

African Research Review

An International *Multidisciplinary Journal, Ethiopia*

Vol. 8 (2), Serial No. 33, April, 2014:325-342

ISSN 1994-9057 (Print)

ISSN 2070--0083 (Online)

<http://dx.doi.org/10.4314/afrev.v8i2.19>

Application of Business Risk Auditing among Audit Firms in Western Region, Kenya

Naibei, I. K. - Department of Accounting and Finance
Maseno University, Box 333 (40105), Maseno, Kenya
E-mail: naibei2008@yahoo.com
Phone: +256721520089

Oima, D. O. - Department of Accounting and Finance
Maseno University, Kenya
E-mail: doima@yahoo.com

Ojera, P. B. - Department of Accounting and Finance
Maseno University, Kenya
E-mail: pbojera@yahoo.com

&

Owiye, O. P. -Department of Management Sciences
Maseno University, Kenya
E-mail: owiyep@yahoo.com

Abstract

Auditing remains an important tool of management oversight. Auditing theory indicates that the discipline draws its legitimacy on its ability to enhance confidence on the financial statements by its users. However, there has been increasing criticisms addressed to the audit profession in the recent past especially after the failure of several international and local firms which led to need to revisit the oversight role of audit. To remain relevant, auditors have been compelled to reengineer their audit approaches to be more responsive to business risks. In spite numerous calls of the departure from traditional audits, little is known as to how auditors in developing economies such as Kenya has responded to increasing business risks in their engagements. The purpose of this study was to evaluate the extent of application of Business Risk among audit firms in Western Region, Kenya. Cross-sectional survey research design was used. The target population of the study is 48 Audit firms in which saturated sampling technique was used. Respondents comprised of Audit Senior and Audit manager selected purposively from each firm. Primary data was collected using self administered questionnaires which was pretested and supplemented by secondary data from published accounts of client firms. The study established that BRA approach is practiced only to a moderate extent in the study area (mean 3.367, SDEV 0.086 in a scale of 5). The study provides rationale for BRA and its findings provides direction for response to business risks among audit practitioners besides enriching the literature of audit risk and fee models with expanded variables and evidences from emerging economies.

Key words: *Business Risk Auditing, Audit firms, Kenya*

Introduction

Auditing remains to be an important facet of financial management oversight. The auditing theory points out to the fact that the discipline draws its legitimacy on the enhancement of confidence on the financial statements of an entity by its intended users (Gray &

Manson, 2008; Serban & Vilsanoi 2010). The America Accounting Association (AAA)'s committee on basic Auditing concepts identified four conditions which drive the need for independent audit of accounting data; the need to bridge the potential conflict of interest between the user and the preparer of the financial statements, to enhance the credibility of the financial information for decision making, the complexity of financial information necessitating a third person to examine its quality and finally the need to enhance accessibility of financial information (Schroeder et al, 2011). Early auditing was geared towards verifying the honesty of the persons charged with fiscal rather than managerial responsibilities. However, the external audit has since evolved in line with changes in the auditor's role, the auditing environment and the auditing technology. Today the annual audit is one of the cornerstones of corporate governance, Lemon *et al.*, (2000).

However, increase in the complexity of businesses resulting from internal growth, mergers and other forms of combinations and greater divorce of owners from management has greatly increased the need of assurance services, Wamai, (2005). Current trends in auditing are creating new challenges for the profession, leading to development of new methods and ideas, (Eilifsen *et al.*, 2001). Audit procedures have evolved over the recent years following the unprecedented market pressures, increased volume of transactions thereby increasing cost of training and carrying out audit, development in technology and litigations. Consequently, many audit firms around the globe concluded that the audit process needed new skills, techniques, shifting costs and value addition to the audit. The pressure to reconsider audit methodologies was also precipitated by much criticisms addressed to the audit profession especially after the failure of Enron, World-com and other international companies that resulted in severe and social harms. All this happened despite the auditors not indicating any reservations on their financial statements. This, coupled with Global economic crisis of 2008 triggered by Lynn Brothers Bank and the related insurance company, the American international group (AIG) led to a big debate about the role of auditors, and shocked trust

in the audit profession leading to dissatisfaction (Abdullah & Al-Araj 2011). One such milestone in the auditing profession in bid to bridge the challenges is the development of Business Risk Audit Approach, (BRA), (Robson *et al.*, (2007; Vilsanoui & Serban, 2010; Abdullatif & Al-Khadash 2010).

