



IFRS ADOPTION AND AUDIT QUALITY OF FIRMS QUOTED IN NIGERIAN STOCK EXCHANGE

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Abstract

This study examined the effect of IFRS adoption on the audit quality of firms quoted in the Nigerian Stock Exchange. IFRS adoption was indicated by identifiable areas of implementation like asset tangibility, leverage, reported earnings per share and cash flow; audit industry specialization was captured by statutory audit fees and the presence of the big-4 audit firms. Audit quality was estimated by Dechow and Dichev (2002) model for reporting quality. The longitudinal research design was adopted using a sample of 20 quoted manufacturing firms with an equal mix of ten consumer goods and ten industrial goods firms. Secondary data were obtained from the annual reports of the selected firms for a period of 16 years spread into 8 years of pre-IFRS adoption and 8 years of post-IFRS adoption. The Data were analyzed using the ordinary least square (OLS) regression estimation technique. The results indicate that the adoption of IFRS has improved the quality of audit of quoted manufacturing firms in Nigeria during the post IFRS period. The result also revealed that the coefficient of regression for all indicators of IFRS adoption during the post-IFRS period were positive. The implication is that the adoption of IFRS has a significant positive influence on the audit quality of quoted manufacturing firms in Nigeria. The study recommends that regulations and monitoring should be strengthened in the manufacturing sector in order to sustain improved institutional transformation and financial reporting in keeping with the Financial Reporting Council of Nigeria requirements alongside with requirements of IFRS.

Key Words: *Audit Quality, Statutory Audit, Audit Fee, Industry Specialization*

1.0 INTRODUCTION

Audit quality has been reported to be influenced by a variety of determinants including audit fees and non-audit services (Zaman, Hudaib, and Haniffa, 2018), internal control system, auditor independence, audit firm reputation, auditor industry specialization (Al-Khaddash, Al-Nawas and Ramadan 2016), audit committee expertise and social ties with auditors (Ghafran and O'Sullivan, 2017).

In recent years, the industry specialization of auditors has become prominent among the determining variables for audit quality (Willenborg, 2015; De Fuentes and Sierra, 2015; Garcia-Blandon and Argles-Bosch, 2018; Cassell, Huntn Narayanamoorthy and Rowe, 2019). The attainment of prominence by auditor

industry specialization might be predicated on commonplace 'audit mistakes' (or failures) among celebrated audit firms like Earnst and Young complicity in the defunct Thomas Cook case of in 2017 in UK; overstatement of Ted Baker's £25 Million Stock that was not discovered by KMPG in 2018 (Accounting Age, 2019); FRC's review of KPMG's audit of Stanbic IBTC holding in Nigeria in 2015 detailed in the regulatory decision in the matter of financial statements of Stanbic IBTC Holding in Nigeria.

Auditors' risk of errors may be minimized if the audit is exclusively conducted in industries in which the audit firm has adequate level of competence, expertise and experience. A firm with industry knowledge therefore can capitalize on its expertise by designing and marketing

audit-related services that are tailored towards industry clients and provide a higher level of assurance. As a result of its extensive knowledge in the business, such a firm is likely to produce high-quality audit reports. However, if financial reporting regulators do not assess such industry competence, it may just be a claim with bad consequences.

The International Federation of Accountants (IFAC, 2014) specifies firms' possession of

Although the discussion of auditor specialty appears to be limited to large audit firms, the situation in Nigeria, where international, networked firms handle the audit of most of the listed companies, may take on a new twist (World Bank, 2011). The regulatory perception in Nigeria describes the situation as one that could erode audit quality in the country, as small and medium-sized practices (audit firms) are hampered by a lack of access to current literature on applicable accounting and auditing standards, negatively impacting audit quality in the country (World Bank, 2011).

Meanwhile, the adoption of International Financial Reporting Standards (IFRS) in Nigeria in 2012 has increased the market presence of larger firms in Nigeria, particularly the Big 4 audit firms, as evidenced by reviews of audited financial reports and an N6.8 billion cumulative increase in audit fee in the accounting period following IFRS adoption (John, 2019).

Extant studies on audit quality (Scott and Gist, 2018; Garcia-Blandon and Argles-Bosch, 2018) have shown that the "big audit" firms have greater probability to specialize in specific industries. This study examines whether such specialization has been influenced by IFRS adoption, with an unintended consequence on audit quality. Previous audit quality studies have either isolated specific industries for research evaluation (Farouk and Hassan, 2016; Alao and Gbolagade, 2019; Etuka, Anichebe, and Etuka, 2019) or have ignored the conditioning effect of auditor industry specialization on audit quality (Ahmed and Madobi, 2019). Thus, there is an apparent need to address the problem of IFRS adoption and audit quality. The study is therefore set to investigate the effects of IFRS adoption on audit quality of quoted firms in Nigeria.

1.2 Statement of Problem

Extant empirical studies have indicated the presence of financial reporting issues in some companies like Cadbury Nigeria Plc connected to one of the Big 4 accounting firms in Nigeria

personnel with knowledge of the relevant industry and experience with the regulatory and reporting requirements of the specific industry as a driver of audit quality in the International Standards on Quality Control (ISQC). Larger audit firms, on the other hand, are frequently thought to have more competent audit staff based on these criteria, as they may have sufficient resources to create the necessary capabilities by bringing in industry specialists (ACCA, 2020).

