EFFECT OF AUDIT MARKET CONCENTRATION AND AUDITORS' ATTRIBUTES ON AUDIT QUALITY IN THE QUOTED NIGERIAN MANUFACTURING FIRMS

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Abstract

This study seeks to ascertain the effect of audit market concentration and auditor's attributes on audit quality in the company quoted in Nigerian manufacturing sector. Specifically, it aims at finding out the impact of audit market concentration (AMC) and auditors' attributes (AUTEN, AUDFZ, ADFEE, YEND) on the quality of audit (AQ) in the Nigeria manufacturing sector. Ex post facto research design was employed because the data were extracted from archive of past events. The study was restricted to quoted Nigerian manufacturing firms. Simple random sampling technique was employed to select 52 firms quoted on the Nigerian Stock Exchange as at 31st December, 2015. The study covers a period of 15 years from 2001 – 2015, forming a total of 780 firm-year observations. Data were obtained from secondary sources (annual reports and accounts) and subjected to the regression analysis using the pooled OLS and Panel EGLS. The result shows a non-significant positive relationship between Hirschman-Herfindahl Index and the quality of audit while concentration ratio for Big 4 reveals a negative non-significant relationship; auditors' tenure appears positive and statistically significant; audit firm size appears negative and non-significant; audit fee appears positive and statistically significant and year-end was negative and statistically significant with the quality of audit.

Keywords: Big 4, Audit tenure, Audit fees, Quality audit, Audit market concentration.

Introduction

Flanagan, Muse and O'Shaughnessy (2008) assert that audit is a device that enhances quality assurance and gives credibility to financial reports. It boosts the confidence of the potential investors on the financial reports. The importance of quality financial report cannot be overemphasised as it guides investment decisions and helps to evaluate managers' true performance (Ahmed, Maysam & Naim, 2018). Investors, capital providers, the firm at large and other stakeholders, like - employees, government and researchers also rely on information generated from financial statements to guide them in decision making. Abysmal financial report will mislead the aforementioned categories of interest groups (Scott, 2009). When an unqualified opinion in the place of a qualified audit opinion is issues by an auditor on a financial report, such a report will eventually mislead the users of such financial report. Velte and Stinglbauer (2012) opine that the concept “concentration” depicts the agglomeration of financial power that is present in several industrial sectors, with varied reasons. Extant literature examines the use of market share as a proxy for market concentration (Dubaere, 2008; Miguel, 2010). Market concentration is a function of the quantity of firms in a market and their respective market shares. Schaen and Maijoor (1997) assert that concentration is the joint market allocation of foremost companies which connotes a level of oligopoly. Feldman (2006) further argues that mergers of some prominent audit firms in the 1ast two decades have raised the concentration of prominent audit firms. Pong (1999) reports that in extremely tight markets, the probability of conspiring with (high) fee fixing engagements is very high and auditee's choice is limited while conflict of interest has become the order of the day. Dubaere (2008) documents that smaller audit firms and governments are apprehensive of the fact that excessive concentration on the large audit firms will result to indiscriminate increase in audit prices, unabated decrease in auditor independence neglect of other audit firms and lowered quality of audit.

The results of previous studies (Numan & Willekens, 2012; Willekens & Achmadi, 2003; Ding & Jia, 2012; Pearson & Trompeter, 1994; McMeeking, Peasnell & Pope, 2007) appears to be inconclusive on market concentration and the quality of audit. There seem to be diverging perceptions of likely outcomes of growing competition in audit markets by two different schools of thought. The legalistic school looks at market concentration from the view of the traditionalist of courts and legislators. They assert that competition in the market will improve quality and reduce prices. On the contrary, the economists suggest that when suppliers struggle for market coverage, competition will lead to poor product quality. As at 2011, twenty thousand audit firms offer audit services to unquoted and quoted firms in Nigeria (World Bank, 2011). In spite of the existence of large number of audit service providers, the audit market is controlled by few large audit firms, known as the 'Big4' (World Bank, 2011). These accounting firms audit about 90 percent of quoted firms in Nigeria. They dominate the practice in Nigeria while the 15 national firms with international affiliation audit the remaining percent. The difference in market share between the Big4 and non-big4 has become wider, eventually plummeting the likelihood for the non-Big4 firms to become momentous service suppliers of audit services in the market (World Bank, 2004).

