MODERATING EFFECT OF BUSINESS RISK ON THE AUDIT FEE MODEL AMONG SMALL AUDIT FIRMS: CASE OF WESTERN REGION, KENYA

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Abstract

Auditing remains a fundamental tool of financial management oversight. Despite of auditing ability to enhance confidence and reliability of the financial statements, there has been increasing criticisms addressed to the audit profession in the recent past especially after the failure of several international and local companies which occasioned doubt on the oversight role of audit due to its overreliance on financial statements at the expense of business risks. Consequently, auditors have been compelled to reengineer their audit approaches to be more responsive to business risks. The purpose of this study was to evaluate the moderating impact of business risks on the relationship between audit fees and its determinants among audit firms in Western Region, Kenya using cross-sectional survey research design with a target population of 48 Audit firms. Saturated sampling technique was used in which data was collected using self administered questionnaires. The study revealed existence of significant moderating effect of business risks on the both audit duration and size of the audit firm – audit fee relationship. The study concludes that client's size, complexity as determined by number of subsidiaries and branches and audit firm size are the major determinants of audit fee and that their effect can further be enhanced by business risks, the moderator variable. The study provides rationale for BRA and its findings provides direction for response to business risks among audit practitioners as well as enriching the literature of audit risk and fee model with evidences from emerging economies.

Keywords: Business risks, audit fees, 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 and Manson, 2008; Serban and 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). According to Wamai, (2005), 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. The auditing profession is now moving from traditional audit scope to assurance. 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 as many audit firms around the globe agree that the audit process need new skills, techniques 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 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).

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. Bell *et al.*, (1997) argues that an auditor attempting to conduct a business risk audit of a client should not rely only on the reported financial statements but should endeavor to understand the internal as well as the external relationships and the entire realm of relationships and dealings of the concern.

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.

In a competitive audit market, audit fees are set to recover the auditor's costs plus a normal profit (Bell *et al.*, (2008). Therefore, audit effort is a major driver of audit fees. Behavioral research conducted via survey and questionnaires link audit fees to the marginal cost of auditing plus expected losses from litigation, where higher effort increases the cost of performing audits but decreases the expected litigation and insurance cost. Hence, auditors can either increase effort and hence audit quality in defense of likely litigation, or charge additional insurance premium to cover possible future litigation costs (Palmrose 1986; Simon and Francis 1988; Pratt and Stice 1994; Simunic and Stein 1996). Similarly, prior literature documents that audit effort increases with the assessment of inherent business risk (O'Keefe, Simunic, and Stein 1994; Bell *et al.*. 2001).

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.

This study was based on the Western Region, Kenya region as defined by ICPAK, (2011) where all the audit firms in the study area will participate in the study. The study area have been chosen in order, to concentrate the study on the small and medium sized audit firms since most of the audit firms listed in this category operate in the study area (ICPAK, (2011). This is in response to a call by several scholars for more empirical studies among small and mid-sized audit firms in developing countries (see Abdullah & Al-Araj, 2011; Lovaas, 2009; Vilsanoiu & Serban 2010) 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. Previous studies have failed to address the multivariate nature of risks especially from the dimensions of ISA 315 which implies a great rift between the audit practice and the

academia. This study therefore sought to investigate the status of BRA, the relationship between business risks, audit effort and audit fees among audit firms in Western Region, Kenya.

Methodology

The study adopted a 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 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 was 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,

Data analysis involved correlation and regression analysis. Pearson correlation analysis was conducted to determine the direction, strength, and significance of the bivariate relationship of audit determinants. Moderated regression analysis was used to determine the moderating Impact of business risk. Researchers have posited that moderated regression analysis is the most general and conservative method for testing contingency hypothesis in which interaction exists (Aguinis, 2004 and Dowling & Mc Gee, 1994). This procedure involves the regression of the dependent variable on the independent variable the potential moderating variable, and the cross-product interaction term of the independent variable and the potential moderating variable. If the cross-product interaction term produces a significant change in the R-square value (that is, significantly increases the

amount of variance accounted for in the criterion variable), then the moderating variable is identified as having a significant effect on the nature of the relationship between strategic control and the criterion variable. The moderated regression analysis used to test data is mathematically presented below:

Model 1 is a regression of the dependent variable and the independent variables.

