus, 44 questionnaires were physically delivered to the respondents while 11 were sent by post.

3.5 Techniques of Analysis

In this study tabulations, percentages, and cross-tabulations will highly be used in analysing the data obtained from the field. These might help in summarizing the data for further analysis (where necessary and/or for easier understanding and conclusions derivation.

There are two variables being measured in this study, that is, scope of internal auditing and the related independence. As stated earlier objectivity and organisation status accorded to the internal audit function are the measures of independence in this study. Each of these aspects is being measured through various statements as discussed in an earlier section.

A respondent's score on each of these aspects is obtained by summing up his scores across statements. The scores thus obtained represent the aspect measured. Summing across statements has been recommended by Emory (1980:272) and Churchill (1983:258). If there are 10 statements it is possible for a respondent to score from 10 to 50 points with 30 points being equivalent to a neutral position.

The neutral position is the indifference score (3) multiplied by the number of statements (10). If a respondent's score is less than 30 points it is clear that he has a low level of the aspect being measured and if he scores more than 30 points, he has a high level of the aspect being measured. These total scores could be used to rank the companies in a descending or an ascending order.

The interpretation of the scores nearer the neutral position is less clear. For example, a score of 33 is slightly above the neutral position in the "high level" side, but it may represent a relatively low level score when compared to those of other respondents. To get out of this difficulty we can classify the respondents into three classes by using the interquartile range concept. Any respondent who scores beyond 75 percent (37.5 points) of the maximum total score (50 points) has a high level of the aspect being measured. Anybody scoring less than 50 percent (25 points) of the maximum total score has a low level of the aspect being measured. The rest will be considered as having a moderate level of the aspect being measured.

Even though the total summation is of great relevance a statement by statement analysis will be carried out. This will add much weight to the total summation analysis. It is important to rank the various statements dealing with each aspect being measured. This will indicate the most common activities of internal audit function. This ranking will be achieved through the use of average score per statement.

The average score per statement is arrived at by summing the scores by all respondents and dividing by the number of respondents. Rittenberg and Davis (1977) used this method in their research study to rank the various activities undertaken by internal and external auditors in auditing EDP systems.

From the data available two more types of ranking are possible, that is, ranking the companies by size of the internal audit department (number of employees) and ranking by age of the internal audit departments in the various companies. The size of the internal audit department (in terms of employees) is taken to indicate the size of the company. It is only a big company that can afford to employ a large number of people in the internal audit department - the bigger the company the bigger the internal audit department.

Using the ranking of the companies by summation across statements, the ranking by size, and the ranking by age, Spearman Rank Order Correlation Coefficient will be used to test the relationship between:

(1) Scope of internal auditing and size of internal audit department,
(2) Scope of internal auditing and Age of internal audit department,
(3) Independence of Internal audit function and size of Internal audit department,
(4) Independence of internal audit function and Age of Internal audit department,
(5) Scope and Independence of internal audit function,
(6) Size and Age of Internal audit department.

As Churchill (1983:595) puts it, Spearman correlation coefficient, denoted as r_s is one of the best known coefficients of association of rank order data. This coefficient is applicable where two variables, both measured on an ordinal scale, are ranked in two ordered series. To determine whether there is any relationship between the two variables we use the differences in ranks based on each of the two variables. Let x_i be the rank of the ith company with respect to the first variable and y_i be the rank of the ith company with respect to the second variable. Let $di = x_i - y_i$ be the difference in rankings of the ith company.

With this data, the Spearman rank-order correlation coefficient is calculated using the formula below:

$$r_s = 1 - \frac{6 \sum_{i=1}^{n} di^2}{n(n^2-1)}$$

where n = the number of companies being ranked.

The null hypothesis in this situation would be that there is no relationship between the two variables, while the alternate hypothesis would suggest that there is a relationship. According to Churchill (1983:597), the null hypothesis that $r_s = 0$ can be tested by referring directly to the tables of r_s or, when the number of sample objects is greater than ten, by calculating the t- statistic as follows:

$$t = r_s \sqrt{\frac{n - 2}{1-r_s^2}}$$

which is referred to a t-table for n-2 degrees of freedom.

If the calculated t exceeds critical t, the null hypothesis of no relationship is rejected. Where the calculated t is less than the critical t, the null hypothesis, that there is no relationship is not rejected.

The upper limit of the Spearman Rank-order correlation coefficient is one, since with perfect agreements in the ranks, $\sum_{i=1}^{n} d_i^2$ would be zero. Thus a relationship would be said to be significant and relatively strong if r_s is near one.

CHAPTER FOUR

DATA PRESENTATION AND ANALYSIS

4.1 RESPONSE RATE ANALYSIS

Of the 55 respondents who were issued with the questionnaire 42 responded. Of these 42 responses only 24 could be used in this research study. The other 18 responses were just for informing the researcher that the respective companies did not have internal audit departments. A summary of the distribution and response is shown in table 1 below:

Table 1

Questionnaires Sent To Heads of Internal Audit Departments

	Number	Percentage
Responses received:		
From those with internal audit departments	24	43
From those without internal audit departments	18	33
Total responses	42	76
No response	13	24
Total questionnaires issued	55	100
Response Rate	76%	

Through some other alternative procedures, the researcher found that out of the 13 companies that never replied, 9 of them had internal audit departments some of which were well established. The alternative procedures included, inter alia:

(a) Observations when dropping questionnaires and during subsequent visits (for example, such titles as "Internal Auditor - EDP", "Internal Auditors - Plantations", and "Internal Audit Manager" could be seen on the doors of the offices of some of these companies),

(b) Talking to the internal auditors themselves either through the phone or face to face, that is, when persuading them to fill the questionnaire and,

(c) Interrogating junior staff and friends working in such companies informally.

Assuming that the others that never replied did not have internal audit departments, one could roughly say that out of the 55 publicly quoted companies 33 (60 percent) had internal audit departments. Going by the responses, out of the 42 companies that responded 24 (57 percent) had internal audit departments. There was no material difference whether we made the above assumption or go by the responses.

There were various reasons for non-response by the 13 companies that never responded. These reasons included, inter alia:

(a) Need to maintain corporate and political security. This was a common case mainly in companies related to the Government of Kenya in one way or another and where the respondents were foreigners,

(b) waiting for approval either from the chief executives who could be abroad for a business trip or from the parent company,

(c) outright refusal (for example "our company is in chaos and we do not want more from the University" or "we are too busy, we have no time for questionnaires"), and

(d) misplacement of questionnaires (even in cases where the researcher made an effort of taking a second questionnaire where such a complaint was raised, the second questionnaire ended up being misplaced also).

4.2 The Scope of Internal Auditing

In section 4.1, it was concluded that about 57 percent of the publicly quoted companies in Kenya at least maintained internal audit function. These results compared very well with the situation in U.K. in 1980 whereby only approximately half of the listed companies maintained internal audit function (Chambers, 1980:274). This in turn matched very well with the fact that most of the publicly quoted companies in Kenya had some U.K. origins or some relationships with U.K. companies in terms of directors, external auditors, financing, shareholding, and branch or subsidiary relationships.

The results of the field work on the issue of scope of internal auditing are summarised in Appendices 3A and 3B.

In Appendix 3A there are 22 statements describing the issue of scope. Thus, the maximum possible total score for one respondent was 110 points while the minimum possible was 22 points. The neutral position was 66 points. From Appendix 3A, it appears that the issue of scope was quite wide in these 24 companies. Out of 24 companies 17 (71 percent) scored over and above the neutral position (66 points). Table 2 below summarises these results:

Table 2

	Below 66 points	Above 66 points	Total
Number of Companies	7	17	24
Percentage %	29	71	100

This implied that the scope of internal auditing in those companies was wide enough to cover some of the other operations other than financial/accounting operations.

The total scores in Appendix 3A could be analysed further to classify the scope of internal auditing into three classes, that is Wide, Moderate, and Normal. As discussed in section 3.5, 75 percent of the maximum possible total score form the cut-off point between Wide and Moderate, that is, 82.5 points. 50 percent of the maximum possible total score form the cut-off point between Narrow and Moderate, that is, 55 points. Table 3 below summarises the total scores from Appendix 3A in this order:

Table 3

	Narrow 22-55	Moderate 56-82.5	Wide 83-110	Total
Number of Companies	2	8	14	24
Percentage (%)	8	33	59	100

From Table 3, it appears that the aspect of scope was wide in those 24 companies which had internal audit departments. 14 (59 percent) of them had internal audit departments with a wide scope, 8 (33 percent) had moderate scope and 2 (8 percent) had Narrow scope of internal auditing. The internal auditors of those 14 companies appeared to be going beyond the books of accounts to evaluate most of the operations behind the accounting figures. Given that Kenya is a developing country, these results compare very well with those of an 'international' &U.K. surveys that showed that in 1975 just over 80 percent of internal audit departments were examining all their organisations' activities (Chambers: 1980:275).