The emergence of the Big4 in the audit market in the last decade has subsequently culminated into a heavier concentration. The collapse of Arthur Andersen in 2002 led to the decrease in the number of choices for large public clients looking for an auditor to just four. Stressing the importance of effective competition, the increasingly taut oligopoly in the audit service industry raises concerns about non-competitive pricing behaviour. Bain (1956) suggests that highly concentrated industries exert a negative effect on quality in the long run. The study further asserts that such industries can still be very price competitive. Scholars have not reached any consensus on the effect of market concentration on audit quality. The mixed results in literature on the effect of concentration on audit quality, suggests that additional evidence is required to ascertain if audit market concentration will negatively affect audit quality in an emerging economy like Nigeria. However, most of the researches on audit market and audit quality were done in developed countries like, United States of America, United Kingdom, Belgium, New Zealand, Australia and the likes. It will be disingenuous to presume over the results and draw conclusion for audit markets of emerging economies. Hence, this study incorporates some certain audit peculiarities that exist in the supply side of the audit market for emerging economies (like Nigeria), such as auditors' tenure, audit firm size, audit fees and fiscal year end. Thus far, the observed empirical evidence existing appear indecisive and mostly polarised. The main objective of this study, therefore, was to evaluate empirically, using Nigerian-based data the effect of audit market concentration and auditors' attributes on audit quality. The specific objectives were to:

1. determine the relationship between audit market concentration and audit quality;
2. evaluate the effect of auditors' tenure on audit quality;
3. determine the relationship between audit fee and audit quality.

The rest of the paper is structured as follows: section 2 elucidate on audit market concentration, auditors' attributes and audit quality. Section 3 reveals research methods employed emphasising on the data, model and estimation techniques. Section 4 centered on results and analysis while section 5 succinctly elucidated on the conclusion.

Prior Empirical Evidence on Audit Market Concentration, Auditors' Attributes and Audit Quality

Audit Market Concentration and Audit Quality

To gain deeper knowledge on audit services supply, a brief description of audit market is germane. The supply side of audit has transformed extremely during the previous decade. The revolutionized audit service delivery was as a result of countless circumstances arising from diverse locales. The relationship between audit market concentration and audit quality is been of a mixed evidence. The audit market concentration over time, premised on market shares of all auditors (both the non-big 4 as well as the big 4 group) have been measured by a Herfindahl index. Dechow & Dichev (2002) empirically validates the relationship between accrual estimation error and the discretionary accruals (absolute value) associating these with city-level Herfindahl indices. The findings of Kallapur, Sankaraguruswamy and Zang (2010) revealed that audit market concentration is positively related with audit quality. Auditor's tolerance for earnings management in different audit markets in the US during 2003-2009 was evaluated by Boone, Khurana and Raman (2012).

The authors use the Herfindahl index to measure concentration and finds that clients of auditors located in more concentrated audit markets are more likely to use income-increasing discretionary accruals to achieve earnings benchmarks. This implies that higher audits market concentration leads to lower quality. In an international study, Francis, Michas, and Seavey (2013), find that, in countries where the markets share is concentrated by just one or two of the Big-4 audit firms, Big-4 clients have less conservative earnings, are less likely to report losses and generally record higher accruals. Similar to the evidence in Boone et al. (2012), the evidence in Francis et al. (2013) suggest that audit market concentration leads to lower audit quality.