Model 1

$$F_i = b_0 + b_1X + \mu_1 \quad \ldots [1]$$

Model 2

Model 2, introduces the business risk in order to establish their contribution in the general audit fee model 1.

$$F_i = b_0 + b_1X + b_2Z_i + \mu_2 \quad \ldots [2]$$

Model 3

Model 3 encompasses the dependent independent variables, the potential moderating variable and the cross-product interaction term of the dependent and potential moderating variable.

$$Fi = b_0 + b_1 X + b_2Z + XZ_+ \mu_3 \quad \ldots [3]$$

Four distinct MRA procedures were conducted for each of the audit effort variables; audit duration, size of the client, size and client complexity in order to the existence of moderating effect of business risks in any or each of the variables as per the hypotheses. As depicted in the regression equations, the interaction term, XZ, is entered last to ensure that the coefficient is not confounded with variance arising from the main effects of the variables. In addition, Z can be considered as a moderator variable only if the change in R^2 for equation (3) compared to equation (2) is statistically significant. Moderated regression analyses (MRA) include multiplicative terms that might be highly correlated with their constituents, a situation that is prone to problems of multicollinearity in the estimation of regression coefficients. To alleviate this problem, mean centering of all the variables was done before calculating interaction terms, a procedure that has been demonstrated to reduce such multicollinearity in multiplicative regression models (Howell, 2007).

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. 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.

The first step towards achieving the overall objective of the study was to establish the determinants of audit fees among audit firms in the study area. The audit effort was measured by several parameters consistent with those used by leading researchers in the audit fee model studies; audit duration, client size, audit size and client complexity. Client complexity was measured by the number of subsidiaries and branches of the client. To actualize this objective, correlation analysis was conducted. The results of the correlation analysis are summarized in table 1 below.

Table 1
Correlations results: Determinants of audit fees

	Audit Fee	Duration	Client Size	Audit firm Size	Client Complexity
Audit Fee	1.000				
Duration	.404**				
Client Size	.271*	.331*			
Audit firm Size	.305**	-.142	-.003		
Client Complexity	.327**	.184*	.128	-.011	1.000

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

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

Source: Survey data, 2013

The findings of the study reveal that all the independent variables have a significant positive correlation with the dependent variable, the strongest relationship being indicated by duration $\beta = 0.404$ ($p < 0.01$). Client complexity also exhibited a positive relationship which was significant at 0.01 level ($\beta = 0.327$, $p < 0.01$). Client size depicted a positive correlation with audit fee, which was significant at 0.05 level (2-tailed). The study then proceeded to analyze the moderating impact of Business risks on the relationship between various determinants of audit fees and audit fees by

audit firms in Western Region, Kenya. To actualize this objective, a moderated regression analysis was conducted separately for audit duration – audit fee relationship, client size – audit fee relationship, audit firm size - audit fee relationship and complexity of client – audit fee relationship. The results of each of these analyses are presented in the subsequent section.

The study hypothesized that the relationship between audit duration and audit fees is moderated by business risk as assessed by the auditor. To test this hypothesis, a moderated regression analysis was run, a procedure which yielded results tabulated in table 2. As shown in the table, the full model that includes the independent variable of audit duration, the moderator of business risks and the interaction effects is significant at (R^2= 0.293, Adjusted R^2 = 0.197 , F = 3.712, F- change = 01.614, $p < 0.05$). Compared with the reduced model, which only includes predictors and moderators (step 2), the addition of interaction terms in the full model significantly increases the R^2 (increase in R^2 =0.109, $p < 0.05$). The moderating effect of business risks that improves the model's goodness of fit is statistically evident. The hypothesized contingency model explains 29.3% of the variance in audit fee charged by auditors.