A statement by statement analysis in Appendix 3A and Appendix 3B gives better results on the particular activities that were being carried out by internal auditors in those 24 companies. From Appendix 3B it is evident that apart from statements 3a(ii), 3a(iv) 3a(ix) and 3c(iii); all the other statements were applicable either to a great extent or to a greater extent in more than 50 percent of the 24 companies which maintained internal audit function.

Statement 3a(ii) that "Internal audit recruits must have wide business experience" applied either to a great extent or to a greater extent in only 8 (34 percent) of the 24 companies with internal audit departments. The statement was applicable to a moderate extent in 10 companies, to a small extent in 4 companies and to no extent in 2 companies. Statement 3a(iv) that "internal audit recruits people with non-accounting background" did not apply to a great extent or to a greater extent in any of the 24 companies. It applied to a moderate extent in 3 companies, to a small extent in 5 companies and to no extent in 16 companies.

Statement 3a(ix) that "internal audit employs data processing specialists" applied to a great extent or to a greater extent only in 3 (12 percent) companies. It applied to a moderate extent in 7 (29 percent) companies, to a small extent in 3 (13 percent) companies and to no extent in 11 (46 percent) companies. The results of these three statements 3a(ii), 3a(iv) and 3a(ix) did not conflict one another in any way. They led to the conclusion that the accounting profession was the main source of internal audit staff.

Statement 3e(iii) that "Internal auditors appraise the quality of performance in carrying out assigned responsibilities" applied to a great extent or to a greater extent in 11 companies (46 percent). This was not very low compared to the above three statements as it applied in a much bigger proportion of the 24 companies that had internal audit departments.

The average scores per statement shown in Appendix 3A summarise the results shown in Appendix 3B. Statement 3b(iii) that "Internal audit is <u>not</u> restricted on what areas to audit and not to audit" scored the highest. This was followed by statement 3b(i) that "internal audit is <u>not</u> restricted to items normally checked by external auditors". Number three in the list was statement 3b(v) that "internal audit is <u>not</u> restricted on the information to reveal to the external auditors". These three statements indicated that internal audit function in those 24 companies was generally free to take independent decisions on what to audit and not to audit.

The high scores of the following statements were further indication of how wide the scope of internal auditing was in the 24 companies.

1. 3b(iii) I.A. is <u>not</u> restricted on what areas to audit and not to audit (4.54 points);

2. 3b(i) I.A. is <u>not</u> restricted on items normally checked by external auditors (4.38 points);

3. 3a(iii) I.A. has access to all company records and personnel (4.08 points),

4. 3a(i) I.A. reviews all operational functions on behalf of management (3.96 points), and

5. 3a(v) I.A. maintains and evaluates controls in all departments of the company (3.83 points).

All the statements regarding the issue of scope of internal auditing could be grouped into three classes using their scores, that is, 'highly applicable', 'moderately applicable', and 'lowly applicable'. The cut-off point between high and moderate was 75 percent of the highest possible scores (75 points), 3.75 points, while the one between low and moderate was 50 percent of the highest possible score (5 points), 2.5 points. This classification is shown in Table 4 below.

Table 4

Internal Audit issues applicable to the scope of Internal Auditing

Highly applicable (3.75 - 5.00)	Extent on a 5 point scale
1. 3b(iii) I.A. is not restricted on what areas to audit and not to audit	4.54
2. 3b(i) I.A. is not restricted to items normally checked by external auditors	4.38
3. 3b(v) I.A. is not restricted on the information to reveal to the external auditors	4.25
4. 3a(x) I.A. are often called upon to carry out special investigations	4.12
5. 3a(iii) I.A. has access to all company records and personnel	4.08
6. 3c(v) I.A. ascertain the extent to which company assets are accounted for and safeguarded from losses of all kinds	4.04

Table 4 (contd.)

7. 3ç(iv) I.A. review and appraise the soundness, adequacy, and application of accounting, financial and other operating controls, and promote effective control at reasonable costs	4.00
8. 3a(i) I.A. reviews all operational functions on behalf of management	3.96
9. 3b(iv) I.A. does not just verify and reconcile transactions	3.88
10. 3e(i) I.A. recommends operating improvements	3.88
11. 3e(ii) I.A. ascertain the extent of compliance with established policies, plans and procedures	3.88
12. 3a(i) I.A. maintains and evaluates controls in all departments of the company	3.83
Moderately applicable (2.5 - 3.75)	
13. 3a(viii) I.A. ensures that all management policies are being implemented as required at each department and branch level	3.71
14. 3a(xi) I.A. give recommendations on book-keeping procedures and data processing system	3.67
15. 3b(ii) when auditing other areas (not accounting) I.A. does not concentrate on financial matters only	3.54

Table 4 (contd.)

16. 3a(vii) I.A. suggest control measures before new/changes in systems are implemented	3.50
17. 3e(iii) I.A. appraise the quality of performance in carrying out assigned responsibilities	3.33
18. 3a(vii) I.A. ensures that company operations and programs are consistent with plans	3.33
19. 3a(ii) I.A. recruits must have wide business experience	3.17
20. 3e(vi) ascertain the reliability of management data developed within the company	3.08
Lowly applicable (1 - 2.5)	
21. 3a(ix) I.A. employs data processing specialists	2.12
22. 3a(iv) I.A. recruits people with non-accounting background	1.46

Thus, out of the 22 statements on the issue of scope of internal auditing only two were lowly applicable which just verified that most internal audit staff were from the accounting discipline. All the other statements were either moderately applicable or highly applicable implying that the scope of internal auditing was wide enough to cover the other operations.

Carrying of special investigations by internal auditors seems to have been the most common activity of internal audit in those 24 companies as it scored the highest (4.12) points among the activities of internal auditors discussed in Chapter 2. Of the six activities recommended by the Institute of internal auditors as defining the scope of internal auditing, only two were in the moderately applicable class, that is, 3e(iii) and 3e(vi). The other four duties were in the highly applicable class. Hence, the internal auditors in those companies could be said to be in line with the recommendations of the Institute of Internal Auditors.

There may seem to be some contradiction in the classification of some of the similar statements in the highly applicable class and the moderately applicable class. For example, statement 3e(i) that "internal audit recommends operating improvements" in the highly applicable class vis-a-vis statements 3a(vi) that "internal audit suggest control measures before new/ changes in systems are implemented" and 3a(xi) that "internal audit give recommendations on book-keeping procedures and data processing system" in the moderately applicable class. This difference in classification may be attributed to the difference in the wording of the statements leading to difference in meaning to the respondents. There could be a lot of contradictions in particular questions but these have been highly reduced by averaging of the scores per statement.

Contradictions on the issue of scope were few even when we consider the specific cases. An example of contradiction is the scoring of 5 points in statement 3a(iii) that "Internal Audit has access to all company records and personnel" and a score of 1 in statement 3b(iii) that "Internal Audit is not restricted on what areas to audit and not to audit" by one respondent. One wonders how internal audit can be restricted on one hand and on the other have access to all organisational records.

From the analysis above it appears that the scope of internal auditing is wide, internal audit does seem to include not only the financial audit but also the operational audit in most of the 24 companies that maintain internal audit function.

4.3 The Independence of Internal Audit function

As discussed earlier in chapter 2, the independence on internal audit function is of two dimensions, that is, independence of operations and independence of function (or line staff). Questions 3c and 3d in the questionnaire* were used to obtain the situation

*See Appendix 1 for the particulars of the questionnaire.

in the 24 companies that maintained internal audit function. The results of the field work are summarised in Appendices 4A and 4B.

In Appendix 4A there are 16 statements dealing with the issue of independence in internal auditing. Therefore the maximum possible score per respondent was 80 points while the minimum possible was 16 points. The neutral position was 48 points. Total scores in Appendix 4A indicated that out of the 24 companies 21 (88 percent) scored over and above the neutral position. Table 5 below summarised these results.

Table 5

	Below 48 points	Above 48 points	Total
Number of Companies	3	21	24
Percentage	12	88	100

This implied that the level of independence in those 24 companies appeared to be high. A further analysis on these total scores from Appendix 4A would classify the issue of independence into three categories, that is, high, moderate and low levels of independence. The cut-off point between moderate and high would be 75 percent of the maximum possible total score (80 points) that is, 60 points. The cut-off point between low and moderate would be 50 percent of the maximum possible total score (80 points), that is, 40 points. Table 6 below summarises these total scores in that order.

Table 6

	Low 16 - 40	Moderate 41 - 60	High 61 - 80	Total
Number of Companies	0	10	14	24
Percentage %	0	42	58	100

From Table 6 it is quite clear that the level of independence in those 24 companies appeared quite high as none of them fell in the low independence level class. All of them had either a moderate or high independence level of the internal audit function. 10 (42 percent) companies had a moderate independence level while 14 (48 percent) companies had a high independence level of their respective internal audit functions.

