European Journal of Accounting, Auditing and Finance Research
Vol.5 No.4, pp.1-11, April 2017
Published by European Centre for Research Training and Development UK (www.eajournals.org)

THE ASSOCIATION BETWEEN AUDIT QUALITY AND EARNINGS MANAGEMENT BY LISTED FIRMS IN NIGERIA

Clement C. M. Ajekwe*[1] and Adzor Ibiamke[1]
[1] Department of Accounting Benue State University Makurdi

ABSTRACT: *This study examines the association between audit quality and earnings management by listed firms in Nigeria. The study measures audit quality by audit firm size and earnings management by the absolute abnormal discretionary accruals using the modified Jones model. The study was carried out in two parts, the first part is the comparative study using independent sample t-test and the Wilcoxon signed ranked test. The second part is the multivariate analysis where the association between audit quality and earnings management was examined. Based on our analysis, we found that auditor size has restrained earnings management but the decrease is not statistically significant. The implication of this finding is that users should not blindly assume that high audit quality proxy by the big 4 auditor is a symbol of earnings quality.*

KEYWORDS: Audit quality, auditor size, earnings management, Nigeria

INTRODUCTION

Firms manage accounting numbers to increase, reduce or smooth earnings relative to their "unmanaged" levels when they have incentives to do so. Firms manage earnings to meet the market earnings expectations (Graham, Harvey & Rajgopal, 2005; Levitt, 1998); increase stock prices of firms (Burgstahler & Eames, 1998); escape from political scrutiny (Deegan & Unerman, 2008; Mulford & Comiskey, 2002); increase the bonus pay of firm managers (Jiang, Petroni &Wang, 2010; Armstrong, Jagolinzer & Larcker, 2010); increase the value of their stock options (Levitt, 1998) or simply to enhance firm reputations (Wasley & Wu, 2006).

Plausible as these incentives to manage earnings might appear, it is generally assumed that earnings management is conducted to the detriment of investors because of the implied reduction in the transparency and reliability of financial reports (Scott, 1997; Beneish, 2001). Therefore, financial statement users consider earnings management to be unethical; and its occurrence should necessarily be prevented, by for example, relying on well defined accounting standards, such as the International Financial Reporting Standards (IFRS) and the firm's internal governance structure (Dechow, Sloan & Sweeney, 1996). This paper focuses on the role of the external auditors, particularly the quality of external auditors, as an aspect of the firm's internal governance structure.

Auditors provide a critical role to capital markets through the delivery of statutory assurance to users of general purpose financial statements. Auditing reduces information asymmetries that exist between managers and firm stakeholders by allowing outsiders the opportunity to verify the validity of financial statements. The effectiveness of auditing, and its ability to constrain the management of earnings, is expected to vary with the quality of the auditor. In the literature, auditor size (dichotomous Big x – non-Big x) has been the proxy for audit quality

ISSN 2053-4086(Print), ISSN 2053-4094(Online)

(Van Caneghem, 2004; Vander Bauwhede & Willekens, 2004). Myers, Myers, and Omer (2003) propose that when audit quality is high, auditors constrain the self-serving choices that management would like to make in the presentation of financial statements. Therefore, increased audit quality could or should lead to increased quality of reported earnings (Rusmin, 2010). In comparison to low-quality auditors, high-quality auditors are more likely to detect questionable accounting practices and, when detected, to object to their use and/or to qualify the audit report. Thus, high-quality auditing acts as an effective deterrent to earnings management because management's reputation is likely to be damaged and firm value reduced if misreporting is detected and revealed. Therefore, earnings management is assumed to be greater in firms with lower-quality auditors than in firms with higher-quality auditors (Becker, DeFond, Jiambalvo & Subramanyam, 1998; Cai, Zhao & Huang, 2005).

This study is based in Nigeria and examines the relationship between audit quality and earnings management. Considering that earnings management is undertaken to over-value, smoothen, or under-value earnings relative to their "unmanaged" levels, we focus on the absolute values of discretionary accruals to proxy earnings management. The study tests the hypothesis that, non-Big-Four audit firms allow more absolute discretionary accruals (ABSDA) than Big-Four firms. The hypothesis is tested in an independent t-test and Wilcoxon test of differences in median.