Table 2

Moderating effect of business risks on the Audit duration-audit fee relationship

Variables	Model 1			Model 2			Model 3		
	B	SE_b	B	*B*	SE_b	B	*B*	SE_b	B
Constant	2.023	0.065	-	2.245	0.178	-	2.354	0.22	-
Step 1									
Duration	1.137	0.339	0.475	1.338	0.339	0.475	0.213	1.375	0.076
Step 2									
Business Risks				-0.553	0.413	-0.161	-0.825	0.525	-0.24
Step 3									
Duration x Business risks							2.401	2.846	0.45
R^2			0.163			0.184			0.293[c]
Adj. R^2			0.152			0.161			0.197[c]
R^2 Change			0.163			0.021			0.109[c]
F change (ANOVA)			14.133[d]			7.323			7.614[d]
F value for model			13.87			3.789			3.712[c]

The significance levels shown are one-tailed for hypothesis testing and two tailed for control variable testing

[a]p< 0.1; [b]p<0.05; [c]p< 0.01; [d]p< 0.001

Source: Survey data (2013)

Table 3 below summarizes the findings of the three – step moderated regression analysis with the dependent variable (client size) only in step one, the potential moderating variable (business risks) introduced in step 2 and eventually interaction effect in step 3.

Table 3

Moderating effect of business risks on the relationship between client size and audit fee

Variables	Model 1			Model 2			Model 3		
	B	SE_b	B	*B*	SE_b	B	*B*	SE_b	B
Constant	1.693	0.218	-	1.607	0.285	-	1.064	0.83	-
Step 1									
Client Size	0.126	0.053	0.272	0.126	0.053	0.272	0.275	0.22	0.591
Step 2									
Business Risk				0.184	0.394	0.054	1.396	1.782	0.407
Step 3									
Client size X Business Risks							-.331	.474	-.479
R^2			0.073			0.076			0.083
Adjusted R^2			0.06			0.05			0.043
Change in R^2			0.073			0.003			0.006
F change (ANOVA)			14.133[d]			6.323			5.614 [d]
F value for model			5.624			0.218			0.486

The significance levels shown are one-tailed for hypothesis testing and two tailed for control variable testing

[a]p< 0.1; [b]p<0.05; [c]p< 0.01; [d]p< 0.001

Source: Survey data (2013)

As shown in the table 3 above, the full model that includes the independent variable of client size, the moderator of business risks and the interaction effects is insignificant at (R^2= 0.083, Adjusted R^2 = 0.043 , F = 0.486, F- change = 5.614, $p < 0.05$). Compared with the reduced model, which only includes predictors and moderators (step 2), the addition of interaction terms in the full model slightly but insignificantly increases the R^2 (increase in R^2 =0.109, $p > 0.05$). This implies that the moderating effect of business risks that improves the model's goodness of fit is statistically insignificant.

The study also revealed that there is a significant moderating effect of business risks on the relationship between size of the audit firm and audit fee

at (R^2= 0.231, Adjusted R^2 = 0.194 , F = 5.533, F- change = 7.614, p < 0.05). Compared with the reduced model, which only includes predictors and moderators (step 2), the addition of interaction terms in the full model significantly increases the R^2 (increase in R^2 =0.138, p < 0.05). The moderating effect of business risks that improves the model's goodness of fit is statistically evident. The hypothesized contingency model explains 23.1% of the variance in audit fee charged by auditors.