If we consider the two dimensions of independence separately Appendix 4A could be divided into two parts, that is, part 1 dealing with organisation status (statements 3c(i) upto 3d(i)) and part 2 dealing with objectivity (statements 3d(i) upto 3d(x)).

For organisation status there were 7 statements. Therefore, the maximum possible total score per respondent was 35 points. The neutral was 21 points while the lowest possible total score was 7 points. Total score in part 1 indicate that 13 (54 percent) scored above the neutral position. Table 6.1 summarises these results here below:-

Table 6.1

	Below 21 Points	21 Points	Above 21 Points	Total
Number of Companies	10	1	13	24
Percentage %	42	4	54	100

This implies that the organisation status accorded to internal audit function in these 24 companies appeared to be moderately high on average. A further analysis on these total scores from Appendix 4A - part 1 would classify organisation status as High, moderate and low. The cut-off point between High and Moderate would be 26.25 points while the one between low and moderate would be 17.5 points. Table 5.2 below summarises these total scores in that order.

From Table 6.2 we can say that on the average the level of organisation status appeared to be moderate though 9 (38 percent) of the 24 companies have a low level of organisation.

Table 6.2

	Low 7 - 17.5	Moderate 17.5-26.25	High 26.25-35	Total
Number of Companies	9	12	3	24
Percentage %	38	50	12	100

Status accorded to internal audit function.

For objectivity, there were 9 statements. Therefore, the maximum possible total score per respondent was 45 points. The neutral position was 27 points while the minimum possible total score was 9 points. The total scores in Appendix 4A part 2 indicate that all companies scored above the neutral position. This implied that the level of objectivity in those 24 companies was high.

4.3.1 Relationship Between Organisation Status and Objectivity

At this point it would be appropriate to determine whether organisation status and objectivity are related.

We make use of the spearman Rank-Order correlation coefficient (r_s). Appendix 4C depicts the ranking of the companies by organisation status and independence. r_s is calculated as follows:-

$$r_s = 1 - \frac{6(1439)\quad)}{24(24^2 - 1)} = \frac{8634}{13800} = 0.374$$

Since n is greater than 10 we calculate the t statistic as follows:

$$t = 0.374 \sqrt{\frac{22}{1 - (0.374)^2}}$$

$$t = 1.892$$

The critical value of t for 22 degrees of freedom and for α = 0.05 is 1.717. Since the calculated value of t is greater than the critical t we conclude that there is a relationship between organisation status and objectivity.

A statement by statement analysis in Appendices 4A and 4B gives better results on the particular aspects of independence in internal auditing. From Appendix 4B it is evident that statements 3d(iii) upto 3d(x) were applicable to a greater extent in more than 70 percent of the 24 companies which maintained internal audit function. All these statements together with 3a(ii) were measuring objectivity in internal auditing or in other words, independence from operations. Statement 3d(ii) that "when there is a shortage of staff in finance/ accounting department, I.A. do not help in carrying out the duties of the department" was also substantially applicable in the 24 companies. The statement was applicable to 13 (54 percent) of the companies to a greater extent or to a great extent and moderately to 4 of the companies. It was applicable to a small extent in 3 companies and not applicable to 4 companies.

According to the scores on statement 3c(i), 17 (71 percent) companies were responsible to the Board of Directors, either to a great extent or to a greater extent. Though not asked to specify, most of the respondents indicated that they reported to the managing director and not to the Board as a whole. On statement 3d(i) 15(62 percent) respondents did not report to the financial controller/chief accountant/company secretary either to a great or to a greater extent. In a few cases, respondents indicated that they reported to the managing director but always gave a copy of their report to the finance head. On the other hand only 11 (46 percent) respondents indicated that they audit the activities of the finance head to a greater extent or to a great extent.

On the promptness in implementing internal audit recommendations 14 (58 percent) respondents indicated that their recommendations are implemented promptly to a great extent or to a greater extent. No respondent indicated that there was no promptness in the implementation of the recommendations.

The average scores per statement which are shown in Appendix 4A summarise the results of Appendix 4B. Statements 3d(iii) that "I.A. do <u>not</u> sign/endorse cheques before payment to trade creditors" and 3d(vii) that "I.A. do <u>not</u> receive cash from debtors" scored the highest on the issue of independence, specifically, on the independence from operations. Statement 3c(i) that "I.A. is responsible to the Board of Directors" scored highest on the issue of independence of function followed by 3c(v) that "I.A. recommendations are implemented promptly."

All these statements regarding the issue of independence could be classified into three categories by using the average scores, that is, highly applicable, moderately applicable, and lowly applicable. Again the cut-off point between moderate and high was 75 percent of the highest possible score (5 points), that is 3.75 points. The cut-off point between moderate and low was 50 percent of 5 points, that is 2.5 points. This classification is shown in Table 7 below.

Table 7

Internal Audit Issues Applicable to Independence in Internal Audit

Highly Applicable (3.75 - 5.00)	Extent on a 5 Point scale
1. 3d(iii) I.A. do not sign/endorse cheques before payment to trade creditors	5.00
2. 3d(vii) I.A. do not receive cash from debtors	5.00
3. 3d(viii) I.A. do not write off bad debts	4.83
4. 3d(iv) I.A. do not sign/endorse salary cheques before payment to employees	4.5
5. 3d(v) I.A. do not sign/endorse payment vouchers before payment cheques are prepared	4.5
6. 3d(ix) I.A. do not maintain and control petty cash system	4.46
7. 3d(x) I.A. do not maintain and control the register of fixed assets	4.33
8. 3d(vi) I.A. do not control blank voucher books	4.12
Moderately Applicable (2.5 - 3.75)	
9. 3c(i) I.A. is responsible to the Board of Directors	3.58

Table 7 (contd.)

10. 3c(v) I.A. recommendations are implemented promptly	3.54
11. 3d(i) I.A. does not report to the Financial Controller/Chief Accountant/ Company Secretary	3.50
12. 3d(ii) when there is a shortage of staff in finance/accounting department, I.A. do not help in carrying out the duties of the department	3.38
13. 3c(ii) I.A. department audits the activities of the financial controller	3.08
14. 3c(vi) I.A. help external auditors to carry out some of their work during external audit	2.79
Lowly Applicable (1 - 2.5)	
15. 3c(iv) I.A. hold meetings frequently with external auditors	2.33
16. 3c(iii) I.A. has stationed some of its employees at the branches who report to the head office	1.83

It should be noted that all statements that are highly applicable relate to independence from operations (objectivity) and none to independence of function fall in the moderately applicable class while the other two fall in the lowly applicable class. Thus, one may say that independence of operations in those 24 companies appeared quite high while independence of function appeared just moderate.

A few contradictions on the issue of independence of function may be sighted from Appendix 4A especially as regards statements 3c(ii) and 3d(i). It does not make sense to audit the activities of the finance department head to a great or to a greater extent and then report to him to a great or to a greater extent. As stated earlier, the effect of these contradictions is highly minimised by averaging of the scores.

From the analysis above it appeared that the level of independence in those companies was quite high. But when we consider the two dimensions of independence, it is only the independence from operations that had a high level. The independence of function was just moderately high.

4.4 Size and Age of Internal Audit Function

Questions one and two of the questionnaire were dealing with age (in terms of years) and size (in terms of number of employees) of internal audit department respectively. The results of the fieldwork are depicted in Appendix 5.

Coincidentally the oldest internal audit department also happened to be the largest. This department was 50 years old and had 30 members of staff. The members of staff ranged from internal audit manager, two assistant internal audit managers, senior internal auditors and their assistants, and finally the audit assistants. The senior internal auditors were in charge of the various departments of the company such as data processing, finance and accounting, marketing and personnel. This information was given by the internal audit manager. In other companies it was quite difficult to get such inside information leave alone filling the questionnaire.

Second in the list of age was 20 years followed by 17 years and 16 years. Apart from the above case all the other internal audit departments were 20 years old or less. Out of these 24 internal audit departments 13 (54 percent) were less than 10 years old. Classification of the companies by age is depicted in Table 8 below.

Second in the list of size was 16 employees (about half of the above exceptional case). This was followed by 15 employees and 11 employees. Out of these 24 internal audit departments 18 (75 percent) had less than 10 employees. 6 (25 percent) had one employee only. Classification of the companies by size is depicted in Table 9 below.

Table 8 - Age in Years

	0 - 4 years	5 - 9 years	10 - 14 years	15 - 19 years	20+ years	Total
Number of Companies	6	7	5	4	2	24
Percentage %	25	29	21	17	8	100

This implies that most of the internal audit departments were not as old as their respective companies. Some companies started operating in Kenya before 1930 but their internal audit departments were less than 10 years old. This may be explained by the fact that 'modern' internal auditing was 'born' only in 1941 as explained in chapter 2. Transferring the knowledge from developed to developing countries must have taken a lot of time also.