Whereas traditional audits focuses primarily on compliance with rules and procedures, and their recommendations may not give management enough information about the achievement of the organizational objectives, BRA involves high-level risk profiling of the audit portfolio over time; thus it facilitates strategic use of scarce audit resources, aligns audit efforts with management objectives, facilitates institutional development and reduces risk exposures by focusing attention on areas of weaknesses, (Mozammal, 2005). The proliferation of forward-looking and other judgment-laden financial reporting requirements in the 1990s, coupled with more dynamic client business environments and significant audit fee pressure, prompted the largest public accounting firms to develop new audit approaches to improve both audit effectiveness and efficiency (*Bell et al.*, 2007). For many, concern about how auditors conduct audits has become an important issue following the many accounting scandals of the 1990s. However, for auditors, concern over the methodologies that are used to conduct audits and identify risks for their clients has been an important issue for decades. Over the course of several decades, the popularity of different methodologies has changed as companies and concerns about auditors have evolved in terms of how audits are conducted and the information that is sought when conducting audits (Kitum 2010).

Since the introduction of risk-based auditing, there was much anticipation that developments in risk-based audit methodologies were in the process of better systemizing the knowledge base of auditing and enhancing its operational effectiveness, (Prinsloo, 2008). Audit risk refers to the risk that the auditor gives an inappropriate audit opinion. Audit risk has three components, inherent risk, control risk and detection risk (Kimuda, (2005). On the other hand, Risk-based

auditing is an audit approach which focuses on risk identification, prioritization of audit areas and allocation of audit resources in accordance with the risk assessment. The evaluation and consideration of the Business Risk Audit approach is a normal consequence of the striving for improvement and the development of the services that the auditing profession provides. In developing the risk-based audit approach there are certain complexities surrounding an audit that should be considered. The major complexities in performing the audit are: firstly, the expectation gap; secondly, the uncertainties surrounding the responsibilities of the auditor; thirdly, the provision of reasonable assurance; and fourthly, the practical implementation of the standards, Prinsloo (2008).

The emergence of BRA methodology seems to have been received in different perspectives by small and large audit firms. In the UK, the acceptance of BRA has seen an adjustment of practices associated with the professional institutes. Although BRA is almost exclusively associated with the largest of the audit firms, the professional associations in the UK have facilitated a wider acceptance of the 'assurance' methodology. One key element of this exchange has been a struggle between the large and small firms to re-structure the education of prospective accountants and auditors Humphrey *et al.*, (2010).

Despite BRA being hailed as a positive revolution in auditing profession, there seems to be great rift in the application of the approach in theory and in practice (Abdullah & Al-Araj 2011). Further, there is only scanty evidence in the literature that the BRA is being practiced by small audit firms and in developing countries. This is evidenced by several empirical studies that either concentrate on large audit firms or are based in developed countries such as United States of America and Europe (Abdullah & Al-Araj, 2011; Lovaas, 2009; Vilsanoiu & Serban 2010). This has contributed to scholars such as Salehi & Khatiri (2011) calling from developing countries adopting this audit approach. Despite this call, the adoption rate of has been slow. For instance in Jordan, on average, BRA was the least

applied Audit approach in the 2011 survey (Abdullah and Al-Araj, 2011).