Table 4

Moderating effect of business risks on the relationship between size of the audit firm and audit fee

Variables	Model 1			Model 2			Model 3		
	B	SE_b	β	*B*	SE_b	B	*B*	SE_b	B
Constant	1.643	0.211	-	1.501	0.29	-	3.36	1.203	-
Step 1									
Size	0.47	0.176	0.313	0.482	0.176	0.313	0.966	0.926	0.627
Step 2									
Business Risks				0.278	0.391	0.081	3.513	2.413	1.024
Step 3									
Size							2.952	1.855	1.388
Business Risk									
R^2			0.093			0.131			0.231[c]
Adjusted R^2			0.08			0.074			0.194[c]
Change in R^2			0.093			0.006			0.138[c]
F change (ANOVA)			14.13[d]			6.323			5.614[d]
F value for model			7.284			0.504			4.533[c]

The significance levels shown are one-tailed for hypothesis testing and two tailed for control variable testing

[a]p< 0.1; [b] p<0.05; [c]p< 0.01; [d]p< 0.001

Source: Survey data (2013)

Finally, the hypothesis that the relationship between complexity of the audit client and the audit fee charged by the auditor is moderated by business risks was not supported. Audit complexity was measured by the number of subsidiaries and branches of the client consistent with previous studies. The full model that includes the independent variable of auditee complexity, the moderator of business risks and the interaction effects is insignificant at (R^2= 0.108, Adjusted R^2 = 0.070 , F = 0.053, F- change = 5.614, p < 0.05). Compared with the reduced model, which only includes predictors and moderators (step 2), the addition of interaction terms in the full model insignificantly increases the R^2 (increase in R^2 =0.001, p > 0.05).

This implies that the moderating effect of business risks that improves the model's goodness of fit does not exist. The hypothesized contingency model explains 10.8% of the variance in audit fee charged by auditors.

Table 5

Moderating effect of business risks on the relationship of auditee complexity and audit fee

Variables	Model 1			Model 2			Model 3		
	B	SE_b	B	*B*	SE_b	B	*B*	SE_b	B
Constant	2.12	0.05	-	2.07	0.18	-	2.06	0.2	-
Step 1									
Client Complexity	1.08	0.38	0.33	1.08	0.38	0.33	0.92	0.8	0.28
Step 2									
Business Risk				0.1	0.39	0.03	-0	0.69	-0
Step 3									
Complexity X Business Risks							0.17	0.73	0.07
R^2			0.11			0.11			0.108
Adjusted R^2			0.09			0.08			0.07
Change in R^2			0.11			0			0.001
F change (ANOVA)			14.133[d]			6.32			5.614[d]
F value for model			8.49			0.07			0.053

The significance levels shown are one-tailed for hypothesis testing and two tailed for control variable testing

[a]p< 0.1; [b] p<0.05; [c]p< 0.01; [d]p< 0.001

Source: Survey data (2013)

This study established that size of the audit firm, size of the client; audit duration and complexity of the client are among the major determinants of audit fees in the study area. These findings were consistent with prior studies by leading scholars. According to Simunic (1980), client size, complexity, risk, and profitability of the firm being audited (Auditee) are major determinant of audit fees. Other studies with similar findings include, Hackenbrack & Knechel, (1997), Hay, Knechel & Wong, 2006 and El-Gamal (2012). The later studied the views of external auditors and client's representatives comprising of accountants, financial controllers and internal

auditors on the determinants of audit fees whereby data was collected by self-administered questionnaires administered to a sample of 80 respondents. The characteristics of the respondents and target respondents were similar to this study and the results compares quite well. El-Gamal (2012), concluded that the major determinant of audit fee is the size of the audit firm consistent to the finding of this study in which the relationship between the size of the audit firm and audit fees was found to have a positive significant relationship with audit fees ($\beta = 0.305$; $p < 0.001$)