Auditors Attributes and Audit Quality

Auditors' Tenure and Audit Quality

Audit tenure is also capable of diminishing audit quality when auditors' tenure is elongated –auditee has the same external auditor year in year out without changing the firm. This can weaken auditors' independence, and makes the auditor, a puppet in the hands of the auditee (Francis, 2004). Conversely, acquaintance with auditee by reason of long term relationship is sometimes advantageous than indiscriminate auditor switching, because it is quite time comsuming for the new auditor to fathom the accounting system. Engaging new auditors may appear more expensive for firms. However, overtime some client-specific benefits can be gained having continued in operational dealings with the same client hedging against any form of conduct that may appear opportunistic. It is moreover detrimental for big audit firms to provide low quality audit over time as their reputation would be at stake, hence the audit quality for big audit firms is perceived to be higher. Varying levels of audit quality as opined by DeAngelo (1981) is the sin qua non for the agency cost difference.

Audit Fees and Audit Quality

The correlation between audit quality and the fees for audit services is melted with multifarious hiccups. To start with, the audit services to be rendered to firms/client with wider coverage will no doubt outweigh firms/clients with narrow coverage, thus, the broader the coverage of the audit services rendered, the higher the fees charged. The need for exceptional and extraordinary non-audit service provision may also arise, which may further broaden the scope of the audit engagement. There will therefore be variance in the fees charged for audit and other non-audit services as the case may be (Palmrose, 1986). The job complexity, geographical coverage, and coordination of the engagement may also affect the fees for any audit engagement. Imagine a firm with several multi - branches across the country, continent and the globe at large, requiring multiple on-site and online meetings for various verification, with tight reporting deadlines. Such audit engagement will no doubt be more expensive. The industry of the client can also affect audit fees by measuring differences in risk. Audit fees are also generally higher among companies with public ownership. Companies with public ownership are at a greater exposure to risk and require more audit evidence. If there are any report modifications, the auditor is required to accumulate a greater amount of evidence to achieve the same quality, which results in more billable hours and higher audit fees (Arens & Loebbecke, 1997). All of these variables can attribute to the difference in fees between a small and large firm; thus it is difficult to determine if audit firms with higher fees provide higher audit quality.

Audit Firm Size and Audit Quality

Previous studies generally concur that the audit quality of large audit firms (offices) with international brand names is better than that of small audit firms. There is now a great deal of evidence that large audits firms provide higher quality audits and offer greater credibility to clients' financial reports than audit firms of relatively small size. As opined by Nichols and Smith (1983) and Eichenseher, Hagigi and Shields, (1989), the choice to engage a big audit firm transcends to a favourable reaction in the stock market as against a smaller audit firm. The accuracy of financial distress signalling is higher with big audit firms as shown in their audit opinions (Lennox, 1999). The auditors' pocket depths as well as the reputation of the auditors are duo-core proofs of the theoretical research provision for audit quality's positive correlation with the size of the auditors. Little wonder, Okolie, Izedonmi and Enofe (2013), in Nigeria, posits that the appropriate determinants of audit quality were client importance, audit remuneration, size of the audit firm, and tenure of the auditor.

Yu (2007), in the US, examines the Big 4's effect on the quality of audit. The author conjuncture was evaluated with a year – firm observation of 6,568 as the sample over a period of 3 years (2003 – 2005). The study resulted in a positive effect. The empirical result of the test by Yuniarti (2011), in Indonesia was negative for public accounting firms. DeAngelo (1981) documents a positive association between audit firm size and the quality of audit. His arguments was, the bigger the audit firms, the larger its client base, therefore the higher the revenue from audit, and the higher the reputation to keep, so, they have more inducement for provision of high quality service delivery. A number of scholars (Krishnan, 2003; Clarkson & Simunic, 1994) further asserts that auditor size has a positive association with the quality of audit. In Libya, the link between audit firm size and audit quality was examined by Sawan and Alsaqqa (2013), using questionnaire as the source of data. In an attempt to validate and strengthen the claims of the questionnaire, semi – structured interviews were conducted. The result of their findings shows the positive association of audit firm size and the quality of audit as well as the superiority in reputation issues of the Big 4 firms over the non-Big 4 firms.