(Otusanya and Lauwo, 2015). The World Bank (2011) observed that accounting issues coupled with other developments as in the cases of Stanbic IBTC Holdings *V/S* KPMG (2015); Oando Financial Crisis (2019) and following the adoption of IFRS in Nigeria, indicate the existence of audit quality pitfalls across all industries in Nigeria.

The World Bank (2011) noted also that the nature of audit practice in Nigeria is positively skewed towards the Big-4 audit firms. Thus, auditor industry specialization may require extra consideration because of the character of audit practice which is tilted towards the favour of the Big 4 audit firms in Nigeria. Scott and Gist (2018), Hoelscher and Seavey (2016), Dao and Pham (2017), Nagy (2017), and De Fuentes and Sierra (2015) have examined auditor specialization in specific industries, and agree that industry expertise gained through experience could promote unreasonable thought of 'perfection' in auditors and complacency in audit firms. This, by implication means that auditors may get contented because they involuntarily consider that transmitting audit services to clients would not be simple since they possess the know-how in the particular industry.

Available studies on auditor industry specialization have pointed to a focus on variables such as audit fees, audit quality, disclosure quality, and market reaction of microeconomic factors as key determinants (De Fuentes and Sierra, 2015; Garcia-Blandon and Argles-Bosch, 2018; Cassell, Hunt, Narayanamoorthy; and Rowe, 2019). Using various techniques, Fung, Gul, and Krishnan (2016), Scott and Gist (2018), Fleming, et al., (2016), Nagy (2017) investigated the association between audit industry specialty and audit fees. Fung, Gul, and Krishnan (2016) used panel regression to evaluate 17,207 firm-year observations from publicly traded companies in the United States. During the study's sample period, audit fees for industry-specialized

auditors increased, although prices for the post-Sarbanes-Oxley Act period were lower.

Flemming et al., (2016) agreed with Fung et al., (2016) to observe that audit industry specialization moderated the increase in audit fee in the first year of the post- Sarbanes-Oxley Act era and led to auditors' ability to implement industry-specific expertise in improving audit practice while enhancing audit cost efficiency. Despite considering conditional influences, none of the studies considered how audit quality reacts to industry specialization and virtually all the studies ignore the impact of IFRS adoption. Scott and Gist (2018) examined the reaction of audit fees to industry specialization along with the extra condition of Arthur Anderson's forced auditor failure.

Due to industry specialization and consistent with Nagy (2017) submission on the study of audit fee and auditor industry specialization, without considering any other variables, it was determined that audit fees paid by Arthur Anderson's defunct clients were greater. Furthermore, Bills, Jeter, and Stein (2015) observed that firms audited by industry specialist auditors in homogeneous industries pay lower audit fees because they have more bargaining power. This is in contrast with Wang, Sewon, and Iqbal (2019) who found an increase in audit fees for industry specialists, particularly the Big 4 firms. On the whole, these studies excluded the IFRS adoption and its effects on audit quality.

Using panel analysis on a 12,253 firm-year sample, Yuan, Cheng, and Ye (2016) explored how auditor industry specialization affects discretionary accruals in the Shanghai and Shenzhen Stock Exchanges. Audit quality was shockingly highlighted in the study. The result indicated that the association between industry specialist auditors and discretionary accruals got stronger for companies that drifted from industry strategy norms. Despite these results, the study indicated that the effect was not uniform between clients. Equally, Balsam, Krishnan, and Yang (2018) found that industry expert auditors can improve audit quality, but the study disaggregated the influence by audit firm size. The conditioning effect of auditor industry specialization on audit quality was neglected by both studies.

Lowenshohn, Johnson, Elder, and Davies (2017) observed audit quality improvements for public sector clients audited by the Big 5 (now Big 4) firms in a study of the effect of auditor specialization on audit fee and quality. This finding defeats the proxy of audit quality with

Big 4 firms because they do not have the distinctiveness of quality across their client types.

In consideration for the strength of the political environment, Jaggi, Gul, and Lau (2019) study established that audit professionals improve audit quality in nations with a poor legal environment, but not in countries with a strong legal environment. This study's conditioning effect did not account for IFRS adoption; thus leaving research void in the area of conditioning effect of IFRS adoption on the connection between audit quality and auditor industry specialty. Gracia-Blandon and Argles-Bosch (2017) found that industry specialization does not improve audit quality when paired with both discretionary accruals and amended audit opinion, excluding the conditioning effect of IFRS adoption.

Given the foregoing, this study is used to explore the conditioning influence of audit industry specialization on the linkage between IFRS adoption and audit quality of Nigeria's listed firms. The study seeks a vital validity test for the conflict theory's prediction because Nigeria's adoption of IFRS was ignited by enormous financial losses in the banking industry, necessitating a verification of auditors' industry specialty. This explanation is provided by the conflict theory prediction that IFRS adoption in Nigeria emanated from observed issues and challenges in Nigeria and the resultant loss of depositors' funds. Nevertheless, the continual apprehension of domination, prompted by assertions of specialization amid big companies, in the midst of other variables, continues to permit unwholesome rivalry and improved revenue-driven attitude among audit firms.