As a result of the aforementioned, the need to carry out empirical studies in developing countries with the participation of small audit firms becomes imperative. In Kenya, the application of Business Risk Audit approach is not well documented and researched. In Kenya, it was not until 2005 when the Risk Based Auditing was piloted in the public sector. Kenya was chosen for the pilot because of its unique operating environment for public financial management. In the years just preceding the pilot, Kenya had been active in the public financial management front Mozamal, (2005). The results of this pilot indicated a bright future for the new audit approach and sparked wide interest and raised high expectations in Audit profession the ensuing years. However, there is no literature supporting, the scenes in the audit profession in Kenya in the post pilot period. Furthermore, the response of the private sector audit to this new development is not clear given the wanting literature to that effect.

Like many emerging economies, the Auditing profession is in Kenya dominated by the four largest international accounting firms. These four firms are the auditors of all the publicly traded companies in Kenya; about 54 companies are listed on the Nairobi Stock Exchange. The partners of these firms—both local and expatriate—actively participate in various committees of the professional body. Of the two other major firms in the country, one is the associate of a Big 5 international accounting firm and the other is a Kenya-based regional accounting firm (World Bank 2001). There are more than 100 local firms with clientele concentrated mainly among the small and medium enterprises. Professionals working in small accounting firms find it difficult to keep up to date with new developments in accounting and auditing. According to report on observance of Standards and codes in Kenya by World Bank, because of the downturn in the economy during the past several years, small audit firms are constantly struggling to earn enough to stay afloat, and they cannot afford to spend money and time on training programs. The small and medium-

size practitioners in Kenya are also handicapped by their lack of access to appropriate literature on the application of established accounting and auditing standards. It is against this background that a study on emerging trends in auditing profession focusing on small audit firms becomes handy.

The financial statements on which auditor's form opinion may reflect a true and Fairview position despite existence of business environmental turbulence and forces within and without the firm unrelated to the financial statements perse that may adversely affect the business' ability to meet its objectives. These factors may not be apparent at the time of audit. Traditional audit approaches such as balance sheet audit largely fail to take these factors into account. Hence exposure to immense audits risks. The last few decade have witnessed much criticisms addressed to the audit profession from the shareholders and the general users of audited financial information especially after the failure of leading global companies: Enron, World-com, American International Group (AIG) among other international companies and local companies such as CMC Motors, CMA, KPCU, East African Packaging, Bauman & Company, Reagent Undervalued Assets Ltd., Pearl Dry cleaners, Theta group, Hutchins Biemer, Pan paper Mills and a host of many others. All this happened despite the auditors not indicating any reservations on their financial statements. This, accelerated the debate about the role of auditors, and shocked trust in the audit profession leading to dissatisfaction. Consequently, auditors have been compelled to reengineer their audit approaches and methodologies to put more emphasis on business risks. Although the emerging Business risk audit approach has dominated audit discourses over recent years, studies indicate that there is still skepticism expressed the approach. In all of this the inadequacy of empirical analysis of contemporary audit practice and its implications for the status, effectiveness and identity of the profession remains striking. This study seeks to investigate the extent to which audit firms in the study area conduct business risk assessment and to assess the contribution of business risk indicators in the audit fee model.

Methodology

The study will adopt the cross-sectional survey research design. Survey design is posited as the most appropriate approach where the aim of the study is to determine the existence and extent of a problem (Nachmias & Nachmias 2008). This approach is intended to facilitate the development of a broad industry-based understanding rather than study of individual audit firms, of the moderating influence of business risks on the audit effort-audit fee relationship. The study was conducted in Western Region, Kenya. The geographical area of Western Region, Kenya to be covered in the study was obtained from the Western Region as defined by the Institute of certified Public Accountants of Kenya (ICPAK, 2011). This study area has been chosen because it is cost effective to cover a smaller geographical area in situations where the population is homogeneous. Furthermore, the target of the study was small and medium audit firms as well as auditees. The population of the study constituted all the 48 Audit firms in the Western Region.