In justifying this study, DeAngelo (1981) seminal work paved the nitch for a number of prior studies to empirically investigate the quality of audit in developed and developing economies. Firstly, most studies have emanated from developed economies with a hand-full empirically known about the implications, relationships and impact of audit market concentration on audit quality in emerging or transition economies like Nigeria. Secondly, the methodology for all these aforementioned studies tend to be similar, with very few exceptional cases, in the type of data set that is basically cross-sectional, hence, small sample sizes which hampers valid holistic generalizations. The problem of heterogeneity is one of the several problems that are associated with the cross sectional unit design that cannot be addressed. Moreover, most of these researches continually include the financial sector, despite the overwhelming importance of manufacturing sector to the economy. In addition to the above, it is also observed that while the literature uses a large number of proxies to measure audit quality, there is no consensus on which measures are best and little guidance on how to evaluate them.

Methodology

Data and Model Specification

The research design employed in this study is ex post facto with the aid of secondary data culled from randomly selected annual reports of sampled firms in the Nigerian Stock Exchange (NSE) for publicly listed manufacturing firms over the period (2001 – 2015), 2001 being the lagged year and 2002, the base year, we selected fifty-two (52) firms from the manufacturing sectors of the Nigerian stock exchange market, using random sampling technique with the aid of the Yamani formula to ensure equal representation and to enhance a broad spectrum generalization of the study results.

The study specified and estimated an econometric model that examines the relationship between audit quality (AQ) and audit market concentration (Hirschman-Herfindahl Index (HHI) and Concentration Ratio for Big 4(CR4), auditors' attributes (audit tenure (AUDTEN) and audit firm size (AUDFZ)) using audit fees and fiscal year ends as control variables. This model was adapted from the studies of Le Vourc'h and Morand (2011), and Sanja, and Mateja (2015) with some modifications and country-specific variables to align with our objectives as shown:

$$Aq_{it} = \beta_0 + \alpha 1\, HHI_{it} + \alpha_2 CR4_{it} + \alpha_3 AUTEN_{it} + \alpha_4 AUDFZ_{it} + \alpha_5 ADFEE_{it} + \alpha_6 YEND_{it} + Vit$$

where AQ_{it} =Audit Quality, HHI_{it} = Hirschman-Herfindahl Index, $CR4_{it}$= Concentration Ratio for Big 4, $AUTEN_{it}$ =Audit Tenure, $AUDFZ_{it}$ = Audit Firm Size, ADFEEit= Audit Fee, $YEND_{it}$= Fiscal Year end, V= Stochastic Error Term, Apriori expectation; $\alpha_0, ..., \alpha_5 > 0$.

Variable	Variable Label	Measurement	Source	Expected sign
Dependent				
Audit Quality	*AQ*	*Discretionary Accruals*	*Le Vourc'h, and Morand (2011),*	
Independent				
Absolute Audit Market Concentration	*HHI*	*Hirschman-Herfindahl Index (HHI)*	*Sanja, and Mateja (2015), Quick and Sattler, 2011; Velte and Stiglbauer, 2012*	-
Relative Audit Market Concentration	*Cr4*	*Concentration ratio for Big 4(CR4)*	*Quick and Sattler, 2011; Sanja, and Mateja (2015); Velte and Stiglbauer, 2012*	-
Auditors' Tenure	*AUTEN*	*Number of years for the current audit engagement*	*Thinggaard and Kiertzner (2008),*	-
Audit Firm Size	*AUDFZ*	*Big 4 or Non Big 4*	*Firth (1993), Caneghem (2009).*	+

Control				
Audit Fee	*ADFEE*	*Total auditor' remuneration*	*Simunic (1980), Soltani and Rekik (2011)*	-
Auditee Fiscal Year-end Date	*YEND*	*Dummy value of "1"if Fiscal Year-end Date is December otherwise "0"*	*Soltani and Rekik (2011)*	-

Source: Author's Compilation (2019)

4. Analyses and Presentation

Table 1: Descriptive statistics

	AQ	HHI	CR4	AUTEN	AUDFZ	ADFEE	YEND
Mean	16.937	0.074	0.641	6.227	0.663	8.485	0.681
Median	16.890	0.074	0.630	5.000	1.000	8.561	1.000
Maximum	26.475	0.077	0.690	15.000	11.000	12.160	1.000
Minimum	9.232	0.069	0.580	1.000	0.000	5.075	0.000
Std. Dev.	2.606	0.002	0.031	4.086	0.604	1.248	0.466
Jarque-Bera	34.028	24.592	41.577	58.109	382114.900	5.889	141.757
Probability	0.000	0.000	0.000	0.000	0.000	0.053	0.000
Observations	780	780	780	780	780	780	780