Table 9 - Sample in Number of Employees

	1 - 4	5 - 9	10 - 14	15 - 19	20+	Total
Number of Companies	12	6	3	2	1	24
Percentage %	50	25	13	8	4	100

Though there was no basis for comparison, some of these departments were too small. For example, one company with a total number of employees of 25,000 had only 6 employees in the internal audit department. Size of internal audit department may vary with the type of operations under-taken by the company. Thus, with the data available one cannot actually conclude on this issue of size.

4.5 Strength of Relationship Between Variables

In Appendix 3A, the 24 companies were ranked using the total score on all the statements regarding the issue of scope of internal auditing. A similar ranking was done in Appendix 4A as regards the issue of independence in internal auditing. In Appendix 5 the companies were ranked by age in years and by size in terms of employees. In this section, the strength of the relationship between any two of those is tested using the Spearman's Rank Correlation Coefficient (r_s), which was discussed in Section 3.5.

(a) Scope and Independence of Internal Audit Function

Appendix 6A contains the ranks of the 24 companies with respect to scope and independence. From Appendix 6A we calculate r_s as follows:-

$$rs = 1 - \frac{6 \sum_{1=1}^{n} di^2}{n(n^2 - 1)}$$

$$r_s = 1 - \frac{6(929)}{24(24^2 - 1)} = 1 - \frac{5,574}{13,8000} = 0.596$$

Since the number of sample objects is greater than 10 we calculate the t-statistic as follows:

$$t = r_s\sqrt{\frac{n-2}{1-r_s^2}} = 0.596 \sqrt{\frac{22}{1-(0.596)^2}} = 3.481$$

Using a t table for 22 degrees of freedom the critical value of t is 1.717 for $\alpha = 0.05$. Calculated t exceeds critical t. Therefore, we conclude that scope of internal auditing is related to independence of internal audit function. This implies that where the independence of internal audit function is high the scope is also wide.

(b) Scope and Age of Internal Audit Function

The ranks of the 24 companies are depicted in Appendix 6B. r_s is calculated here below.

$$r_s = 1 - \frac{6(1645)}{24(24^2-1)} = 1 - \frac{9870}{13800} = 0.285$$

Since the number of sample objects is greater than 10 we calculate the t statistic as follows:

$$t = 0.285\sqrt{\frac{22}{1-(0.285)^2}} = 1.394$$

The critical value of t for 22 degrees of freedom and for $\alpha = 0.05$ is 1.717. Calculated t is lower than critical t. Therefore, we conclude that scope of internal audit function is a company.

(c) Scope and Size of Internal Audit Function

The ranks of the 24 companies are depicted in Appendix 6C. r_s is calculated here below:

$$r_s = 1 - \frac{6(1693)}{24(24^2-1)} = 1 - \frac{10158}{13800} = 0.264$$

Since n is greater than 10 we calculate the t statistic as follows:

$$t = 0.264 \sqrt{\frac{22}{1 - (0.264)^2}} = 1.284$$

The critical value of t for 22 degrees of freedom and for $\alpha = 0.05$ is 1.717. Calculated t is less than critical t. Hence, we conclude that there is no relationship between scope of internal auditing and size of internal audit department.

(d) Independence and Age of Internal Audit Function

The ranks of the 24 companies are depicted in Appendix 6D. The calculation of r_s is here below:

$$r_s = 1 - \frac{6(1944)}{24(24^2-1)} = 1 - \frac{11664}{13800} = 0.155$$

Since n is greater than 10 we calculate the t statistic as follows:

$$t = 0.264 \sqrt{\frac{22}{1 - (0.264)^2}} = 1.284$$

The critical value of t for 22 degrees of freedom and for $\alpha = 0.05$ is 1.717. Calculated t is less than critical t. Hence, we conclude that there is no relationship between scope of internal auditing and size of internal audit department.

(d) Independence and Age of Internal Audit Function

The ranks of the 24 companies are depicted in Appendix 6D. The calculation of r_s is here below:

$$r_s = 1 - \frac{6(1944)}{24(24^2-1)} = 1 - \frac{11664}{13800} = 0.155$$

Since n is greater than 10 we calculate the t statistic as follows:

$$t = 0.155 \sqrt{\frac{22}{1-(0.155)^2}} = 0.736$$

The critical value of t for 22 degrees of freedom and for $\alpha = 0.05$ is 1.717. Calculated t is less than critical t. Hence, we conclude that there is no relationship between independence and the age of the internal audit function.

(e) Independence and Size of Internal Audit Function

The ranks of the 24 companies are depicted in

Appendix 6E. r_s is calculated as follows:

$$r_s = 1 - \frac{6(1572)}{24(24^2 - 1)} = 1 - \frac{9192}{13800} = 0.334$$

Since n is greater than 10 we calculate the value of t statistic as follows:

$$t = 0.334 \sqrt{\frac{22}{1-(0.334)^2}} = 1.662$$

The critical value of t for 22 degrees of freedom and for $\alpha = 0.05$ is 1.717. Calculated t in less than critical t, hence we conclude that there is no relationship between independence and size of internal audit function.

(f) <u>Size and Age of Internal Audit Department</u>

The ranks of the 24 companies are depicted in Appendix 6F. r_s is calculated here below as follows:

$$r_s = 1 - \frac{6(868)}{24(24^2 - 1)} = 1 - \frac{5208}{13800} = 0.623$$

Since n is greater than 10 we need to calculate the t statistic as follows:

$$t = 0.623 \sqrt{\frac{22}{1-(0.623)^2}} = 3.735$$

The critical t for 22 degrees of freedom and for $\alpha = 0.05$ is 1.717. The calculated t is greater than the critical t, hence we conclude that there is a relationship between size and age.

Table 10 below is a summary of the results of the various relationships.

Table 10

Variables	r_s Value	t Value	Decision
Independence and Age	0.155	0.736	weak relationship
Scope and size	0.264	1.284	weak relationship
Scope and Age	0.285	1.394	weak relationship
Independence and Size	0.324	1.662	weak relationship
Scope and Independence	0.596	3.481	strong relationship
Size and Age	0.623	3.735	strong relationship

Critical value of t is 1.717 for 22 d.f. and = 0.05

From Table 10 it is clear that age has little effect on the independence accorded to internal audit function and also to the scope of internal auditing. This may be due to the fact that a company's policy on internal auditing may remain unchanged for a long time. Similarly size does not seem to affect scope nor independence of internal auditing. Due to lack of change in a company's policy, the internal audit function may grow in size only to continue test-checking the increasing cash transactions as before with little or no added independence.

To be able to carry out their work well, internal auditors need to be highly independent - hence the strong relationship between scope and independence. One cannot be expected to audit all organisational activities when he reports to a junior officer; he needs to report to the chief executive officer if he is to be effective.

Size and age of internal audit function seem to go together, that is, the older the internal audit function the more the number of employees in the internal audit department. These two variables have the highest relationship as shown in Table 10 above.

CHAPTER FIVE

4.1 SUMMARY AND CONCLUSIONS

This chapter mainly summarises the findings of the research study. Conclusions and recommendations are discussed together with the summary. Limitations of the study and suggestions for further research are also discussed.

From Section 4.1 it was found that only 57 percent of the publicly quoted companies maintained internal audit function. 43 percent did not maintain internal audit function. From the analysis in Section 4.2 it seems that the scope of internal auditing was quite wide in those companies. The scope of internal auditing was wide enough to cover other operations of these companies other than finance/accounting operations. This is an indication that internal audit function in those companies might have developed to incorporate operational auditing like in the developed countries of the world.

'Internationally' the traditional role of internal audit function has changed. Emphasis in the past was mainly placed on the fraud and error approach. The main duties of the internal audit department were:

(a) reviewing and appraising the soundness and adequacy of accounting, financial and other controls;

(b) checking the accuracy of financial transactions and records, and

(c) ensuring that the organisation's assets are safeguarded from losses of all kinds.

Though this is as important as ever, internal audit is also being used for carrying out audits of other operations of the business by examining the economy, efficiency and effectiveness of its activities. From Section 4.2, it appears that most of the 24 companies with internal audit departments had also assumed this 'new' dimension of internal auditing despite carrying out the traditional duties.

Noticeable in the role of internal audit function in those 24 companies is the prevalence of special investigations. This was found to be common in all those companies. Recommendations of operating improvements was also found to be quite a common activity in those companies. The traditional activity of ascertaining that company's assets are safeguarded from losses of all kinds was also among the high scorers.

Another prominent issue is that accounting discipline was the major source of internal audit staff in these 24 companies. Very few of these companies employed internal audit staff with other professional backgrounds. This led to the low scores in such statements as "I.A. recruits people with non-accounting backgrounds" and "I.A. employs data processing specialists". One is left with a question as to how such internal audit departments carry out operational auditing. Considering the high rate of computerisation in the world, data processing specialists are necessary in an internal audit department. Employees with some engineering background may also be necessary to help in evaluating efficiency in production departments.

Recruiting from accounting discipline only is also a common issue in the developed countries. According to Chambers (1980-278) 75 percent of all U.K. internal auditors have an accounting background. In the U.S. 53 percent of the internal audit departments expect their internal audit staff to have a college degree in accounting (Chambers; 1980:278).