The study utilized mainly primary data collected by use self administered questionnaires. Secondary data from relevant publications was used to supplement the primary data. This study aimed at collecting data relating to the last three audits conducted by the audit firms. In an effort to improve the content validity and improve response rate, the survey was formulated and implemented with guidelines adopted from Dillman (2000). The scales for the questionnaire and other quantitative measures are drawn from in-depth literature review from which indicators for business risk and determinants of audit fees with modifications that suit the study were selected. The pool of items in the questionnaire was subjected to evaluation of expert both practicing Accountants and the academicians,

Various validity and reliability tests was conducted to ensure that the instruments for data collection are reliable both in content and construct. The questionnaire was pretested before the actual field survey. Reliability refers to the extent to which an experiment, test or

any measuring procedure yields the same result when subjected to repeated trials (Sekaran, 2000).. Content validity was achieved by subjecting the pool of questions of the research instrument to academic expert's panel in the field of auditing who expressed their level of agreement/disagreement on use of various items in the questionnaire. Construct validity was established by use of factor analysis in which the information contained for the original variables were summarized with minimum loss of information on the original variables.

The validity of a measure is defined as the extent to which a construct or a set of measures correctly represents the concept of study, and the degree to which it is free from any systematic or non-random error (Nunally, 1978). It is widely held that establishing the reliability of a measurement scale should precede an assessment of its dimensionality because the presence of unreliable measurement items enhances a scale's lack of uni-dimensionality (Cortina, 1993). In this regard reliability is, therefore, a necessary condition for validity (Peter, 1981; Peter and Churchill, 1986). The foregoing section has reported the positive results of reliability analysis. Researchers also assert that no single statistic offers a general index of validity of the measurements made. Consequently, three basic types of validity have been proposed (Sekaran, 2000): content validity (whether the measure adequately measure the concept), construct validity (measures whether the instrument tap the concept as theorized) and convergent validity (tests whether two instruments measuring the concept correlate highly)

For the risk based auditing construct, the literature depicts a vast corpus propositioning conceptual frameworks. The pool of items generated from this exercise that were deemed to represent the underlying dimensions of the risk based auditing were given to an expert panel of five academics drawn from the fields of accounting professionals and non practicing accountants. These experts expressed their degree of agreement/disagreement with the use of the different items on a Likert scale of five points. This process yielded

13 items to represent the business risk measures consistent with the dimensions of business risk indicators envisaged by ISA 315.

Findings and discussions

Primary data was collected by means of self administered questionnaires. The questionnaires were distributed in the month of June/July 2013. Responses were received from 31 audit firms out of the target population of 48 firms. This represented 65% of the targeted population. The respondents were required to give responses regarding their own audit firm and how they conducted their audit as well as responses regarding three of their clients recently audited. Under this research strategy, responses regarding 144 clients were anticipated out of which 73 were received. Majority of the audit firms who participated in this study were from Kisumu County. Out of the total 48 firms in the study area, 20 were based in Kisumu from whom 70% responses were received.

The first section of the research instrument sought to capture the general information about the respondents. The majority of the (67.7%) respondents were male compared to 32.3% female. This preliminary indication suggests that the auditing profession in the study area is dominated by male. The study revealed that most (74.2%) of the respondents were aged 40 years and below with 45.2% of the respondents falling in the 21- 30 year bracket. Only 3.2% of the respondents were aged over 50 years. Since the majority of the respondents were employees of audit firm participating in the study, this finding indicates that most audit firms in the study area employ young professionals or have been in operation for a shorter period.

Further survey of the characteristics of the respondents revealed that most of the respondents had attained undergraduate and Certified Public Accountants (CPA) qualification with 41.9 of the respondents saying they hold both Undergraduate and CPA qualification and 16.1% being holders of CPA qualification without a degree. Equivalent number of respondents had Masters qualification and CPA. Only 16.1% of the respondents held qualifications equal to partial

CPA/ACCA and below. Most of the responses were collected received from audit managers. Of the six major categories of designation of respondents, 25.8% consisted of audit managers, 12.9% were received from audit seniors. Audit assistants also gave 12.9% of the responses as interns did.