Consequent upon the conflicting dilemma to the degree of control gained by the Big 4 audit firms, the study on the adoption of IFRS is designed to explore the basis for building up industry unique expertise and how it may have a changed impact on audit quality. This study thus, is directed at examining the effects of IFRS adoption on audit quality of quoted firms in Nigeria, and to specifically:

- a) examine if there is any significant difference between audit quality of quoted firms in the Pre-IFRS and Post-IFRS period;
- b) determine the effects of IFRS adoption on the audit quality of quoted firms in Nigeria; and
- c) examine the effect of audit industry specialization on the audit quality of quoted firms in Nigeria

In order to achieve the objectives, the following hypotheses are proposed for the study:

- **H₀₁**: There is no significant difference between the audit quality of quoted firms in the Pre-IFRS period and Post-IFRS period in Nigeria;
- **H₀₂**: IFRS adoption has no significant effect on the audit quality of quoted firms in Nigeria; and
- **H₀₃**: Audit industry specialization has no any significant effect on the audit quality of quoted firms in Nigeria

2.0 LITERATURE REVIEW

Literature in this study are reviewed majorly provide an exposition of the concept of audit quality, audit industry specialization, IFRS adoption in Nigeria, and theoretical framework of this study.

2.1 The Concept of Audit Quality

Audit quality is a complicated topic for which there is no universally accepted definition or analysis (IAASB, 2018). A periodic or serial auditor views it as a declaration of truth and fair view on the financial reports and accounts that are free of limitations, qualifications, or exemptions, and that is worthy of stakeholders' trust. Frances (2015) says Audit quality is an audit in which suitable report on the clients' adherence to needed accounting GAAP is issued (Francis, 2015). The audit profession views expertise and experience as the application of impartiality, integrity, and skepticism as necessary components required for public confidence in the auditors' ability and capacity to report the identification of serious misrepresentations in financial statements (Alhababsah, 2019).

DeAnglo (1981; 2014) had earlier authoritatively posited that audit quality is the combined likelihood or joint probability of identifying and reporting breaches in a firm's accounting system, hence improving the guarantee of quality financial reporting. Zhang and Defond (2016), Christensen, Glover, Omer and Shelley (2016) and Rajgopal, Srinivasan and Zheng (2018) believe that audit quality is improved with the assurance of high-quality financial reporting by the auditor necessary to enable individual investors value the competence of the auditor.

Audit quality may be quantified and calculated across the continuum using financial statement metrics since it allows for the linking of audit characteristics to statistical aspects of client financial statements. Lennox, Wu, and Zhang (2016), Lawrence, Minutti-Meza (2017) Singh, Kotha, Sultana, and Evans (2019) all recognized that certain audit features are responsive to the frequently used expected accrual model developed by Jones (1991). Essentially, audit

quality is generally perceived as the result of audit characteristics and other control variables. Lawrence, Minutti-Meza, and Zhang (2015) examined the audit quality difference between the big 4 and non-big 4 audit firms using the modified Jones (1991) model as adopted by Kothari, Leone and Wasley (2015).

2.1.1 Audit Industry Specialization in Nigeria

Psychologists prefer to argue that domain-specificity drives specialization in an area. That is, the ability to achieve something creatively using a set of talents, or aptitude in a particular topic. Genuine domains are characterized by a discrete set of core principles, leading to conceptual change that involves the change in core principles which define the things in a domain and guide the reasoning about those entities (Carey and Spelke, 1994). Gracia-Blandon and Argiles-Bosch (2017) applied this logic to audit specialization, using Craswell Francis and Taylor's (1995) thesis that audit quality can only be ensured if auditors have some specific knowledge in addition to basic accounting and audit knowledge. This supports the International Auditing and Assurance Standard Board's Audit Quality Framework requirement (IAASB, 2018). As a result, an audit firm with industry knowledge has specialization in that area, which it uses to develop and promote audit and assurance services, tailored to industry clients (U.S. Government Accountability Office, 2008).

Audit specialization is thought to be a result of training and practical experience earned from auditing in a specific industry, as information gained from experiences increases the possibility of being able to execute and conduct quality audits (Gramling and Stone, 2015; Hammersley, 2016). Neal and Riley (2017) used 'market share' and 'portfolio share' to operationalize audit industry specialty. The market share strategy holds that the firm with the largest share inside a certain industry would have accumulated the most expertise of that industry. It is anticipated that such an auditor would have made considerable investments in creating industry-specific technologies while also establishing a target for expected returns from such investments in terms of audit quality. In contrast, the portfolio share model views the highest revenue-generating businesses among all of the audit clients as the driver of specialization.

Minutti-Meza (2015) provided evidence that market share within the audit sector has inherent difficulties as proxies for audit specialty. The audit market share model is criticized because of disparities in customer characteristics amongst

auditor types, leading to the conclusion that significant market share does not drive expertise. Instead, expertise is driven by specialists. In order to overcome this challenge, Fleming, Hee, and Romanu (2016) proposed a product of the two measures as a proxy for audit specialization in order to capture both the firm-specific and auditor-specific aspects of audit specialization.