The remainder of the paper is organised as follows: the next section reviews relevant literature and develops the hypothesis of the study; sample selection is discussed in section 3 followed by an explanation of the research design and methodology in section 4. Results of the study are presented in section 5 followed by the summary and conclusions in the final section of the paper.

LITERATURE REVIEW AND DEVELOPMENT OF HYPOTHESIS

Several prior studies thought that larger audit firms are less likely than smaller audit firms to compromise their independence by endorsing opportunistic behaviours of management to manage earnings (DeAngelo, 1981; Krishnan, 2003; Francis & Wang, 2008; Becker *et al., 1998*). Moreover, larger audit firms are under pressure to provide better quality audit services because they have greater reputations to protect. Hence, the larger audit firms (Big 4 auditors)[1] are perceived as more skilled in sustaining an acceptable degree of independence, and therefore have more quality, than smaller audit firms because they commonly deliver a range of services to a larger number of clients, thereby reducing their reliance on any specific clients. Furthermore, as suggested by Lawrence, Minutti-Meza and Zhang (2011), the Big 4 firms can provide superior audit quality as their sheer size would definitely be able to support more comprehensive training programs, standardised audit methodologies, and more options for appropriate second partner reviews.

Shivakumar (1998) finds evidence which, he argues, is consistent with external auditors' ability to hinder or limit management discretion over accounting procedures, including discretionary accruals. The specified audits are seen as enhancing the credibility of financial information as a result of independent verification of the financial reports provided by the management. Thus, auditors are also seen as minimising the investors' information risk as proposed by the positive accounting theory (Watts & Zimmerman, 1986). Krishnan (2003) also finds that Big 4 auditors

[1] The Big Four audit firms are PriceWaterhouseCoopers, Ernest& Young, Delliote & Touche, and KPMG.

ISSN 2053-4086(Print), ISSN 2053-4094(Online)

aggressively mitigate accruals-based earnings management more than non-Big 4 auditors and therefore influence the quality of earnings. Becker *et al.* (1998) found that discretionary accruals of non-Big 4 audit firms are higher than for clients of Big 4 audit firms. Similarly, Francis and Wang (2008) find that earnings quality is higher as the country's investor protection regime becomes stronger, but only for firms with Big 4 auditors.

It is instructive to note that the researches indicating that audit quality constrains the earnings management were usually performed in developed countries (e.g., USA) where effective audit and oversight mechanism for auditors exists. If the institutional setting does not encourage high quality audits, auditors may not constrain the earnings management practices of clients who may then behave opportunistically (Jeong & Rho, 2004). Therefore, under weak regulatory institutional regimes, Big 4 auditors may not provide higher audit quality than non-Big 4 auditors (Nichols & Smith, 1983; Lam & Chang, 1994; Petroni & Beasley, 1996; Kim, Chung & Firth, 2003; Jeong & Rho, 2004; Rajhi & Azibi, 2008).

On the other hand, Van Caneghem (2004) using UK evidence and van der Bauwhede and Willekens (2004) using Belgian evidence found no evidence that auditor size decreases earnings management practices. These findings are also understandable considering some behavioural factors which auditors may face in the course of performing their duties. Two instances come to mind: Auditors are subjected to "intense pressure" by companies seeking to exploit opportunities to undertake aggressive earnings management (Segovia, Arnold, & Sutton, 2009). Auditors have also been found to form personal relations with clients and may identify with their clients' needs more than those of the investors they are supposed to be serving (Bazerman, Loewenstein & Moore, 2002). Based on these arguments and empirical study results, it is hereby hypothesised (in the null form) that:

> *Ho: There is no significant association between the reported absolute discretionary accruals and the audit quality of firms in Nigeria.*

RESEARCH METHODS: SAMPLE SELECTION

The thrust of the study is a comparison of earnings management under the interventions of Big-4 auditors and non-Big-4 auditors. Based on the study objectives, an *ex post facto* descriptive design was adopted. The population for the study consisted of 79 firms in the real sectors listed on the main board of the Nigerian Stock Exchange as at 31st December, 2014. Firms exhibiting the following characteristics were excluded from the sample: (i) financial and utility companies, (ii) firms with negative equity. Similarly excluded are (a) firms with insufficient data to compute discretionary accruals, (b) firms that changed their fiscal year-ends during the period of analysis, and (c) firms whose total or absolute discretionary accruals are equal or greater than 100% of lagged total assets. This sample selection procedure yielded a sample size of 48 firms for the period 2009 – 2014 with 201 firm-year observations audited by Big-4 auditors and 87 firm-year observations audited by non-Big-4 auditors.