Source: Author's Computation (2019)

where AQ = Audit Quality, HHI= Hirschman-Herfindahl Index, CR4= Concentration ratio, AUTEN = Auditor's Tenure, AUDFZ = Audit Firm Size, ADFEE = Audit Fee, YEND= Auditee Fiscal Year-end Date.

Table 1, revealed that the standard deviation, the maximum, the minimum and the minimum for the AQ were 2,606, 26,475, 9,232 and 16,890, and a percentage of 16% average AQ rate for the year's study period. The mean of HHI was 0.074 and suggests a concentration of approximately 7.4% in the study period, with a distribution of 0.002. The maximum, minimum and maximum during the period of study were 0.077, 0.069 and 0.074, respectively. The mean value of CR4 was 0.641, which suggests an additional concentration of around 64.1%, with a deviation of 0.031. The maximum, minimum and minimum were 0.690, 0.580 and 0.630 concurrently. AUTEN was obsessed with having a minimum value of 6,227 and a deviation of 4,086. The maximum, minimum and minimum were 15.0, 1.00 and 5.00 concurrently. AUDFZ had an average value of 0.663 and a deviation of 0.604. The maximum, minimum and minimum were respectively 11.00, 0.00 and 1.00. ADFEE had an average value of 8.485 and a deviation of 1.248. The respective maximum, minimum and minimum were 12.16, 5.075 and 8.561. Finally, YEND revealed an average of 0.681 and a deviation of 0.466 with the respective maximum, minimum and minimum of 1.00, 0.00 and 1.00. The Järqué-Berá reveals an improvement of all the factors that suggest that the threats indicate that the data is normally distributed.

Table 2 Pearson Correlation results

	AQ	HHI	CR4	AUTEN	AUDFZ	ADFEE	YEND
AQ	1						

HHI	-0.023	1					
	-0.635	-----					
CR4	-0.154	0.278	1				
	-4.360	8.078	-----				
AUTEN	0.235	-0.086	-0.475	1			
	6.733	-2.406	-15.061	-----			
AUDFZ	0.072	0.044	0.079	0.132	1		
	2.022	1.231	2.212	3.727	-----		
ADFEE	0.485	-0.083	-0.341	0.520	0.373	1	
	15.461	-2.312	-10.134	16.989	11.224	-----	
YEND	0.113	0.005	0.016	-0.090	-0.032	0.069	1
	3.186	0.140	0.456	-2.518	-0.884	1.933	-----

Source: Author's Computation (2019)

Table 2 revealed that HHI and CR4 correlates negatively with AQ being - 0.023. and -0.154 respectively while the correlation between CR4 and HHI was positively to the tune of 0.278. AUTEN correlated positively with AQ (0.235) but, negatively correlated with HHI (-0.086) and CR4 (-0.475). AUDFZ was positively correlated with AQ (0.072), HHI (0.044), CR4 (0.079) and AUTEN (0.132). ADFEE was found to be positively correlated with AQ (0.485), AUTEN (0.520) and AUDFZ (0.373). However, it seems to have correlated negatively with HHI to the tune of -0.083 and CR4 to the tune of -0.341). Finally, YEND was positively correlated AQ (0.113), HHI (0.005), CR4 (0.016) and ADFEE (0.069) but negatively correlated with AUTEN (-0.090) and AUDFZ (-0.032). The coefficient of the correlation implies that the problem of multicollinearity did not affect any of the variables.

Investigation and Analysis

The investigation and analysis of the this study sought to establish the relationship between the audit institutes, the contribution of the auditors and the quality thereof. the analysis series was performed using the combined pooled OLS, and the panel OLS (with effects) for robustness purposes. Before carrying out the premise (first), we first did our best to identify the effects that can be applied to the data as revealed in table 3.