The main objective of the study sought to establish the extent of application of BRA among audit firms in the study area. To address this objective, respondents were required to indicate the extent to which they carry out business risk assessment in a scale of 5. The questions focused on the three thematic areas of business risks as per ISA 315; financial risk assessment, operational risk assessment and compliance risk assessment. Table 1below summarizes the findings for the first objective of the study.

Table 1 Application of Business Risk Auditing in Western region

Statement	1	2	3	4	5	Total	Mean	SDev
Financial risk Assessment	3 10%	7 23%	11 35%	9 29%	1 3%	31 100%	2.935	0.108
Operating risk assessment	4 13%	6 19%	16 52%	4 13%	1 3%	31 100	2.742	0.122
Compliance risk Assessment	1 3%	2 6%	4 13%	14 45%	10 32%	31 100	3.968	0.007
Overall score for business risk assessment						31	3.367	0.086

Source: Survey data, 2013

The study revealed that business risk auditing is practiced to a moderate extent in western region, Kenya. In a scale of five, the average score of business risk auditing was 3.367 (standard deviation 0.086). Further analysis of the specific components of business risks

indicate that compliance risk assessment (Mean 3.968 standard deviation 0.007) is most prevalently practiced compared to financial risk assessment (mean 2.935 standard deviation 0.108) Mean 2.742 standard deviation 0.122) and operational risk assessment.

As indicated by the findings, business risk auditing is practiced to at best a moderate extent in western region, Kenya with a mean of 3.367 (standard deviation 0.086) in a Scale of 5. Further analysis of the specific components of business risks indicate that compliance risk assessment (Mean 3.968 standard deviation 0.007) is most prevalently practiced compared to financial risk assessment (mean 2.935 standard deviation 0.108) Mean 2.742 standard deviation 0.122) and operational risk assessment. This result indicates that save for compliance risk assessment; business risk assessment is not practiced in western region Kenya. Auditors are keen on the assessment of compliance risks such as compliance with legal requirements. Little attention is put on the operating and financial risk assessment.

This finding contrasts the findings of similar studies in developed countries. A study by Kitum (2010) which investigated the application of Business risk auditing methodology within non-big-4 audit firms in United States, the United Kingdom and Canada, using structured interviews and questionnaire survey revealed that the non-big-audit firms in the developed countries studied had adopted business risk auditing to a greater extent in order to follow the standards in their countries and to follow the trend in the industry. This means that there is difference in application of this methodology in developing and emerging economies.

Summary, conclusions and recommendations

The census study surveyed 48 audit firms in western region, Kenya. A structured questionnaire was used to collect data from a total of 144 audits comprising of three audits in each of the 48 audit firms. The comprehensive analysis undertaken during this study resulted in various findings: some arise from the literature surveyed, some are emerge from the study methodologies adopted whereas other results

emanate from data analysis. The purpose of this chapter is to elucidate the summary, conclusions and recommendations of this study, as well as implications for theory, policy and practice. A discussion on the limitations of the study and suggestions for future research concludes the chapter.

The major finding of the study was that that business risk auditing is practiced to a moderate extent in western region, Kenya. Further analysis of the specific components of business risks indicate that compliance risk assessment is most prevalently practiced compared to financial risk assessment and operational risk assessment. This findings leads to the conclusion that save for compliance risk assessment; business risk assessment is not practiced in western region Kenya. Auditors are keen on the assessment of compliance risks such as compliance with legal requirements and that little attention is put on the operating and financial risk assessment.

Emerging from the conclusion that business risk auditing is practiced to a moderate extent the study area and that it is only compliance risk assessment that is practiced to a highest degree while financial risk assessment and operational risk assessment is practiced to very little extent by auditors in western region, it is recommended that small audit firms in developing countries should put more focus on financial risk assessment and operational risk assessment. From the literature, the benefits of conducting business risk assessment are enormous. Besides losing on the benefits, there is exposure of audit firms to audit risks arising from failure to conduct adequate business risk assessment. This conclusion also signals the need for training of audit personnel on the emerging audit methodologies and procedures.