2.1.2 IFRS Adoption in Nigeria and the Aftermath

The Federal Government of Nigeria issued a mandate to the now-defunct Nigerian Accounting Standards Board (NASB) to commence the process of IFRS adoption in Nigeria a few years prior to the changes, following which it published the implementation plan in 2010. The roadmap divided Nigerian enterprises into three categories: listed and major public entities, other public listed entities, and Small and Medium Enterprises (SMEs) for reporting their financial activities in the years 2012, 2013 and 2014 respectively (NASB, 2010). The implementation of the International Financial Reporting Standards was thought to have a number of ramifications for the quality of accounting figures produced by firms in Nigeria, as well as the services provided by external auditors and other professional services providers. NASB (2010) recommended the formation of a technical partners' forum of accounting firms as a proactive attempt to mitigate the audit concerns that may arise as a result of the adoption.

According to a poll done by Price-Waterhouse-Coopers (2011), finance leaders of Nigeria's publicly traded companies lamented the high cost of implementing IFRS, notwithstanding their skepticism about its supposed benefits. Although Anao (2018) considers the adoption of the IFRS to be timely because it broadened the scope of financial regulation beyond traditional spheres by encompassing auditing and corporate governance, NASB (2010) emphasizes its implications for quality indices of accounting figures such as loan loss provisioning, securities investments, and regulation of public accounting services, among other issues. The Financial Reporting Council of Nigeria (FRCN) Act (2011), which established the Financial Reporting Council of Nigeria, requires published financial reporting professionals in Nigeria to adopt IFRS. The council was also given increased responsibilities for the oversight of Nigeria's financial reporting practices (FRCN, 2011).

2.2 Theoretical Framework

The study examines the relationship between audit quality and IFRS adoption as moderated by auditors' industry specialization, locating the explanation of this study within the canon of the conflict theory. The conflict thesis is based on the belief that conflicts can only emerge if there has been prior agreement, but that agreement is the result of compulsion or an enforced constraint intended to keep society together (Dahrendorf, 1958). This theory explains the silent disagreement that emerged from the audit market's dominance by focusing on the colonization of the audit market.

The conflict is explained by the Big 4 audit firms' ability to amass resources and 'specialize' in industries as a result of their long-standing relationships and connections with globally-connected firms. Stanga and Williams (1979) suggest that credibility, professional control, leadership, trust, and moral tone are consistent with the interpretation of conflict, given the spontaneous outplay of conflict in the social order. In response to the allegations of Stanga and Williams (1979), Hines (1989) proposes the major audit firms' conceptual frameworks of accounting function as a safeguard for corporate capitalists. Consequently, the claim of industry speciality, or the perception of a lack thereof, causes conflict in the audit market, with both classes competing for the retention and acquisition of new audit clients. The conflict will have an impact on audit quality, which is something they all set out to protect.

This explanation is provided by the conflict theory prediction that IFRS adoption in Nigeria emanated from observed issues and challenges such as the implosion of banks' going concerns in Nigeria and the resultant loss of depositors' funds. Nevertheless, the continual apprehension of domination, prompted by assertions of specialization amid big companies, in the midst of other variables, continues to permit unwholesome rivalry and improved revenue-driven attitude among audit firms.

3.0 RESEARCH METHODOLOGY

In order to investigate the impact of IFRS adoption and audit industry specialization on the audit quality of listed companies in Nigeria, this study uses a longitudinal research methodology. The study evaluated data from firms quoted on the Nigerian Stock Exchange during a 16-year period, with 8 years prior to the implementation of the International Financial Reporting Standards (2003-2011) and 8 years following the regulatory reform (2012-2020).

Due to the availability of data for the selected firms, the research interval between the two periods was extended. The study's population includes all publicly traded enterprises in Nigeria. As of the end of 2020, the population of quoted businesses on the Nigerian Stock Exchange was 188. Data were collected and computed from the financial statements of 20

conveniently selected manufacturing firms. For the purpose of this study, selected manufacturing firms were divided into ten (10) consumer goods firms and ten (10) industrial goods firms. Data collected were analyzed using the Panel Least Square (PLS) regression estimation technique.

3.1 Model Specification:

This study adopted the model of Jung, Kim and Chung (2016) specified below as follows:

$$DA = f(\text{IFRS ADOPTION, AUDIT SPECIALIZATION}) \dots\dots\dots \text{Eqn. (i)}$$

'AQ' is used as proxy for audit quality and 'IFRS' adoption is measured by significant items in financial statements that are affected by IFRS. The significant items include asset tangibility (AST), earnings per share (EPS), leverage (LEV), cash flow from operations (CFO). Auditor Specialization was captured by audit fee (SAF) and the presence of the big-4. When all variables are finally entered, the model translates to:

$$\text{Audit Quality} = f(\text{Asset Tangibility, Earnings per Share, Leverage, Cash Flow to Earnings, Audit Specialization, Big-4}) \dots\dots\dots \text{Eqn. (ii)}$$