Table 3 Test of Effect - Hausman

Hausman Test			
Random effects (Test cross-section)			
Summary of Test	Stat. Chi-Sq.	d.f. Chi-Sq.	PROB.
Random Cross-section	23.314458	6	.0007

Source: Author's Computation (2019)

As shown above, and based on our confidence level of 5%, the Prob chi. sq was lesser, hence the study applied the option of the fixed effect.

Table 4 Result (depdt var. = AQ)

	OLS (POOLED)		OLS (EFFECTS FIXED) (PANEL)	
VAR.	COEFFICIENT	PROB.	COEFFICIENT	PROB.
C	4.038	0.220	12.703	0.000*
EXPLANATORY	VARIABLES			
HHI	22.581	0.575	17.450	0.539
CR4	2.664	0.397	-1.895	0.427
AUTEN	-0.006	0.821	0.062	0.004*
AUDFZ	-0.567	0.000*	-0.047	0.728
CONTROL	VARIABLES			
ADFEE	1.140	0.000*	0.525	0.000*
YEND	0.392	0.027*	-0.942	0.018*
R^2	0.256			0.66
ADJ R^2	0.249			0.63
F-Stat	44.27			24.10
Prob (f-statistic)	.000			.000
Durb. Wat	0.76			1.51

Source: Author's Computation (2019)

As revealed in table 4, the value of R2 of the OLS (pooled – stacked) stood at .256 while it's adjusted value was .249 implying that the model has an ability to explain why the dependent variable varies systematically to the tune of 25.6%. The indicator F (44.27) and the influence p (0.00) indicate strong reasons for the non-rejection of the hypothesis at 5% levels of a significant relationship between the variables. The HHI (Hirschman-Herfindahl Index) appeared positively (22,581) but not significant at 5% and 10% (p = 0.575). CR4 also had a positive coefficient of (2,664) but not significant at 5% and 10% (p = .397). AUTEN (Audit Tenure) was negative (-0.006) but not significant at both 10% and 5% (p = .827). AUDFZ (size of the audit firm) also presented a negative value of - 0.567 and a p-value of 0.000 at 5% level and this indicates that quality of audit may be lowered by bigger audit firm. ADFEE revealed a significant at 5% level with p-value of 0.000 and positive relationship and, therefore, a higher level fee should produce a higher level audit quality. Lastly, companies with "31st December" year-end will have a higher quality of audit as shown by the positive result for YEND values of 0.392 at 5%, p-value been 0.027. The statistical D.W. values of 0.76 implies the existence of a series of changes in the model's residuals.

With a p-value of .539 at both 10% and 5% level, the explanatory variable, HHI (Hirschman-Herfindahl Index) shows a non-significant, though positive effects (17.450).Thus, audit market concentration has no significant relationship with audit quality at both 10% and 5% level. the null hypothesis (H1) of CR4 appeared negative (-1.895) and non-significant at 5% and 10%. AUTEN (Audit Tenure) was both significant and positive at 5% with p-val of 0.004 (.062). Furthermore, ADFEE (Audit Fee) reveals a significant, at 5% with p-val of 0.000 and positive value of 0.525 impact. We therefore, accept the alternative hypothesis and reject the null at 5% level of significance. YEND appeared to impact negatively on audit quality (-0.942) and is significant at 5% level (0.018).

Discussion

From the foregoing, the HHI (Hirschman-Herfindahl Index) appeared positive (17.450) but non-significant at 5% and 10% (p=0.539). The finding is in line with that of Abidin, Beattie and Goodacre (2010) and Willekens and Akhmadi (2003) but is, however, at variance with Eshleman (2013) and Ettredge, Sherwood and Sun (2016) who opined that Hirschman-Herfindahl Index associated significantly in the negative with audit quality. Auditor tenure and audit quality relationship have revealed mixed results from prior studies. However, this study show a positive impact of audit tenure on audit quality, contrary to the study by Enofe el at (2013) that find auditor tenure possessing a negative relationship with audit quality. A possible justification for a negative relationship may be the elongated auditee-auditor relationship. Our finding is in tandem with that of Sanjay and Srinivasan (2010) and Schaen and Maijoor (1997) that reveal an impact of audit tenure on the quality of audit. Also similar to our finding is the study of Eshleman and Lawson (2016) on firms around the United States for five years and posit that relationship between audit fee and audit quality were significantly positive. The possible explanation for this is that more audit effort leads to quality audit and effort is a function of time and expertise. Imploring these factors may increase the fee for audit services.CR4 appeared negative (-1.895) at both 10% and 5% and non-significant.