Estimation of discretionary accruals

The aggregate total accruals cash flow approach was adopted in this study because it is the primary approach to measuring opportunistic earnings management (McNichols, 2000). Under this approach, total accruals (TA_{it}) are calculated as earnings before interest and taxes ($EBIT_{it}$) minus the operating cash flows from continuing operations (CFO_{it}):

ISSN 2053-4086(Print), ISSN 2053-4094(Online)

TA_{it} = $EBIT_{it}$ – CFO_{it}..... (1)

Where
TA_{it} represents total accruals for industry i in time t,
$EBIT_{it}$ represents earnings before interest and taxes, and
CFO_{it} denotes operating cash flows from continuing operations

Following Peasnell, Pope and Young (2000), the cross-sectional modified Jones model was used to estimate non-discretionary accruals in the study. The model is stated as follows:

$$[NDA]_{it} = \alpha_1[1/A_{t-1}]_{it} + \alpha_2[\Delta ADJREV_t/A_{t-1}]_{it} + \alpha_3[PPE_1/A_{t-1}]_{it} + \varepsilon_{it} \quad \text{..... ..... (2)}$$

Where
NDA_t = Non-discretionary accruals in time t
$\Delta ADJREV_t = \Delta REVt - \Delta REC_t$
ΔREV_t = revenues in year t less revenues in year t-1
ΔREC_t = receivables in year t less receivables in year t-1
PPE_t = property, plant and equipment in year t
A_{t-1} = lagged total assets

Consistent with previous research, all variables have been scaled by lagged total assets to reduce heteroscedasticity. ε_t is included as an error term. Estimates of the specific parameters, α_1, α_2 and α_3 are generated using firms matched on year (t) and industry classification (i). For each industry-year grouping, estimates of the specific parameters were calculated using the following regression:

$$[TA_t/A_{t-1}]_{it} = \alpha_1[1/A_{t-1}]_{it} + \alpha_2[\Delta ADJREV_t/A_{t-1}]_{it} + \alpha_3[PPE_t/A_{t-1}]_{it} \quad \text{..... ..... (3)}$$

The discretionary accruals (DA_t) were then calculated as follows:

$$[DA]_{it} = [TA_t/A_{t-1}]_{it} - [NDA]_{it} \quad \text{..... (4)}$$

One of the problems with these models (1 – 4 above) has been the occurrence of extreme financial performance of firms which is wrongly attributed to earnings management, leading to the commission of a type 1 error. Kasznik, (1999) and Kothari, Leone, and Wasley, (2005), among others, mention performance matching as a possible solution to overcome the type 1 error. However, because Kothari *et al*. (2005) find that performance matching reduces the power of the tests, thereby increasing the possibility of Type 2 errors; it is not considered necessary in this paper.

As an alternative control for performance, Jeter and Shivakumar (1999) suggest that cash flow from operations be included in the regression model because doing so increases precision to the model. Kasznik (1999) includes the change in operating cash flows not only as an explanatory variable to the Modified Jones model but also to increase the power to detect earnings management, especially at lower levels of earnings manipulation. Therefore, the

ISSN 2053-4086(Print), ISSN 2053-4094(Online)

change in cash flows was added to the modified Jones model as a driver of the accrual process following Kasznik (1999). This model, referred to as the Kasznik-model, is expressed as:

$$[NDA]_{it} = \alpha_1[1/A_{t-1}]_{it} + \alpha_2[\Delta ADJREV_t/A_{t-1}]_{it} + \alpha_3[PPE_t/A_{t-1}]_{it} + \alpha_4[\Delta CFO_t/A_{t-1}]_{it} + \varepsilon_{it} \quad \text{..... (5)}$$