Then the variables are coded into the main regression model as shown below;

$$AQ = \alpha_0 + \beta_1 \text{AST}_{i,t} + \beta_2 \text{EPS}_{i,t} + \beta_3 \text{LEV}_{i,t} + \beta_4 \text{CFO}_{i,t} + \beta_5 \text{SAF}_{i,t} + \beta_6 \text{BIG4}_{i,t} + \epsilon \dots\dots\dots \text{Eqn. (iii)}$$

Where:

AQ: Audit quality as measured by Dechow and Dichev model which states that:

$$\text{TAC}_{i,t} / (\text{REV}_{i,t} - \text{CFO}_{i,t-1})$$

$$\text{TAC}_{i,t} = (1/\text{Ai},t-1) + (\Delta \text{REVI},t/n) + (\text{PPE}_{i,t}/\text{Ai},t-1)$$

- AST: Asset Tangibility which is measured by the natural logarithm of total assets
- EPS: Earnings per Share is the outcome of net income divided by total unit of shares
- LEV: Leverage as captured by the debt to asset ratio
- CFO: Cash flow from operations as a ratio of net total revenue
- SAF: Fee paid to statutory external auditors of firm i in year t
- BIG4: Audit specialization as rated by 1 for the big-4 and 0 for others
- α_0 : a constant, equals the value of Y when the value of X = 0
- β : coefficient of the independent variables
- ϵ : the error term

4.0 DATA ANALYSIS

4.1 Descriptive Analysis

Table 4.1: Descriptive Analysis

Variable	Both Periods			Pre-IFRS Period			Post-IFRS Period		
	Obs	Mean	Std. Dev	Obs	Mean	Std. Dev	Obs	Mean	Std. Dev
AQ	180	0.860059	8.737503	90	0.740011	4.058442	90	0.962466	11.29772
AST	180	0.539652	0.598908	90	0.63521	2.356211	90	0.486232	3.254692
EPS	180	0.062128	0.068419	90	0.055042	0.064243	90	0.068172	0.071348
LEV	180	0.682785	0.465843	90	0.773109	0.419704	90	0.605735	0.489557
CFO	180	1.820928	6.70281	90	1.313109	2.123973	90	2.254122	8.895834
SAF	180	0.670019	2.050107	90	0.378698	0.913579	90	0.918531	2.637227
BIG4	180	0.071663	0.962372	90	0.04937	0.176513	90	0.090681	1.300657

Source: Statistical Output of Eviews: 9.0

As shown on Table 4.1, the average level of audit quality (AQ) for all selected manufacturing

firms is 0.86, while an average of 0.74 was recorded for the pre-IFRS period while average

of 0.962466 for the post-IFRS period respectively. Asset tangibility (AST) for the pre-IFRS period has a mean value of 0.63521, and the post-IFRS period has a 0.486232; while the average for the study period is 0.539652. For earnings per share as denoted by (EPS), the average EPS for the selected period is 0.068419; while average EPS is 0.055042 for the pre-IFRS period and 0.068172 for the post-IFRS period.

Leverage as denoted by (LEV) shows an average of 0.465843 for the selected period, 0.773109 for

the pre-IFRS period and 0.605735 for the pre-IFRS period. Cash flow to revenue (CFO) shows an average of 1.820928 for the selected period, 1.313109 for the pre-IFRS period and 2.254122 for the post-IFRS period. The average statutory audit fee (SAF) for the pre-IFRS period is 0.378698 and 0.918531 for the post-IFRS period. Finally, BIG4 showed an average of 0.071663 for the selected period, 0.04937 for the pre-IFRS period and 0.090681 for the post-IFRS period.

4.2 Tests for Multi-Collinearity

Table 4.2: Correlation Matrix

Correlation	AQ	AST	EPS	LEV	CFO	SAF	BIG4
AQ	1						
AST	0.26382	1					
EPS	0.11906	-0.24374	1				
LEV	0.27342	0.48472	0.20345	1			
CFO	0.31243	0.37963	0.19737	0.35065	1		
SAF	0.25431	0.22136	0.13256	0.25133	0.32152	1	
BIG4	0.12543	0.32156	0.21363	0.21362	0.21456	0.21458	1

Source: Statistical Output of Eviews 9.0

The correlation matrix using the Pearson correlation coefficients for the predictor variables are presented (Table 4.2) to check for multi-collinearity. The largest coefficient is between leverage and asset tangibility at 48% which is less than 70%. This is followed by the correlation between cash flow to revenue and asset tangibility at approximately 38%. Furthermore, the correlation between statutory audit fee and cash flow to revenue is 32%. The correlation between other variables in the matrix is less than 50%. This means that these variables pose multi-collinearity threat to the model of the study.

4.3 Tests for Unit Root

Table 4.3: Unit Root Test Result

Data Series	Augmented Dicker-Fuller (ADF)	Test Critical Values @ 5% (TCV)	Probability of ADF
AQ	4.453986	2.890926	0.0004
AST	3.950767	2.890926	0.0025
EPS	3.936679	2.890926	0.0121
LEV	4.112039	2.890926	0.0015
CFO	8.652268	2.890926	0.0000
SAF	4.910310	2.452136	0.0001
BIG4	3.957198	2.452136	0.0018

Source: Statistical Output of Eviews 9.0

The table above reveals the summary of the unit root test carried out. The null hypothesis states that there is a unit root, and so the data is stationary. Using the Augmented Dickey-Fuller Test, the result must show a probability value that is lower than the critical value at any level of significance, in order to reject the null hypothesis.