This finding indicate that the most important determinant of audit fees is whether the audit firm is one of the big four or not and the least important factor is the size of the audit firm based on the number of its employees. Many prior (Simunic, 1980; Low *et al.*.,1990; Chan *et al.*., 1993; Carson *et al.*., 2004; Jubb *et al.,* 1996) among other studies conclude that auditee size is the most important factor that influences audit fees, it is usually measured by total assets, revenues, sales and number of employees of the Client Firm. While there seems to be unanimity on the relationship between the size of auditee and audit fees, there is striking difficulty in distinguishing the contribution of audit duration given that audit duration is also a function of size of the audit client and the complexity of the client. This can be seen by the positive and significant relationship between client size and audit fee ($\beta= 0.231$, $p < 0.05$) and ($\beta= 0.184$, $p < 0.05$) as regards the relationship between audit duration and complexity of the audit firm. This position is shared by Palmrose, (1986) and Taylor, *et al.*, (2004) who established that the client's size has a direct impact on the auditors' work, and the time spent in the auditing process. established that larger clients require more audit services than smaller clients, more time needed and that that these large clients pay higher fees per dollar of size relative to smaller clients in the industry.

Another important variable in the audit fee model is complexity of the client. The finding that there is significant positive relationship between the complexity of the client and audit fees is consistent with the findings of leading scholars. Simunic (1980) and Jubb *et al.*, (1996) operationalized the complexity of the auditee by the number of branches and subsidiaries of the firm locally and internationally (subsidiaries in foreign countries) which was adopted for this study. Naser *et al.*, (2007), concluded that the greater the number and the more diversified the subsidiaries and operations of the clients are, the more audit work is required and therefore, audit firms charge higher audit fees. This finding was consistent with the results of an earlier study by Sandra & Patrick (1996) whose results indicated that auditors of highly complex firms often charge high audit fees in examining and evaluating the firm's financial statements. According to them, foreign subsidiaries have to abide by a variety of legislative and proficient

requirements for disclosure, which necessitates further audit testing, requiring more time and additional manpower to complete the audit process. This implies that the companies have to bear additional charges for audit work. Therefore, auditee complexity has a positive correlation with the audit fees. A series of other previous works are in agreement (Simunic, 1980; Low *et al..*, 1990; Chan *et al..*, 1993; Firth, 1997; Butterworth & Houghton, 1995; Carson *et al..*, 2004). These findings justify the inclusion of this variable in the model.

Consistent with prior studies auditor's size was also found to be a key determinant. Francis & stokes (1984) and Palmrose (1986) found out the strong relationship between auditor fees and audit company size. These studies concluded that the experience of the audit firm is considered as an important attribute that influence determining the amount of audit fees. Prior studies (Simon *et al.*, 1992) found that the Big Eight or Big Five, now the Big Four (Ernst & Young, Deloitte, PricewaterhouseCoopers (known as PwC) and KPMG) audit firms receive premium fees in many countries compared to non-Big Four (Palmrose, 1986; Francis & Simon, 1987; Butterworth & Houghton, 1995). The Big Four are the biggest audit firms in the world and due to their financial strength and expertise that they have they are able to provide higher quality audit.

Mixed results were found for the moderating role of business risks on the relationship between the various determinants of audit fees and audit fees. Results indicated that the moderating effect of business risks that improves the model's goodness of fit is statistically evident. This finding indicates that assessment business risks of a client and the duration spend on an audit assignment determines the audit fee charged, the implication is that audit duration does not operate independently as a determinant of audit fees. Results indicated that the relationship between client size and audit fees is not significantly moderated by business risks. This indicates that client size, as a variable operates independently as a driver of audit fees and is not moderated by the business risks of the client. Prior studies have yielded consistent results regarding the role of client size in determination of audit fees with leading scholars such as Simunic, (1980), Low *et al..*,(1990), Chan *et al..*, (1993), Carson *et al..*, (2004), Jubb *et al.*, (1996) among other studies concluding that auditee size is the most important factor that influences audit fees directly. Results also indicated that the relationship between the size of the audit firm and audit fee is significantly moderated by business risks. This indicates that the audit firm size – audit fee relationship is enhanced by business risks. Leading prior studies has indicated consistent results as to the role of size of the audit firm and audit fees charges (Simunic, 1980; Low *et al..*, 1990; Chan *et al..*, 1993; Firth, 1997; Butterworth & Houghton, 1995; Carson *et al..*, 2004). The findings of this study therefore provide further

insight to this relationship by locating the position of business risks as a moderating variable in the relationship. The finding also provide further evidence that big audit firms perform business risk assessment more than small audit firms and the outcome of the business risk assessment is incorporated as a risk premium in the audit fee negotiation.