In these 24 companies with internal audit departments independence of the internal audit function appeared to be generally high. In particular, independence from operations (objectivity) appeared to be quite high while independence of function was found to be just moderate. Though most of the respondents said that they were responsible to the Board of Directors, this was just to a moderate extent as discussed in Section 4.3. These respondents implied that they were reporting within the finance function. Though the internal audit function in those 24 companies seemed to have a high level of objectivity a lot remains to be desired as regards the organisation status accorded to internal audit function. The Institute of Internal Auditors recommends that the chief internal auditor should be reporting to the highest level of management. This only happens in a few cases in these 24 companies.

Most of the internal audit departments were found to be young and small in size in those 24 companies. 92 percent of them were less than 20 years old while 54 percent were less than 10 years old. 75 percent had less than 10 employees in the respective internal audit departments. This situation may be associated with the fact that 'modern' internal auditing is an invention of 1940's.

Size and age were found to have a relationship. Though this is not always the case, it appeared that the size of the internal audit function in those companies grows with time. Independence and scope were also found to be related. With the high level of independence in those companies it is only logical that the internal audit function be accorded a wide scope which includes all operations of the organisation.

This would enhance the taking of the necessary independent decision objectively.

Organisation status and objectivity were also found to be related. This is in line with the fact that these are the two dimensions for judging the independence accorded to internal audit function as recommended by the Institute of Internal Auditors (1971).

All in all internal audit function in most of those 24 companies appeared to be in line with the recommendations by the Institute of Internal Auditors (1971) as discussed in Chapter 2.

4.2 Limitations of the Study

1) This study involved only a small section of the Kenyan industrial and commercial sector. The results cannot therefore be wholly conclusive on the scope and independence of internal auditing in the Kenyan situation.

2) Any external influence to the respondent when filling the questionnaire could not be ruled out. It was difficult to tell whether the respondent was giving the practice in the company or was giving what

he had recently read from articles on scope and independence of internal auditing. The researcher assumed that this did not happen in any one case.

4.3 Suggestions for Further Research

1) The study should be broadened to cover the companies registered at the Registrar of Companies office. This will make it possible to generalise on the Kenyan situation as a whole.

2) External auditors are also interested in the internal audit function as it is subject to their audit. They could place reliance on the internal audit function if they find it effective. External auditors should therefore be included in any future research in internal auditing.

3) Internal auditors exist in companies to aid management in the maintainance of up to date controls. It would, therefore, be necessary to include top executives in any future research in internal auditing.

4) More research on the necessity of internal audit function in Kenyan companies is necessary as a substantial percentage of

the publicly quoted companies were found to be without this function.

5) A large proportion (43 percent) of the publicly quoted companies did not maintain internal audit function. It would be appropriate to investigate as to why they do not maintain internal audit function.

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APPENDIX 1

SPECIMEN LETTER TO THE RESPONDENTS

Dear Respondent,

I am a post-graduate student in the Faculty of Commerce of the University of Nairobi. I am currently collecting data with a view to writing a Management Research Project on "The Scope of Internal Auditing in publicly quoted companies in Kenya".

I am kindly requesting for your assistance in the form of filling the attached questionnaire to the best of your knowledge as it applies to your organization. The information that you provide will be treated as strictly confidential and in no instance will the name of your company be mentioned in the report.

Your co-operation in completing the questionnaire will be greatly appreciated.

Thank you for your co-operation.

Yours sincerely,

F.K. MUGO
MBA II STUDENT

Supervisor: V.O. Kamasara,
Lecturer,
Department of Accounting,
University of Nairobi.

QUESTIONNAIRE

Please respond to all the following questions/statements:

For how long has your company had an internal audit department?

[ ] YEARS

What is the size of your internal audit department in terms of number of employees?

[ ] NUMBER OF EMPLOYEES

Listed below are statements dealing with various issues in internal auditing. Please tick (✓) in the appropriate box to specify to what extent each statement applies in your case. There are no right or wrong answers.

AI = Internal Audit(ing)(ors)

		To a Greater Extent	To a Great Extent	To a Moderate Extent	To a Small Extent	To No Extent
(i)	I.A. reviews all operational functions on behalf of management	5	4	3	2	1
(ii)	I.A. recruits must have wide business experience	5	4	3	2	1
(iii)	I.A. has access to all company records and personnel	5	4	3	2	1
(iv)	I.A. recruits people with non-accounting backgrounds	5	4	3	2	1
(v)	I.A. maintains and evaluates controls in all the departments of the company	5	4	3	2	1
(vi)	I.A. suggest control measures before new/changes in systems are implemented	5	4	3	2	1

IA = Internal Audit(ing)(ors)

		To a Greater Extent	To a Great Extent	To a Moderate Extent	To a Small Extent	To No Extent
(vii)	I.A. ensures that company operations and programs are consistent with plans	5	4	3	2	1
(viii)	I.A. ensures that all management policies are being implemented as required at each department and branch level	5	4	3	2	1
(ix)	I.A. employs data processing specialists	5	4	3	2	1
(x)	I.A. are often called upon to carry out special incestigations	5	4	3	2	1
(xi)	I.A. give recommendations on book-keeping procedures and data processing system	5	4	3	2	1
3b(i)	I.A. is restricted to items normally checked by external auditors	1	2	3	4	5
(ii)	When auditing other departments (not accounting/finance) I.A. concentrates on financial matters only	1	2	3	4	5
(iii)	I.A. is restricted on what areas to audit and not to audit	1	2	3	4	5

IA = Internal Audit(ing)(ors)

		To a Greater Extent	To a Great Extent	To a Moderate Extent	To a Small Extent	To No Extent
(iv)	I.A. just verifies and reconciles transactions	1	2	3	4	5
(v)	I.A. is restricted on the information to reveal to the external auditors	1	2	3	4	5
c(i)	I.A. is responsible to the Board of Directors	5	4	3	2	1
(ii)	I.A. department audits the activities of the financial controller/chief accountant	5	4	3	2	1
(iii)	I.A. has stationed some of its employees at the branches who report to the head office	5	4	3	2	1
(iv)	I.A. hold meetings frequently with external auditors	5	4	3	2	1
(v)	I.A. recommendations are implemented prompt	5	4	3	2	1
(vi)	I.A. help external auditors to carry out some of their work during external audit	5	4	3	2	1
3d(i)	I.A. reports to the financial controller/ chief accountant/ company secretary					

IA = Internal Audit(ing)(ors)

		To a Greater Extent	To a Great Extent	To a Moderate Extent	To a Small Extent	To No Extent
ii)	When there is a shortage of staff in finance/accounting department, I.A. help in carrying out the duties of the department.	1	2	3	4	5
iii)	I.A. signs/endorses cheques before payment to trade creditors	1	2	3	4	5
iv)	I.A. signs/endorses salary cheques before payment to employees	1	2	3	4	5
(v)	I.A. signs/endorses payment vouchers before payment cheques are prepared	1	2	3	4	5
(vi)	I.A. controls blank voucher books (invoice books, LPOs, etc.)	1	2	3	4	5
(vii)	I.A. receive cash from debtors	1	2	3	4	5
viii)	I.A. write off bad debts	1	2	3	4	5
(ix)	I.A. maintain and control petty cash system	1	2	3	4	5
(x)	I.A. maintain and control the register of fixed assets	1	2	3	4	5

IA = Internal Audit(ing)(ors)

		To a Greater Extent	To a Great Extent	To a Moderate Extent	To a Small Extent	To No Extent
3e(i)	I.A. recommend operating improvements	5	4	3	2	1
(ii)	I.A. ascertain the extent of compliance with established policies, plans and procedures.	5	4	3	2	1
(iii)	I.A. appraise the quality of performance in carrying out assigned responsibilities	5	4	3	2	1
(iv)	I.A. review and appraise the soundness, adequacy, and application of accounting, financial, and other operating controls, and promote effective control at reasonable costs	5	4	3	2	1
(v)	I.A. ascertain the extent to which company assets are accounted for and safeguarded from losses of all kinds	5	4	3	2	1
(vi)	I.A. ascertain the reliability of management data developed within the company	5	4	3	2	1

APPENDIX 2

LIST OF QUOTED COMPANIES

The following is a list of all companies listed on the Nairobi Stock Exchange as of 31st March, 1988.