Where

ΔCFOt = change in cash flows from operations

For each industry-year grouping, estimates of the specific parameters α_1, α_2, α_3, and α_4 were calculated using the following regression

$$[TA_t/A_{t-1}]_{it} = \alpha_1[1/A_{t-1}]_{it} + \alpha_2[\Delta ADJREV_t/A_{t-1}]_{it} + \alpha_3[PPE_t/A_{t-1}]_{it} + \alpha_4[\Delta CFO_t/A_{t-1}]_{it} + \varepsilon_{it} \quad \text{.....(6)}$$

Equation 6 can be further explained as

$$[TA/A_{t-1}]_{it} = \dot{\alpha}_1 [1/a_{t-1}]_{it} + \dot{\alpha}_2 [\Delta ADJREV/A_{t-1}]_{it} + \dot{\alpha}_3 [PPE/A_{t-1}]_{it} + \dot{\alpha}_4 [\Delta CFO_t/A_{t-1}]_{it} + \zeta_{it} \quad \text{..... (6)}$$

Non-discretionary Accruals Discretionary accruals

In other words, the error term, ζ_t, is the estimate of the discretionary accruals; or as the difference between total accruals and non- discretionary accruals indicated in Model 4.

Approach to testing

Conducting univariate tests would ordinarily be adequate test of the hypothesis in view of the study objective, which is to compare discretionary accruals between our Big-Four and non-Big-Four samples. However, univariate analysis ignores a number of variables that potentially confound results. Hence multivariate tests were conducted as well. In the multivariate analysis, discretionary accruals were regressed on auditor type (a dummy variable) and firm size as control variables.

Size (**SIZE**) may surrogate for numerous omitted variables. The logarithm of total assets is used in this study as the proxy for the size of the firm, which itself is a proxy variable for political attention (Watts & Zimmerman, 1990). The political cost hypothesis states that larger companies are more likely to prefer to minimise earnings, because the potential for government scrutiny increases as they get larger and more successful (Watts & Zimmerman, 1990; Young, 1999). Audit quality (**AQ**) is a dummy variable with the value of 1 if the firm is audited by a Big 4 audit firm and 0 if audited by non-Big 4 audit firm. The intervention by auditor type (Big 4/non-Big 4) could potentially confound univariate analysis; hence **AQ** was included as a control variable in the multivariate analysis.

The study examined the trend in the level of earnings management over time with the following regression:

ISSN 2053-4086(Print), ISSN 2053-4094(Online)

$$ABS\_DA_t=\alpha_0+\alpha_1 AUDITOR+\alpha_2 SIZE + \varepsilon_t \quad \text{..... (7)}$$

Where
ABS_DA_t = absolute value of discretionary accruals in year t, scaled by lagged total assets estimated by the Kasznik Model.
SIZE = natural logarithm of total assets
AUDITOR =Auditor size- Dummy variable (Big 4 Auditor =1; Non-Big 4 auditor =0)

ANALYSIS AND RESULTS

Univarite analysis

Table 1 represents the general overview of the Big 4 and non-Big 4 samples. Table 1 also exhibits results of testing equality of means of the two samples. According to the table, there is no significant difference between the Big 4 and non-Big 4 samples with respect to absolute discretionary accruals. The Levene's tests for equality of variances signal the following statistics; F = 7.278; t = -.484; p = .629 (2-tailed) confirming that the differences in the values of the means and medians in the two samples is by chance and therefore not significant. Similarly, the Wilcoxon two-sample tests of differences between the two samples also attest to the likely absence of differences between the samples (z = - .210; p = .834 (2-tailed)). Again the differences between the two samples are not significant as is exhibited in Table 1.

Table 1: Descriptive statistics of our samples and results of tests comparing the two groups

	Section A Observations with Big Four Auditors (*n* = 201)			*Section B* Observations with non-Big Four Auditors (*n* =87)			*Section C* Tests of null (A =B)	
	Mean	**Median**	**SD**	**Mean**	**Median**	**SD**	t-statistic	Z-statistic
ABSDA	0.0635	0.0521	0.0466	0.0666	0.0570	0.0546	-0.4840	-0.2100
p-value							(0.6290)	(0.8340)