The theory of business risk- audit fee model is still limited and is not without controversies. Many prior studies incorporate risk in the audit fee model as an independent variable, while others omit it altogether. However, in the recent past, due to the eroding trust on the reliance of auditors in provision of oversight role, much focus has shifted towards business risks. The finding of this study is crucial in providing the right position as a moderating variable in the audit fee model.

Furthermore, controversies marred the debate as to whether business risk approaches is practiced in developing countries and among small audit firms. This study provided a perfect setting and respondents to unearth this mystery with the findings pointing out that the approach is only practiced at best to moderate extent. This will provide the much needed pointer to the appropriate direction to be pursued by scholars and accounting professionals in this category.

The findings of this study brings out several important contributions to the accounting profession. First and foremost, this study has revealed that business risk auditing is only practiced at best to a moderate extent among small audit firms and clients. This knowledge brought to light by this study can be capitalized by practioners in the accounting profession to engeneer their efforts towards adoption of this methodology. While this research makes significant contributions to the body of knowledge on business risk auditing and audit fee modelling, it is necessary to evaluate the results in the context of the study limitations. First, scholars have expressed concerns regarding survey designs and associated measurement problems. Surveys and their cross-sectional nature of data as opposed to longitudinal data mean that conclusions could be limited to those of association as opposed to having conclusions that illuminate causal relationships between the variables of interest.

Another limitation relates to the relatively small sample size and the resulting concern that the data may not fully capture the range of factors that interplay in the relationship between business risks and audit effort. A larger sample size would have supported a more robust statistical technique such as structural equation modelling (SEM), which is better predisposed to expose insignificant relationships otherwise masked in selective correlation regression analysis and multiple regression analysis, (Tucker *et al.*, 2008). However, the study focus on small firms, the study objectives was not jeopardized by the selection of the study area and sample.

Directions for future research are consequent to the study findings as well as from missed opportunities in using the selected rather than

alternative research methodologies and techniques. First and foremost, previous researchers in developed countries have used experimental approach. Future researchers can replicate this study using experimental approach in other parts of developing countries so as to collaborate or otherwise build on the findings of this study. Secondly, there is need for future studies to employ longitudinal research design so as to bring out how the interrelationship of variables changes over time. In this way, the effects of political and social economic changes on the study variables would be ascertained. The study population in this study comprised of firms in western Kenya. Future studies should focus on larger populations. Further, there is need to focus on large audit firms in developing countries.

References

- Abdullah, K.A. & Al-Araj, S.R. (2011). Traditional Audit versus Business Risk Audit: A Comparative Study – Case of Jordan. *European Journal of Economics, Finance and Administrative Sciences*, (40): 74-91
- Abdullatif, M., & Al-Khadash, H.A., (2010). Putting Audit Approaches in Context: The case of Business Risk Audit in Jordan. *International Journal of Auditing*, 14: 1-24
- Bell, T. B., Dooger, R. & Solomon, I. (2007). Audit labour Usage and Fees under Risk based Auditing. *Journal of accounting research*, 46(4) 729-760
- Bell, T. B., Dooger, R., & Solomon, I. (2008). Audit Labour Usage and Fees under Business risk Auditing. *Journal of accounting research*, 16 (4): 729-760
- Bell, T. B., Mars, F. O., Solomon, I & Thomas, I. (1999). *Auditing Organizations Through Strategy Lens*. Montvale, NJ: KPMG LLP.
- Bentley, K., Omar, C.T., & Sharp, N.Y., (2011). Business Strategy, Audit Effort, and Financial Reporting Irregularities, Seminar