COMPANY	PHYSICAL ADDRESS
African Tours and Hotels Ltd.	Utalii House
Baumann A. (Kenya) Ltd.	Leslander House
B.A.T. Kenya Ltd.	Likoni Road
Bamburi Portland	Mombasa
Barclays Bank of Kenya Ltd.	Bank House
Brooke Bond Kenya Ltd.	Norfolk Towers
Car and General (Kenya) Ltd.	Uhuru Highway
Carbacid (Co_2) Ltd.	Commercial Street
City Brewery Investments Ltd.	College House
Consolidated Holdings (The Standard)	Likoni Road
CMC Holdings Ltd.	Conaught House
Credit Finance Corp. Ltd.	KCS Building
Diamond Trust	Diamond Trust House
Dunlop Kenya Ltd.	Kijabe Street
Eaagads Estate	Thika
E.A. Bag and Cordage Co. Ltd.	Kalimoni - Juja
E.A. Breweries Ltd.	Tusker House
E.A. Cables Ltd.	Kitui Road
E.A. Oxygen Ltd.	Kitui Road
E.A. Packaging	Kitui Road
E.A. Portland Cement	Longonot Place
E.A. Services Ltd.	Lunga Lunga Road

E.A. Road Services Ltd.	Lunga Lunga Road
KP&L Company Ltd.	Electricity House
Kenya Finance Corp.	Reinsurance Plaza
Elliots Bakeries Ltd.	Changamwe Road
Chancery Investments Ltd. (The Standard)	Likoni Road
Express Kenya Ltd.	Off Enterprise Road
George Williamson	Tumaini House
Hutching Biemer Ltd.	Moi Avenue
ICDC Investments Co. Ltd.	Uchumi House
Jubilee Insurance Co. Ltd.	Jubilee Insurance House
Kakuzi Ltd.	College House
Kapchorua Tea Co. Ltd.	Nandi Hills
Kenstock Ltd.	College House
Kenya Co-operative Creameries	Creamery House
Kenya Hotels Ltd.	Nyeri
Kenya National Mills	Chester House
Kenya Oil Co. Ltd.	ICEA Building
Kenya Orchards Ltd.	Mua Hills - Machakos
KPCU	Wakulima House
Limuru Tea Co. Ltd.	Limuru
Marshalls (E.A.) Ltd.	Marshalls House
Unga Group	Chester House
Motor Mart	Uhuru Highway
Nation Printers	Rehema House
National Industries Credit	ICEA Building
Ol Pejeta Ranching Ltd.	Nanyuki

Pan Africa Insurance	Pan African House
Pearl Dry Cleaners	Addis Ababa Road
Phillips Harrisons & Co.	Factory Street
Sasini Tea and Coffee Ltd.	Warren House
Sofar Investment Ltd.	Chester House
*Theta Group Ltd	—
Timsales Ltd.	Enterprise Road
Uplands Bacon Factory	Limuru

*Physical Location not known.

APPENDIX 3A: THE ISSUE OF AUDIT SCOPE-GENERAL ANALYSIS

Statement*	Companies															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
3a(i)	4	5	5	3	5	4	4	5	5	4	5	3	4	4	2	3
(ii)	3	2	4	3	3	5	3	5	3	3	4	1	5	3	2	1
(iii)	5	4	5	4	5	4	5	5	4	4	5	2	5	5	3	4
(iv)	3	2	1	3	1	1	1	1	1	1	2	1	1	1	2	2
(v)	5	4	5	2	5	5	5	5	5	4	5	1	4	4	4	3
(vi)	5	5	5	3	4	5	3	5	4	3	3	1	3	4	3	2
(vii)	3	4	5	2	3	4	1	5	2	5	5	1	5	4	2	2
(viii)	3	2	5	2	4	5	4	5	5	5	5	1	5	4	2	3
(ix)	5	1	2	2	3	1	1	1	4	3	1	1	3	3	3	1
(x)	5	5	5	4	5	3	5	1	4	2	5	4	4	4	5	5
(xi)	5	5	5	4	5	4	4	1	4	5	5	3	5	4	4	2
3b(i)	4	5	5	4	5	5	5	5	5	5	5	3	5	5	2	5
(ii)	4	5	5	2	4	3	5	1	5	4	5	2	3	4	2	5
(iii)	4	5	5	3	1	5	5	5	5	5	5	2	5	5	2	5
(iv)	5	4	5	4	5	5	5	2	3	4	5	2	2	4	4	5
(v)	4	5	5	2	5	4	5	2	5	5	5	2	5	5	2	5
3c(i)	4	5	5	4	4	3	5	5	5	5	4	2	4	4	3	5
(ii)	4	5	5	3	4	4	5	5	5	5	4	2	4	4	2	5
(iii)	3	5	5	2	3	3	5	5	4	4	3	1	4	4	2	5
(iv)	5	5	5	4	5	4	5	5	4	5	4	3	5	4	4	4
(v)	5	5	5	4	5	5	5	2	5	5	4	3	5	4	4	3
(vi)	4	4	5	1	4	3	4	1	5	5	4	1	4	4	3	4
Total Score	92	92	102	64	88	85	90	77	92	91	93	42	90	87	62	79
Ranking by Total Score	4	4	1	18	11	14	9	16	4	7	3	24	8	13	19	15

* See Appendix 1 for the wording of the statements.

Appendix 3B

Statement by Statement Analysis on the issue of Audit-scope

Statement*	To a Greater Extent		To a Great Extent		To a Moderate Extent		To a Small Extent		To No Extent	
	No.	%	No.	%	No.	%	No.	%	No.	%
3a (i)	9	38	7	29	6	25	2	8	0	0
(ii)	4	17	4	17	10	41	4	17	2	8
(iii)	11	46	7	29	4	17	1	4	1	4
(iv)	0	0	0	0	3	12	5	21	16	67
(v)	10	42	7	29	2	8	3	13	2	8
(vi)	7	29	5	21	7	29	3	13	2	8
(vii)	5	21	8	33	3	13	6	25	2	8
(viii)	8	33	7	29	4	17	4	17	1	4
(ix)	1	4	2	8	7	29	3	13	11	46
(x)	11	46	8	33	3	13	1	4	1	4
(xi)	9	38	8	33	1	4	2	8	4	17
3b (i)	15	63	5	21	2	8	2	8	0	0
(ii)	8	33	6	25	3	13	5	21	2	8
(iii)	16	67	2	8	2	8	3	13	1	4
(iv)	8	33	9	38	3	12	4	17	0	0
(v)	16	67	2	8	2	8	4	17	0	0
3c (i)	7	29	9	38	6	25	2	8	0	0
(ii)	9	38	8	33	2	8	5	21	0	0
(iii)	5	21	6	25	7	29	4	17	2	8
(iv)	9	38	10	41	3	13	0	0	2	8
(v)	11	46	6	25	4	17	3	12	0	0
(vi)	4	17	10	42	2	8	0	0	8	33

* See appendix I for the wording of the statements

APPENDIX 4A

THE ISSUE OF AUDIT - INDEPENDENCE - GENERAL ANALYSIS

Statements*	Companies																								
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Ave.	Rank
3c(i)	5	4	5	3	5	4	5	4	4	4	5	2	1	1	4	4	4	1	5	4	5	1	2	4	3.58	9
3c(ii)	5	3	5	2	5	3	5	1	4	4	4	1	5	2	4	1	5	1	5	2	2	2	2	1	3.08	13
3c(iii)	4	1	1	2	1	1	1	1	4	1	4	1	1	2	1	1	1	1	1	3	5	4	1	1	1.83	16
3c(iv)	4	2	3	3	3	2	5	1	2	2	2	1	3	2	3	3	2	2	3	3	1	1	2	1	2.33	15
3c(v)	4	4	4	4	4	3	2	5	4	3	5	3	3	3	4	4	4	2	4	4	4	2	3	3	3.54	10
3c(vi)	4	3	4	2	3	1	3	1	4	3	2	1	5	3	2	5	2	2	3	4	3	4	2	1	2.79	14
3d(i)	5	1	1	1	5	2	5	1	5	5	5	1	4	1	4	5	5	2	5	5	1	2	3	5	3.50	11
Sub-total score — organisation status	31	18	23	17	26	16	26	14	27	22	27	10	22	14	22	23	23	11	26	23	21	16	14	16		
3d(ii)	5	3	4	5	2	4	1	1	5	4	5	2	4	4	5	1	3	2	5	3	1	4	3	5	3.38	12
3d(iii)	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	1
3d(iv)	5	5	5	1	5	5	5	5	5	5	5	2	5	5	5	5	4	5	5	5	5	5	1	5	4.5	4
3d(v)	5	4	5	1	5	5	5	5	5	5	5	2	5	5	5	5	5	5	5	5	5	5	1	5	4.5	4
3d(vi)	5	1	5	1	5	5	5	5	1	5	5	3	5	5	5	5	5	3	5	5	1	5	4	5	4.12	8
3d(vii)	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	1
3d(viii)	5	4	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	4	5	5	3	5	5	5	4.83	3
3d(ix)	5	5	5	4	5	5	5	5	1	5	5	2	3	5	5	5	5	5	5	5	5	5	2	5	4.46	6
3d(x)	5	1	5	5	5	5	5	2	3	5	5	5	3	5	5	5	4	2	5	5	5	4	5	5	4.33	7
Sub-total score — Objectivity	45	33	44	32	42	44	41	38	35	44	45	31	40	44	45	41	41	36	45	43	35	43	31	45		
Total Score	76	51	67	49	68	60	67	52	62	66	72	41	62	58	67	64	64	47	71	68	56	59	45	61		
Ranking by total score	1	20	6	21	4	15	6	19	12	9	2	24	12	17	6	10	10	22	3	4	18	16	23	14		

* See Appendix 1 for the wording of the statements.