As indicated earlier, a discussion of audit quality should be situated in a regulatory and institutional context. Where the regulatory and institutional context does not induce high quality audits from auditors, earnings management practices of client firms may not be constrained (Nichols & Smith, 1983; Kim,Chung & Firth, 2003; Jeong & Rho, 2004; Tsipouridou & Spathis, 2012). In the context of the Nigerian environment, auditors are rarely prosecuted in connection with the audits they perform; auditors are not subjected to heavy penalties consequent upon the collapse of their client firms whom they have issued a "clean bill of health". Indicative of this observation is the fact that no auditor (irrespective of size) was prosecuted or penalised following the massive bank failures of the 1990s in Nigeria, in spite of their (the banks) "clean" reports in prior periods. Another fact relates to the fraud at Cadbury Nigeria Plc of 2006 in which the external auditors were not sanctioned. Under this scenario, the DeAngelo (1981) theory of Big-Four auditors constraining earnings management of client firms may not hold. Therefore, there may be no difference in audit quality between Big-Four and non-Big-Four auditors. Consequently, the results signalled in the univarite analysis showing that there is no statistically significant difference between the discretionary accruals of firms audited by Big-Four and non-Big-Four auditors may be consistent with this claim. By extension, these results suggest that there may be no difference in audit quality between Big-Four and non-Big-Four audit firms in restricting earnings management in Nigeria. These findings are similar to the results of research in Korea (e.g. Jeong, 1999; Park, Lee &

ISSN 2053-4086(Print), ISSN 2053-4094(Online)

Won, 1999) and Greece (e.g. Tsipouridou & Spathis, 2012), but are different from the findings of researches of many previous studies in the USA and other developed countries (e.g. DeAngelo, 1981; Myers, *et al.*,2003 ; Palmrose, 1988 & Becker *et al*., 1998).

Multivariate analysis

We also perform a multivariate analysis because the univariate analysis ignores firm size which affects discretionary accruals. Therefore, in addition to a univariate test of our hypothesis, we also present the result of multivariate test that includes firm size (log of assets) and audit quality as control variables. The results of the multivariate analysis are shown in table 2.

The first coefficient in the regression in Table 2 relates to a dummy variable (AQ), representing whether firms are audited by Big-Four auditors. The result shows that auditor size is not significantly associated with discretionary accruals at the 0.05 level (t (285) = -0.361. p = -0.718). This result is consistent with the univariate result discussed in paragraph 5.1. From this result, we can conclude that there is no difference in audit quality between Big 4 and non-Big 4 audit firms in Nigeria. However, an examination of regression statistics shows that firm size (log of firm assets) is significantly related to discretionary accruals at the 0.05 level (t (285) = 2.483, p = 0.014). As the size variable has positive regression coefficients, it means that discretionary accruals increase with increasing assets size. The results suggest that firm size rather than audit size, have significant association with absolute discretionary accruals. As Table 2 shows, there is no significant association between the discretionary accruals of firms with auditor size; implying that auditor size, as proxy for audit quality, has no impact on earnings management in Nigeria.

Table 2: OLS regression of discretionary accruals on audit quality and a control variable

Independent variables	Coefficients (t-statistics)
Intercept	-0.072
	t = -1.282
	(p = 0.201)
AQ	-0.002
	t= (-0.361)
	(p = 0.718)
SIZE	0.014
	t= (2.483*)
	(p = 0.014*)
F	3.201
	(p = 0.042*)
R^2	2.2%
Adjusted R^2	1.5%

*Significant at 5%

Dependent variable is absolute discretionary accruals

SUMMARY AND CONCLUSIONS

The study examined the effect of audit quality on earnings management in Nigeria. Because audit quality and earnings management could not be measured directly, "auditor size" was proxy for "audit quality" and "absolute discretionary accruals" was proxy for "earnings management". To test the hypothesis, absolute discretionary accruals were estimated using the Kasznik (1999) variation of the Modified Jones Model; and these were regressed on auditor size (dummy) and firm size (log of firm assets) variables.

ISSN 2053-4086(Print), ISSN 2053-4094(Online)

The findings of this study show that auditor size, as proxy for audit quality, does not have an impact on earnings management. This means that there is no difference in audit quality between Big-Four and non-Big-Four auditors' ability to constrain earnings management activities of Nigerian firms in the sampled period. This result is consistent with the results of research on Korean firms (Jeong & Rho, 2004; Jeong, 1999; Park et al., 1999) and Greek firms (Tsipouridou & Spathis, 2012). On the other hand, they (findings of this study) are different from the results of researches in developed countries (such as Becker et al., 1998; Teoh & Wong, 1993; Palmrose, 1988; DeAngelo, 1981).