From table 4.3 the augmented dicker-fuller (ADF) test statistics are greater than the test critical values (TCV) at 5% level of significance for all the data series (see also, appendix). Therefore, we hereby reject the null hypothesis which states that the data has a unit root.

4.4 Summary of Regression Results

Table 4.4: Regression Estimation for Model (iii)

Independent variables	<i>Pre-IFRS</i> 2003-2011		<i>Post-IFRS</i> 2012-2020	
	<i>Coeff.</i>	<i>p-value</i>	<i>Coeff.</i>	<i>p-value</i>
Intercept	1.257017	0.0000	1.520577	0.0000
AST	-0.023200	0.0585	0.156698	0.0329
EPS	-0.084442	0.0006	0.125577	0.0198
LEV	0.008621	0.1264	0.121462	0.0255
CFO	-0.713269	0.0620	0.104134	0.0062
SAF	0.018761	0.0411	0.198712	0.0115
BIG4	0.293711	0.0654	0.187912	0.0011
N	90		90	
Adjusted R-squared	0.571773		0.889137	
F-test	0.000000		0.002363	

Significant at 5% level (two-tailed)

4.5 Discussion

4.5.1 IFRS Adoption and Audit Quality in the Pre-IFRS and Post-IFRS Periods

From Table 4.4 above, the coefficient of regression for all indicators of IFRS during the pre-IFRS period have increased in the post-IFRS period. The implication is that the adoption of IFRS has improved the quality of audit of quoted

Furthermore, from the results shown in Table 4.4, the explanatory power of the determinants of IFRS adoption was tested using adjusted R-squared which shows the degree at which the independent variable is a strong predictor of the dependent variable. In this result, the adjusted R-squared in the post-IFRS period shows a stronger explanatory power (i.e. approximately 89%) compared to the pre-IFRS period (i.e. 57%). Hence, the null hypothesis which states that there is no significant difference between the audit quality of quoted firms in the pre-IFRS period and post-IFRS period in Nigeria is refuted by the analysis results and therefore rejected..

4.5.2 Impact of IFRS Adoption on Audit Quality in the Post-IFRS Period

From Table 4 above, the coefficient of regression for all indicators of IFRS adoption during the post-IFRS period were positive. The implication is that the adoption of IFRS has a positive and significant impact on the audit quality of quoted manufacturing firms in Nigeria. The implication is that, the adoption of IFRS has improved assets tangibility, reported earnings, leverage level and real cash flow in the post IFRS period. Furthermore, the P-value for the selected indicators were all less than 0.05; indicating that the adoption of IFRS has a significant impact on the audit quality of quote manufacturing firms in Nigeria, thereby leading to the rejection of the null hypothesis which states that IFRS adoption has no significant impact on the audit quality of quoted firms in Nigeria.

4.5.3 Impact of Audit Industry Specialization on Audit Quality in the Post-IFRS Period

From Table 4 above, the coefficient of regression for all indicators of audit industry specialization during the post-IFRS period were positive. SAF showed a coefficient of 0.198712, while BIG4 showed a coefficient of 0.187912. The implication is that the audit industry specialization has positive impact on the audit quality of quoted manufacturing firms in Nigeria. The implication is that, post adoption of IFRS has improved the audit quality of manufacturing firms in Nigeria by increasing the audit industry specialization. Furthermore, the P-value for the

manufacturing firms during the post IFRS period as reported by the increase in the coefficient for Asset Tangibility (AST) from 2.3% negative to approximately 16% positive; EPS from 8.4% negative to 13% positive; LEV from 0.8% to 12%; and CFO from 71% negative to 10% positive.

selected indicators of audit industry specialization were all less than 0.05 (i.e. SAF-0.0115; BIG4-0.0011); indicating that the audit industry specialization has a significant impact on the audit quality of quote manufacturing firms in Nigeria, thereby leading to the rejection of the null hypothesis which states that audit industry specialization has any significant impact on the audit quality of quoted firms in Nigeria IFRS adoption has no significant impact on the audit quality of quoted firms in Nigeria.

5.1 Summary of Findings

- a) The results revealed that the adoption of IFRS has improved the quality of audit for quoted manufacturing firms during the post IFRS period as reported by the increase in the coefficient for asset tangibility from 2.3% negative to approximately 16% positive; EPS from 8.4% negative to 13% positive; LEV from 0.8% to 12%; and CFO from 71% negative to 10% positive. Also, the adjusted R-squared in the post-IFRS period shows a stronger explanatory power (i.e. approximately 89%) compared to the pre-IFRS period (i.e. 57%);
- b) The result also revealed that the coefficient of regression for all indicators of IFRS adoption during the post-IFRS period were positive. The implication is that the adoption of IFRS has a positive and significant impact on the audit quality of quoted manufacturing firms in Nigeria.
- c) Furthermore, the adoption of IFRS has improved the audit quality of manufacturing firms in Nigeria by increasing the audit industry specialization, and with p-values less than 0.05, the audit industry specialization has a significant impact on the audit quality of quote manufacturing firms in Nigeria

5.2 Conclusion

This study examined the impact of IFRS adoption and audit industry specialization on the audit quality of quoted manufacturing firms in Nigeria. The adoption of IFRS was used as proxy by adjustments in assets tangibility, EPS reporting, leverage level and cash flow to

revenue; while audit industry specialization was captured by statutory audit fee and the presence of a big4 audit firm. To this end, the study aimed at comparing the predictive power of the indicators of IFRS adoption in the manufacturing industry of Nigeria during the pre-IFRS period and the post-IFRS period.