Appendix 4B
Statement by statement Analysis on the issue of Audit-independence

Statement*	To a Greater Extent		To a Great Extent		To a Moderate Extent		To a Small Extent		To No Extent	
	No.	%	No	%	No.	%	No.	%	No.	%
3c (i)	7	29	10	42	1	4	2	8	4	17
(ii)	7	29	4	17	2	8	6	25	5	21
(iii)	1	4	4	17	1	4	2	8	16	67
(iv)	1	4	1	4	8	33	9	38	5	21
(v)	2	8	12	50	7	29	3	13	0	0
(vi)	2	8	5	21	7	29	6	25	4	17
3d (i)	11	46	4	16	0	0	4	17	5	21
(ii)	7	29	6	25	4	17	3	12	4	17
(iii)	24	100	0	0	0	0	0	0	0	0
(iv)	20	84	1	4	0	0	1	4	2	8
(v)	20	84	1	4	0	0	1	4	2	8
(vi)	17	71	1	4	2	8	0	0	4	17
(vii)	24	100	0	0	0	0	0	0	0	0
(viii)	21	88	2	8	1	4	0	0	0	0
(ix)	19	80	1	4	1	4	2	8	1	4
(x)	17	72	2	8	2	8	2	8	1	4

* See appendix 1 for the wording of the statements

Ranking Differences squared - Organisation status and Objectivity

Company	Organisation Status Score	Stated Rank X	Objectivity Score	Rank Y	Ranking Difference d=X-Y	Difference Squared d^2
1	31	1	45	1	0	0
2	18	15	33	21	-6	36
3	23	7	44	6	1	1
4	17	16	32	22	-6	36
5	26	4	42	12	-8	64
6	16	17	44	6	11	121
7	26	4	41	13	-9	81
8	14	20	38	17	3	9
9	27	2	35	19	-17	289
10	22	11	44	6	5	25
11	27	2	45	1	1	1
12	10	24	31	23	1	1
13	22	11	40	16	-5	25
14	14	20	44	6	14	196
15	22	11	45	1	10	100
16	23	7	41	13	-6	36
17	23	7	41	13	-6	36
18	11	23	36	18	5	25
19	26	4	45	1	3	9
20	23	7	43	10	-3	9
21	21	14	35	19	-5	25
22	16	17	43	10	7	49
23	14	20	31	23	-3	9
24	16	17	45	1	16	256
						1439

Appendix 5

Ranking by Age and Size of Internal Audit Department

Company	Age (Years)	Rank	Size*	Rank
1	7	12	16	2
2	16	4	7	8
3	7	12	1	19
4	11	8	5	9
5	10	10	5	9
6	3	19	2	18
7	3	19	1	19
8	7	12	1	19
9	20	2	9	7
10	14	7	5	9
11	50	1	30	1
12	2	22	1	19
13	10	10	3	13
14	11	8	3	13
15	2	22	3	13
16	15	5	10	5
17	7	12	3	13
18	3	19	10	5
19	7	12	15	3
20	1½	24	1	19
21	6	18	5	9
22	15	5	3	13
23	7	12	1	19
24	17	3	11	4

* Size is measured by number of employees in the internal audit department

Appendix 6A

Ranking Differences squared - scope and independence

Company	Scope Ranking X	Independence Ranking Y	Ranking Difference d=X-Y	Difference Squared d^2
1	4	1	3	9
2	4	20	-16	256
3	1	6	-5	25
4	18	21	-3	9
5	11	4	7	49
6	14	15	-1	1
7	9	6	3	9
8	16	19	-3	9
9	4	12	-8	64
10	7	9	-2	4
11	3	2	1	1
12	24	24	0	0
13	8	12	-4	16
14	13	17	-4	16
15	19	6	13	169
16	15	10	5	25
17	2	10	-8	64
18	17	22	-5	25
19	11	3	8	64
20	9	4	5	25
21	20	18	2	4
22	22	16	6	36
23	23	23	0	0
24	21	14	7	49
				929

Appendix 6B

Ranking Differences squared - scope and Age

Company	Scope Ranking X	Age Ranking Y	Ranking Difference $d=X-Y$	Differcence Squared d^2
1	4	12	-8	64
2	4	4	0	0
3	1	12	-11	121
4	18	8	10	100
5	11	10	1	1
6	14	19	-5	25
7	9	19	-10	100
8	16	12	4	16
9	4	2	2	4
10	7	7	0	0
11	3	1	2	4
12	24	22	2	4
13	8	10	-2	4
14	13	8	5	25
15	19	22	-3	9
16	15	5	10	100
17	2	12	-10	100
18	17	19	-2	4
19	11	12	-1	1
20	9	24	-15	225
21	20	18	2	4
22	22	5	17	289
23	23	12	11	121
24	21	3	18	324
				1645

Appendix 6C

Ranking Differences squared - Scope and size

Company	Scope Ranking X	Size* Ranking Y	Ranking Difference d=X-Y	Difference Squared d^2
1	4	2	2	4
2	4	8	-4	16
3	1	19	-18	324
4	18	9	9	81
5	11	9	2	4
6	14	18	-4	16
7	9	19	-10	100
8	16	19	-3	9
9	4	7	-3	9
10	7	9	-2	4
11	3	1	2	4
12	24	19	5	25
13	8	13	-5	25
14	13	13	0	0
15	19	13	6	36
16	15	5	10	100
17	2	13	-11	121
18	17	5	·12	144
19	11	3	8	64
20	9	19	-10	100
21	20	9	11	121
22	22	13	9	81
23	23	19	4	16
24	21	4	17	289
				1693

* Size is measured by member of employees in the internal audit department

Appendix 6D

Ranking Differences squared - Independence and Age

Company	Independence Ranking X	Age Ranking Y	Ranking Difference d=X-Y	Difference Squared d^2
1	1	12	-11	121
2	20	4	16	256
3	16	12	4	16
4	21	8	13	169
5	4	10	-6	36
6	15	19	-4	16
7	6	19	-13	169
8	19	12	7	49
9	12	2	10	100
10	9	7	2	4
11	2	1	1	1
12	24	22	2	4
13	12	10	2	4
14	17	8	9	81
15	16	22	-6	36
16	10	5	5	25
17	10	12	-2	4
18	22	19	3	9
19	3	12	-9	81
20	4	24	-20	400
21	18	18	0	0
22	16	5	11	121
23	23	12	11	121
24	14	3	11	121
				1944

Appendix 6E

Ranking Differences squared - Independence and size

Company	Independence Ranking X	Size* Ranking Y	Ranking Difference d=X-Y	Difference Squared d^2
1	1	2	-1	1
2	20	8	12	144
3	6	19	-13	169
4	21	9	12	144
5	4	9	-5	25
6	15	18	-3	9
7	6	19	-13	169
8	19	19	0	0
9	12	7	5	25
10	9	9	0	0
11	2	1	1	1
12	24	19	5	25
13	12	13	-1	16
14	17	13	4	16
15	6	13	-7	49
16	10	5	5	25
17	10	13	-3	9
18	22	5	17	289
19	3	3	0	0
20	4	19	-15	225
21	18	9	9	81
22	16	13	3	9
23	23	19	4	16
24	14	4	10	100
				1532

* Size is measured by the number of employees in the internal audit department

Appendix 6F

Ranking Differences squared - Independence and size

Company	Size Ranking X	Age Ranking Y	Ranking Difference d=X-Y	Difference Squared d^2
1	2	12	-10	100
2	8	4	4	16
3	19	12	7	49
4	9	8	1	1
5	9	10	-1	1
6	18	19	-1	1
7	19	19	0	0
8	19	12	7	49
9	7	2	5	25
10	9	7	2	4
11	1	1	0	0
12	19	22	-3	9
13	13	10	3	9
14	13	8	5	25
15	13	22	-9	81
16	5	5	0	0
17	13	12	1	1
18	5	19	-14	196
19	3	12	-9	81
20	19	24	-5	25
21	9	18	-9	81
22	13	5	8	64
23	19	12	7	49
24	4	3	1	1
				868

* Size is measured by number of employees in the internal audit department.

BIBLIOGRAPHY

A Project Report of the 1954 Task Committee on Internal Auditing Education, The Accounting Review, Vol. 30, January 1955, p. 58-69.

Abdel-Khalik, D.A. Snowball, & J.H. Wragge, The Effect of Certain Internal Audit Variables on the Planning of External Audit Programs, The Accounting Review, Vol. 58, No. 2, April 1983, p. 215-227.

Abernethy, W.L., Internal Audit in Local Authorities and Hospitals, Shaw & Sons Ltd., Third Edition, 1970.