The divergent findings may be related to differences in the regulatory and institutional framework of the countries in which the researches are situated. Thus, the results of this study indicate that the role and theory of audit quality in constraining earnings management is not always valid in developing countries like Nigeria. This study adds to the literature on audit quality by showing that Big-Four auditors (proxy for audit quality) may not constrain earnings management of client firms in certain regulatory and institutional environments.

REFERENCES

Armstrong, C. S., Jagolinzer, A. D., and Larcker, D. F. (2010). CFOs and CEOs: Who have the most influence on earnings management? *Journal of Financial Economics*, 96(3): 513 – 526.

Bazerman, M. H., Loewenstein, G. and Moore, D. A. (2002). Why good accountants do bad audits. *Harvard Business Review*, November: 96-102.

Becker, C., DeFond, M., Jiambalvo, J. and Subramanyam, K. (1998). The effect of audit quality on earnings management *Contemporary Accounting Research, 15*, 1–24. Retrieved on 7 July 2016 at http://dx.doi.org/10.1111/j.1911-3846.1998.tb00547.x

Beneish, M.D. (2001). Earnings management: A perspective. *Managerial Finance*, 27(12):3 17.

Burgstahler, D. and Eames, M.J. (1998). Management of earnings and analyst forecasts' to achieve zero and small positive earnings surprises. Working paper, University of Washington.

Cai, C., Zhao, S. and Huang, Y. (2005). Toward the effect of audit quality on earnings management: Empirical evidence from manufacturing enterprises listed in Shangai Stock Market. *Journal of Modern Accounting and Auditing.* 1(2): 69-80.

Chen, K. Y., Lin, K. and Zhou, J. (2005). Audit quality and earnings management for Taiwan IPO firms. *Managerial Auditing Journal*, 20(1): 86-104.

Chia, Y. M., Irvine, L. and Hing-wah, L. (2007). Choice of auditors and earnings management during the Asian financial crisis. *Managerial Auditing Journal*, 22(2): 177 - 196

DeAngelo, L. (1981). Auditor size and audit quality Journal *of Accounting an Economics*, 3, 183-199.

Dechow, P.M., Sloan, R. G., and Sweeney, A.P. (1995). Detecting earnings management. *The Accounting Review*, 70 (2): 193-225.

ISSN 2053-4086(Print), ISSN 2053-4094(Online)

Deegan, C. and Unerman, J. (2008). *Financial accounting theory*, (European ed.), London: McGraw-Hill Education.

Francis, J. R. and Wang, D. (2008). The joint effect of investor protection and Big 4 audit on earnings quality around the world. *Contemporary Accounting Research*, 25 (1): 1-39.

Graham, J. R., Harvey, C. R., and Rajgopal, S. (2005). The economic implications of corporate financial reporting. *Journal of Accounting and Economics*, 40(1-3): 3 – 73.

Jeong, S.W. (1999). The comparison of the results of audit report review between Big-6 and non-Big- 6 auditors. *Accounting and Auditing Research., 35: 193-217.*

Jeong, S.W. and Rho, J. (2004). Big six auditors and audit quality: The Korean evidence. *The International Journal of Accounting, 39: 175-196.*

Jeter, D. and Shivakumar, L. (1999). Cross-sectional estimation of abnormal accruals using quarterly and annual data: Effectiveness in detecting event-specific earnings management. *Accounting and Business Research*, 29, 299-319.

Jiang, J., Petroni, K.R. and Wang, I.Y. (2010). CFOS and CEOs: Who has the most influence on earnings management? *Journal of Financial Economic*, 69(3): 513-526.

Jiang, J., Petroni, K.R. and Wang, I.Y. (2010). CFOS and CEOs: Who has the most influence on earnings management? *Journal of Financial Economic*, 69(3): 513-526.

Johl, S., Jubb, C. A. and Houghton, K. A. (2007). Earnings management and the audit opinion: Evidence from Malaysia. *Managerial Auditing Journal*, 22(7): 688-715

Kasznik, R. (1999). On the association between voluntary disclosure and earnings management. *Journal of Accounting Research*, 37(1): 57-82.