- paper presented to the University of New Wales, School of Accounting, Session (1) 2011.
- Dowling M. J., McGee J. E. (1994). Business and technology strategies and new venture performance: a study of the telecommunications equipment industry. *Management Science* 40(12): 1663-1677.
- Aguinis, H. 2004. *Regression analysis for categorical moderators*. New York: Guilford
- Eilifsen, A., Knechel, W. R. & Wallage, P. (2001). Application of the Business Risk-Audit Model, A field Study. *Accounting Horizon*, 15(3), 193-207
- El-Gammal, W., (2012). Determinants of Audit Fees: Evidence from Lebanon. *International Business Research*, 5(11) 136-145
- Flint, C., Ian, A. M. & Hathely, J. H. (2008). Business Risk Auditing: A regressive evolution? – A research note, *Accounting Forum*, 32 (2)
- Francis, J. R.. & Simon, D.T. (1987). A test of audit pricing in Small-Client segment of US market, *Accounting Review LXII*(1): 145-157
- Gray, I., Manson, S., (2008). *The Audit Process: principles practice and cases*. Seng Lee Press, Singapore.
- Griffins, P. (2011). *Risk-based Auditing*. Gower Publishing, USA.
- Humphrey, C., Jones, J., Khalifa, R. & Robeson, K. (2010) . *Business Risk Auditing and Auditing Profession: Status, Identity and Fragmentation*.
- IASB (2009). International Standards of Auditing 315. ISAB
- ICPAK, (2011). Institute of Certified Public Accountants (ICPAK), *Western Branch*, Document No. ICPAK/VAP/BRANCEHES 001.

- Jubb, C.A., Houghton, K.A. & Butterworth, S. (1996). Audit fees determinants; the plural nature of risks, *Managerial Auditing Journal*, 11(3) 25-40
- KPMG (1999). *The Financial Statement Audit: Why a New Age Requires an Evolving Methodology*, Assurance and Advisory Services, USA, KPMG LLP.
- Lemon, W.M., tatum, K.W., & Turley, W.S. (2000). Developments in audit Methodologies of large Accounting Firms. London, ABG professional information.
- Lovaas, P. (2009). A comprehensive risk-based Auditing framework for Small and Medium Sized financial institutions. *Issues in information Systems* 10(2) 485-495
- Miles, R.E., & Snow, C.C. (1978). *Organizational strategy, structure and process*. New York, NY: McGraw-Hill.
- Mozammal, M. (2005). Risk-based Audit: Lessons from Kenya Pilot. Operations Policy and Country Services, November, 2005, number 9.
- Mwindi, D., (2005). *Auditing*. Focus publisher's ltd., Nairobi, Kenya
- Prinsloo, J (2008). Development and evaluation of risk-based audit approaches. Unpublished PhD dissertation, University of Free State.
- Rene`, D. (2008). Defining and measuring business risk in an economic-capital framework, *Journal of Risk Finance*, 9(4), 317-333
- Robson, K., Humphrey, C., Khalifa, R., & Jones, J. (2007). Transforming Audit technologies: Business risk Audited methodologies and the field. *Accounting Organizations and Society*, 32: 409-438.

- Salehi, M., & Khatiri, M. (2011). A study of risk-based Auditing Barriers: Some Iranian evidence. *African Journal of Business Management*, 5(10), 3923-3934.
- Schroeder, R.G., Clarc, W.M., Carthy, J.M. (2011). *Financial Accounting, Theory and Analysis: Text and cases*. 10th Ed., John Wiley and Sons, Inc.
- Vilsanoiu, D., & Serban, M., (2010). Changing Methodologies in Financial Audit and their Impact on Transforming Systems Audit. *Informatica economica*, 14 (1): 57-65
- Wamai, S.K. (2005). *Auditing Assurance & Related Services: shifting paradigm*. Kijabe Printing Press, Kijabe, Kenya
- World Bank, (2001). *Accounting and Auditing ROSC*, November, 2001. Available online: www.worldbank.org/ifa/kenyarosc.pdf