Adams, A.A.; The Training and Experience of Internal Auditors and the Scope, Practices, and Applications of Internal Auditing in Public School Systems Exceeding 50,000 pupil population, George Washington University, 1968.

American Accounting Association: Report of the Committee on Basic Auditing Concepts, The Accounting Review, Supplement to Vol. 47, 1972.

Anderson, R.G., Business Systems, Macdonald and Evans Ltd., First Edition, 1977.

Bigg, W.W. & J.O. Davies, Internal Auditing H & L (Publishers) Ltd., Third Edition, 1965.

Campfield, W.L., Professional Status for Internal Auditor, The Accounting Review, Vol. 40, No. 3, July 1965, p. 594-598.

Cemach, H.P., Task and Scope of Internal Audit: What is its Role? The Accountant (England), September 28th, 1972, p. 390-392.

Chambers, A.D., Developments in Internal Auditing, Accounting and Business Research, Summer 1980, p. 273-280.

Chambers A.D., "Research on Internal Auditing: Issues and Possibilities" in Hopwood A.G., M. Bromwich, & J. Shaw, Eds., Auditing Research: Issues and Opportunities, Deloitte Haskins + Sells, U.K., 1982, p. 99-128.

Chambers, A.D., Teaching Internal Auditing at a University - An Example in Context, The Accounting Review, Vol. 53, No. 1, January 1978, p. 143-147.

Churchill, G.A., Marketing Research: Methodological Foundations, CBS College Publishing, Third Edition, 1983.

Churchill, N.C. & W.W. Cooper, A Field Study of Internal Auditing, The Accounting Review, Vol. 40, No. 4, October 1965, P. 767-781.

Corfeld, K.G., Internal Audit, The Accountant (England), March 15, 1973 in Accountants Digest, Vol. 38, No. 4, June 1973, P. 183-185.

Cunningham, E.H., The Need of College Courses in Internal Auditing, The Accounting Review, Vol. 30, January 1955, p. 51-57.

Daniel W.W. & J.C. Terrell, Business Statistics: Basic Concepts and Methodology, Haughton Miffin Company, Third Edition, 1983.

Davies M.B.T., Objectives of Internal Auditing, The Accounting Review, Vol. 31, April 1956, P. 227-233.

Deloitte Haskins + Sells, Internal Audit, Deloitte Haskins + Sells, U.K., 1978.

Dirsmith, M.W., Contracting for the Extension of External Auditors' Services, International Journal of Government Auditing, Vol. 14, No. 4, October 1987, p. 6-10.

Emory, C.W., Business Reserch Methods, Richard D. Irwin, Inc., Revised Edition, 1980.

Gupta, K., Contemporary Auditing, Tate McGraw-Hill Publishing Company Ltd., First Edition, 1977.

Hayes, B., What I Expect from my Internal Audit, Public Finance & Accountancy, 15th May, 1987, p. 9.

Horngren, C.T., Cost Accounting: A Managemerial Emphasis, Prentice-Hall on India Private Limited, New Delhi, Fifth Edition, 1983.

Hughes, J.S., Optimal Internal Audit Timing, The Accounting Review, Vol. 52, No. 1, January 1977, p. 56-67.

International View of Internal Audit; Regional Conference in Paris, The Accountant (England) March 13, 1976, p. 570-571.

Jain, A., Overcoming Resistance to Internal Audit, The Chartered Accountant (India), June 1973 in Accountants Digest, Vol. 39, No. 2, December 1974, p. 4-6.

Jain, S.K., Internal Auditing and Manpower, The Chartered Accountant (India), October 1973, in Accountants Digest, Vol. 39, No. 3, March 1974, p. 135-137.

Joshi, P.L., Effective Internal Auditing, The Accountant (Kenya), October/December 1981, p. 13-15.

Kaffen, A.S., Auditing your Internal Audit Department, Financial Executive, April 1983 in The Accountants Digest, Vol. 48, No. 4, June 1983, p. 1-4.

Kerlinger, F.N., Foundations of Behavioural Research, A Holt International Edition, Second Edition, 1973.

Kohler, E.L., Essential Elements in a Program of Internal Audit, The Accounting Review, Vol. 28, No. 1, January 1953, p. 17-24.

Koontz, H., O'Donnell, C., and Weihrich, H., Management, McGraw-Hill International Book Company, Eighth Edition, 1984.

Lokko, B.C.F., Education and Training (with respect to Accounting Profession), The Professional Accountant (Ghana), Vol. 4, No. 2, April/June 1980, p. 8-19.

Margheim, L.L., Further Evidence on External Auditors Reliance on Internal Auditors, Journal of Accounting Research, Vol. 24, No. 1, Spring 1986, p. 144-205.

Masita, S.C., The Developments of Accounting Profession and its Application to East Africa, Unpublished MBA Thesis, University of Nairobi, 1976.

Mogere, N.O., How to set up an Internal Audit Department, The Accountant (Kenya) January/March 1984, p. 17-18.

Morton, J.G., The Professional Internal Auditor: Fact or Fantasy? The Internal Auditor, November/December 1974 in Accountants Digest, Vol. 40, No. 4, June 1975, p. 196-199.

Muragu, K., A Survey on the Need and Scope for Independent Audit of Management by Certified Public Accountants, Unpublished MBA Research Project, University of Nairobi, 1981.

Mwarania, K. M., Financial Accounting Standards: An Analysis of the Standard Setting Process in Kenya, Unpublished MBA Project, 1983.

Norbeck, E.F., Operational Auditing for Management Control, American Management Association, Inc., First Edition, 1969,

Nwoko, C., The Internal Auditor is the Watchdog, The Nigerian Accountant, July/September 1985, p. 13-15.

Omidiora, B. & C.O.S. Oseni, The Education of the Accountant from the point of view of the Accountant in Industry, The Nigerian Accountant, October/December 1983, p. 29-39.

Onyango, S.O. & B.K. Smith, Role of Internal and Operational Audit, The Accountant (Kenya) July/September 1987, p. 23-25 & 29.

Ostlund, D., The Responsibilities of the Internal Auditor, The Magazine of Bank Administration, August 1975, in Accountants Digest Vol. 41, No. 2, December 1975, p. 70-72.

Perrin, J.R., The Internal Auditor Today, The Accountant (England) July 20th, 1972, p. 73-76.

Pratt, M.J., Auditing, Longman Group Limited, Second Edition, 1983.

Price, P.N.G., Internal Audit and the Statutory Auditor, The Accountant (England), January 29th, 1976, p. 130-131.

Recent Developments in Internal Auditing, The Accountant (England), March 4th 1976, p. 267-268.

Ricchuite, D.N., Auditing: Concepts and Standards, South-Western Publishing Co., First Edition, 1982.

Rittenberg, L.E. & G.B. Davies, The Roles of Internal and External Auditors in Auditing EDP Systems, The Journal of Accountancy, December 1977, p. 51-56.

Salih, M.A., Evaluation of Internal Control: Ethiopian Airlines Branch Office, Unpublished MBA Project, 1983.

Schneider, A., Modelling External Auditors Evaluation of Internal Auditing, Journal of Accounting Research, Vol. 22, No. 2, Autumn 1984, p. 657-678.

Simiyu, N.T.T., Participatory Budget Setting and Budget Commitment - A Study of Manufacturing Personel, Unpublished MBA Thesis, University of Nairobi, 1981.

Stettler, H.F., Auditing Principles, Prentice-Hall of India Private Ltd., New Delhi, Fourth Edition, 1980.

Straker, T., Detection and Prevention of Financial Fraud, Management Accounting, July/August, 1985, p. 29-30.

Tello, R.N., Internal Audit in Government Departments and Related Establishments. The Professional Accountant (Ghana), April 1987, p. 27-30.

Thompson, W.E., Internal Auditing: A Survey of its Past, Present and Future, Gergia Journal of Accounting, Spring 1982, in Accountants Digest, Vol. 48, No. 2, December 1982, p. 30-36.

Uecker, W.C., A.P. Brief, & W.R. Kenny, Perception of the Internal and External Auditor as a Deterrent to Corporate Irregularities, The Accounting Review, Vol. 54, No. 3, July 1981, p. 465-478.

Using the work of an Internal Auditor - Internation Auditing Guideline 10, The Accountant (Kenya), October 83/January 84, p. 21-22.

Walker, W.A., R.A. Irish, L.G. Macphercon, E. Sinott, & W.N.A. Stokvis, The Internal Auditor, Accountancy, Vol. 68, December 1957, p. 517-519.

Wangai, W.J.G., Role of the Accountant in Assisting the Saml1 Business Client in Solving His Financial Probelms" A Survey on the Kenyan Situation, Unpublished MBA Research Project, University of Nairobi, 1981.

Wilson, T., Management Evolution in the Civil Service, Public Finance Accountancy, 15th May, 1987, p. 6-9.

Woolf, W.E., Auditing Today, Prentice-Hall International, Inc., London Second Edition, 1982.