Kim, J.R., Chung, R., and Firth, M. (2003). Auditor Conservatism, Asymmetric Monitoring and Earnings Management. *Contemporary Accounting Research*. 23(2): 1-26

Kothari, S.P., Leone, A.J. and Wasley, C.E. (2005). Performance matched discretionary accruals measures. *Journal of Accounting and Economics*, 39:163-197.

Krishnan, G. (2003). Does Big 6 auditor industry expertises constrain earnings management? *Accounting Horizons*, 17(1):1-16.

Lawrence, A., Minutti-Meza, M., and Zhang, P. (2011). Can Big 4 versus non -Big 4 differences in audit- quality proxies be attributed to client characteristics? *The Accounting Review* 86 (1): 259–286.

Levitt, A. (1998). The "numbers game". Speech delivered at New York University Law and Business Centre. Retrieved from http://www.sec.gov on 7th July, 2015.

McNichols, M.F. (2000). Research design issues in earnings management studies. *Journal of Accounting and Public Policy,* 19: 313-345.

Mulford, C. W. and Comiskey, E. E. (2002). *The financial numbers game: Detecting creative accounting practices*. New York: John Wiley and Sons Inc.

ISSN 2053-4086(Print), ISSN 2053-4094(Online)

Myers, J. N., Myers, L. A. and Omer, T.C. (2003). Exploring the term of auditor-client relationship and the quality of earnings: a case of mandatory rotation? *The Accounting Review, 78(3):779-799.*

Nichols, D.R. and Smith, D.B. (1983). Auditor credibility and auditor changes. *Journal of Accounting Research.* 21(2):534-544.

Palmrose, V.Z. (1988). An analysis of auditor litigation and audit service quality. *The Accounting Review*. 63(1): 55-73.

Park, J., Lee, M., and Won, J. (1999). Audit quality analysis using discretionary accruals. *Accounting and Auditing Research.* 35: 289-319.

Peasnell, K., Pope, P. and Young, S. (2000). Detecting earnings management using cross-sectional discretionary accrual models *Accounting and Business Research*, 30, 313- 326.

Rajhi, M.T. and Azibi, J. (2008). Auditor's choice and earnings management after Enron scandals: Empirical approach in French context. *2008 EABR & TLC Conferences Proceedings,* Rothenburg, Germany.

Rusmin, R. (2010). Auditor quality and earnings management: Singaporean evidence. *Managerial Auditing Journal*, 25(7): 618-638. http://dx.doi.org/10.1108/02686901011061324

Scott, W. (1997). *Financial accounting theory*. Upper Saddle River: N. J. Prentice Hall.

Segovia, J., Arnold, V. and Sutton, S. G. (2009). Do principles- vs. Rules-based standards have a differential impact on U.S. auditors' decision? *Advances in Accounting Behavioural Research*, 12: 61-84.

Shivakumar, L (1998). Market reaction to seasoned equity offering announcements and earnings management. *Working paper*. London Business School.

Tsipouridou, M. and Spathis, C. (2012). Earnings management and the role of auditors in an unusual IFRS context: The case of Greece. *Journal of International Accounting, Auditing and Taxation.* 21:. 62-78.

van Caneghem, T. (2004). The impact of audit quality on earnings rounding-up behaviour: Some UK evidence. *European Accounting Review*, 13 (4): 771-786

Vander B. H. and Willekens, M. (2004). Evidence on (the lack of) audit-quality differentiation in the private client segment of the Belgian audit market *European Accounting Review*, 13(3): 501-522

Wasley, C. and Wu, J. (2006). Why do managers voluntarily issue cash flow forecasts? *Journal of Accounting Research*, 44(2):389-428.

Watts, R. L. and Zimmerman, J. L. (1986). *Positive accounting theory*. Eaglewood Cliffs: Prentice Hall

ISSN 2053-4086(Print), ISSN 2053-4094(Online)

Young, S. (1999). Systematic measurement error in the estimation of discretionary accruals: An evaluation of alternative modelling procedures. *Journal of Business Finance and Accounting*, 26(7/8): 833–862.

ISSN 2053-4086(Print), ISSN 2053-4094(Online)