Therefore, audit market concentration has no significant relationship with audit quality. CR4 revealed the absence of a single – direction relationship between concentration and performance, but series of interrelated feedback between other parameters. The study further show that when audit market has higher ratio of big audit firms, there will be high possibility that clients will engage in opportunistic behaviour, hence, higher concentration tends to lower the quality of audit. This result corroborates Francis et al (2013) and Boone et al (2010) that revealed that CR4 lowers audit quality. YEND with p-value of 0.018 at 5% level revealed a negative impact on the quality of audit (-0.942) and is significant. This indicates that firms prepare their report in busy period are prone to financial misstatements. In addition, AUDFZ (Audit Firm Size) impacted negatively on audit quality (-0.047) but was non-significant at 5% and 10% level (0.00). The result corroborates the negative gotten by Okile, Izedonmi and Enofe (2013) and Sawan and Alsaqfi (2013) but appear to be at variance with study of Ilaboya and Ohiokha (2014) which found a positive relationship. It possible that bigger firms pay less attention to diligence because of high patronage while smaller firms will put in their best in order to build good reputation.

Summary

1. Unexpectedly, this study revealed that HHI exerts a non-significant but positive influence on the quality of audit with a coefficient of 17.45 at 5% and 10% (ρ =0.539) level of significance. This implies that this audit market concentration proxy has a positive but non-significant influence on the audit quality.
2. Surprisingly, the coefficient of -1.895 at both 10% and 5% level with ρ-val of 0.427 also revealed that the influence of CR4 on the quality of audit was non-significantly negative
3. Auditors' tenure and audit quality relationship at 5% (p=0.004) was positive and significant based on the coefficient of 0.062.
4. Audit Firm Size at 10% and 5% with p-val of 0.728 revealed a non-significant and negative (-0.047) relationship.
5. Audit Fee at 5% with ρ-val of 0.000, showed a significantly positive (0.525) relationship

Conclusion

This study aimed at examining the effect of audt market concentration and auditor's attributes on audit quality with a focus on manufacturing firms whose shares are listed on the Nigerian Stock Exchange market. For this purpose, a sample of 52 companies was examined by applying multiple regressions over a period of fifteen (15) years (2001 – 2015). The primary regression model was expanded by adding control variables including audit fees and year end. The empirical results showed mixed findings between the measures of audit market concentration, auditors attributes (Hirschman-Herfindahl Index and Concentration Ratio for Big 4), auditors attributes (AUTEN and AUDFZ) and their effect on the quality of audit. While HHI, a measure of concentration appeared positive but non-significant, CR4 was negative and non-significant; while auditors' tenure appeared positive and significant, audit firm size appeared negative and non-significant; while audit fee appeared positive and significant; year-end was negative and statistically significant. We may, therefore, conclude that audit market concentration does not empirically affect audit quality. In tandem with the auditors' attributes, we may conclude that the results are mixed.

Recommendations

The audit market concentration and auditors' attributes combined effect on the quality of audit of firms appear to be quite germane for portfolio managers, researchers, investors, policy makers, and professionals concerned about the outcome of audit markets. Our findings revealed mixed results and we recommend that whichever basis a firm decides to employ, (audit quality of a firm will not be affected by audit market concentration since the firm's value will not be affected as much as the belief that the auditors' attributes will impact on the quality of the audit of the firm and the firm's value through an improved or worsened attributes on the other hand), firms should meticulously be conscious in their decision on effective, efficient and economic method to maximize the wealth of stakeholders as well as achieve the multifaceted needs of the firm.

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