The study findings indicated that moderating effect of business risks on the relationship between client's complexity and audit fee is not statistically significant, implying that business risks do not enhance the relationship between the two variables. Similar to the client's size, client's complexity is a higher order variable which operates independently of business risks or any other contextual variable for that matter. Naser *et al.*, (2007), established that the more complex the client firm is, the greater the number and the more diversified the subsidiaries and operations are; which necessitate more audit work; therefore, audit firms charge higher audit fees. This finding was consistent with the results of an earlier study by Sandra & Patrick (1996) who asserted that existence of business risks calls for more audit work thereby driving audit fees upwards. However from prior studies, complexity of the client would by itself call for more rigorous audit work. This means that as a determinant of audit fees, client's complexity operates independent of and is not moderated by business risks.

Conclusion:

Following the findings of this study, several conclusions were drawn. All the variables tested; audit duration, client size, client complexity and audit firm size had a significant relationship with audit fees charged and that audit duration was related to client size and client complexity, the study concludes that the client size, client complexity and audit firm size are the major factors that influence audit fee. This finding also points at the fact that audit duration is a contingent factor affecting audit fees arising from the size and complexity of the client. In tandem with this conclusion, the study recommends that that audit firms can enhance their revenues by focusing on the variables that determine audit fees charged. The positive relationship between the audit firm size and audit fees implies that big audit firms have a competitive edge compared to small audit firms regarding audit pricing. Hence it is recommended that small firms should focus on expansion strategies including merger with other small firms. Apart from the potential of large audit firms charging premium fees, they are able to attract bigger clients which will further enhance their revenue since the study suggests a significant positive relationship with audit fees.

The conclusion that audit duration is related to client size and client complexity leads to recommendation that scholars of audit fee modeling should regard audit duration as a parameter for client size or complexity

rather than as independent variable in audit fee model. This finding also points at the fact that audit duration is a contingent factor affecting audit fees arising from the size and complexity of the client. The results of the moderating effect of business risks on the relationship between individual variables of audit effort and audit fees differed. Conclusions in respect of each individual component of audit effort are thus considered separately

The finding that the relationship between audit duration and audit fee is moderated by business risks is significantly evident leads to the conclusion that assessed business risks of a client and the duration spend on an audit assignment determines the audit fee charged and that audit duration does not operate independently as a determinant of audit fees while on the other hand, the finding that the relationship between the size of the client and audit fees is not moderated by business risks leads to the conclusion that client size, is a higher order variable which operates independently as a driver of audit fees and is not moderated by the business risks of the client. its is therefore recommended that recommended that, audit firms should enhance their audit fee revenue by conducting business risk assessment. Existence of business risks in the risk assessment stage will enable the firm put more resources on more risky areas and guide them on the appropriate fee to be invoiced.

The conclusions from this study leads to several important recommendations. The conclusion that the relationship between the size of the audit firm and audit fees is moderated by business risks implies that audit firms which assess business risks of its clients prior to engagement would likely charge premium fees for risky clients in order to cushion themselves against possible audit risks. It is therefore recommended that recommendation that audit firms should assess business risks of its clients prior to engagement as this would likely enable them to charge premium fees for risky clients thus cushioning themselves against possible audit risks.

Finally, emerging from the finding that the moderating effect of business risks on the relationship between client complexity and audit fee is not significant leads to the conclusion that the relationship between the client's complexity and the audit fee charged by the auditor cannot be enhanced by business risks. The possible implication of this conclusion is that complexity of the client is a higher order variable which operates independently as a determinant of audit fee and possibility of the complexity of the client as a variable being considered to incorporate some element of business risk already. It is therefore recommended that these variables should not be incorporated as moderating variable in the audit fee model by scholars in this field.

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.

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