The longitudinal research design was employed with a focused on manufacturing firms quoted on the NSE. The study was conducted over the period of 16 years divided into 9 years pre-IFRS adoption (2003-2011) and 9 years post-IFRS adoption (2012-2020). Data were collected and computed from the financial statements of 20 conveniently selected manufacturing firms. The selected manufacturing firms were divided into 10 consumer goods firms and 10 industrial goods firms. Data were analyzed using the Panel Least Square (PLS) regression estimation technique.

The results obtained in this study as well as prior studies on the subject matter, it is concluded that the adoption of IFRS has a positive and significant impact on the audit quality of quoted manufacturing firms in Nigeria. Furthermore, the adoption of IFRS and audit industry specialization has a positive and significant impact on the audit quality of quoted manufacturing firms in Nigeria.

5.3 Recommendations

The study recommends that:

1. To avert a second wave of business collapse, the Nigerian government should tighten regulatory monitoring in the manufacturing sector, which, among other things, compelled institutional transformation and forced the emergence of Financial Reporting Council of Nigeria to strengthen financial reporting regulation and control in Nigeria;
2. Consequent upon the improvements in audit quality during the post-IFRS period as a wake-up call for financial regulators across all sectors of the Nigerian economy, there is a pressing need for increased oversight in the adoption of IFRS and the preparation of financial reports in Nigeria;
3. The statutory auditors should stick to specific areas of expertise as indicated by the variant of hypothesis two to the effect that “specialization promotes quality”; as evident among the top four audit firms instead of allowing audit firms to conduct audit for every industry across all sectors.

References

- Accounting Age (2009). FRC extends Thomas Cook investigation to more statements audited by EY retrieved from: <https://www.accountancyage.com/2019/12/19/frc-extends-thomas-cook-investigation-to-more-statements-audited-by-ey/>
- Ahmed, A., & Madobi, S. M. (2019). Organizational complexity and financial reporting quality of listed manufacturing firms in Nigeria: does industry specialized auditor matter?. In th 5 annual international academic conference proceedings, 2019 (p. 467).
- Alao, B. B., & Gbolagade, O. L. (2019). An Assessment of How Industry 4.0 Technology is Transforming Audit Landscape and Business Models. *International Journal of Accounting*, 3(10), 15-20.
- Alhababsah, S. (2019). Ownership structure and audit quality: an empirical analysis considering ownership types in Jordan. *Journal of International Accounting, Auditing and Taxation*.35, 71-84. <http://doi.10.1016/j.intaccaudtax.2019.05.006>
- Al-Khaddash, H., Al Nawas, R., & Ramadan, A. (2016). Factors affecting the quality of auditing: *Jordanian commercial banks. International Journal of Research in Business and Social Science*, 4(11), 206–222
- Allan, K. (2007). *The social lens: An invitation to social and sociological theory*. Canada: Sage Publications Inc
- Anao, R. A. (2018). FRC act and Nigeria roadmap to IFRS - implication for accounting education in Nigeria. Financial Reporting Council of Nigeria.
- Association of Chartered Certified Accountants (ACCA) (2020). Auditing in specialized industries. Retrieved from: <https://www.accaglobal.com/in/en/student/exam-support-resources/professional-exams-study-resources/p7/technical-articles/specialised-industries.html>

- Balsam, S., Krishnan, J., & Yang, J. S. (2018). Auditor industry specialization and earnings quality. *Auditing: A journal of practice & Theory*, 22(2), 71-97.
- Carey, S., & Spelke, E. (1994). Domain-specific knowledge and conceptual change. *Mapping the Mind*, 169–200. doi:10.1017/cbo9780511752902.008.
- Cassell, C., Hunt, E., Narayanamoorthy, G., & Rowe, S. P. (2019). A hidden risk of auditor industry specialization: evidence from the financial crisis. *Review of Accounting Studies*, 24(3), 891-926.
- Christensen, B. E., Glover, S. M., Omer, T. C., & Shelley, M. K. (2016). Understanding audit quality: insights from audit professionals and investors. *Contemporary Accounting Research*, 33(4), 1648-1684. <https://doi.org/10.1111/1911-3846.12212>
- Coser L.A. (1956). *The Functions of Social Conflict*. Clenoe: Free Press
- Dahrendorf, R. (1958). Toward a theory of social conflict. *Journal of conflict Resolution*, 2(2), 170-183.
- Dao, M., & Pham, T. (2017). Audit tenure, auditor specialization and audit report lag. *Managerial Auditing Journal*. 29(6), 490-512.. <https://doi.org/10.1108/MAJ-07-2013-0906>
- De Fuentes, C. and Sierra, E. (2015). Industry specialization and audit fees: a meta-analytic approach. *Academia Revista Latinoamericana de Administración*, 28(3), 419-435. <https://doi.org/10.1108/ARLA-06-2014-0083>
- DeAngelo, L. E. (2014). Auditor size and audit quality. *Journal of Accounting and Economics*, 3(3), 183–199. doi:10.1016/0165-4101(81)90002-1
- DeFond, M. & J. Zhang (2016). A review of archival auditing research. *Journal of Accounting and Economics*, 58(2): 275-326. <https://doi.org/10.1016/j.jacceco.2014.09.002>
- Etuka, C. E., Anichebe, A. S., & Etuka N. E. (2019). Effect of audit quality on capital investment of quoted consumer goods companies in Nigeria. *Journal of Accounting, Business and Social Sciences*. 2(1), 88-105.
- Farouk, M. A., & Hassan, S. U. (2016). Impact of audit quality and financial performance of quoted cement firms in Nigeria. *International Journal of Accounting and Taxation*, 2(2), 1-22.
- Fleming, D., Hee, K., & Romanus, R. N. (2016). Auditor industry specialization and audit fees surrounding Section 404 implementation. *Review of Accounting and Finance*. 13(4), 353-370.
- Francis, J. R. (2015). A framework for understanding and researching audit quality. *AUDITING: A Journal of Practice & Theory*, 30(2), 125–152. <https://doi:10.2308/ajpt-50006>
- Fung, S. Y. K., Gul, F. A., & Krishnan, J. (2016). City-level auditor industry specialization, economies of scale, and audit pricing. *The Accounting Review*, 87(4), 1281-1307.
- Garcia-Blandon, J., & Argiles-Bosch, J. M. (2018). Audit partner industry specialization and audit quality: Evidence from Spain. *International Journal of Auditing*, 22(1), 98-108.
- Ghafran, C., & O'Sullivan, N. (2017). The impact of audit committee expertise on audit quality: Evidence from UK audit fees. *The British Accounting Review*, 49(6), 578–593. <https://doi.org/10.1016/j.bar.2017.09.008>
- Gramling, A.A., Stone, D.N., (2015). Audit firm industry expertise: A review and synthesis of the archival literature. *Journal of Accounting Literature*, 20, 1–29.
- Hammersley, J. S. (2016). Pattern identification and industry-specialist auditors. *The Accounting Review*, 81(2), 309-336.
- He, X., Pittman, J. A., Rui, O. M., & Wu, D. (2017). Do social ties between external auditors and audit committee members affect audit quality? *The*

- Accounting Review*, 92(5), 61–87. <https://doi.org/10.2308/accr-51696>
- Hines, R. D. (1989). The sociopolitical paradigm in financial accounting research. *Accounting, Auditing & Accountability Journal*, 2(1), 52-79. <https://doi.org/10.1108/09513578910134671>
- Hoelscher, J. L. & E. Seavey, S. (2016), Auditor industry specialization and corporate risk-taking, *Managerial Auditing Journal*, 29(7), 596-620. <https://doi.org/10.1108/MAJ-02-2014-1000>
- IAASB (2014). A Framework for Audit Quality. International Federation of Accountants. <http://www.ifac.org>
- IAASB (2014). Handbook of International Quality Control, Auditing, Review, Other Assurance, and Related Services Pronouncements. IFAC.
- IAASB (2018). Handbook of International Quality Control, Auditing, Review, Other Assurance, and Related Services Pronouncements. IFAC.
- IASB (2017). Financial Reporting Framework in Nigeria: Adoption of International Financial Reporting Standards. <https://www.iasplus.com/en/jurisdictions/africa/nigeria>
- Jaggi, B., Gul, F. A., & Lau, T. S. C. (2019). Auditor industry specialization, political economy and earnings quality: Some cross-country evidence. *Journal of International Financial Management & Accounting*, 23(1), 23-61.
- John, I. (2019). The Big Four made a kill auditing NSE 30 in 2017 grossing over N6.8 billion. Business Day. <https://businessday.ng/market-intelligence/article/the-big-four-made-a-kill-auditing-nse-30-in-2017-grossing-over-n6-8-billion/>
- Jones, J. J. (1991). Earnings management during import relief investigations. *Journal of Accounting Research*, 29(2), 193. <https://doi:10.2307/2491047>
- Kothari, S. P., Leone, A. J., & Wasley, C. E. (2015). Performance matched discretionary accrual measures. *Journal of Accounting and Economics*, 39(1), 163–197. <http://doi.10.1016/j.jacceco.2004.11.002>
- Lawrence, A., Minutti-Meza, M., & Zhang, P. (2015). Can big 4 versus non-big 4 differences in audit-quality proxies be attributed to client characteristics? *The Accounting Review*, 86(1), 259–286. <http://doi:10.2308/accr.00000009>
- Lennox, C. S. (2016). Did the PCAOB's restrictions on auditors' tax services improve audit quality? *The Accounting Review*, 91(5), 1493–1512. <http://doi.10.2308/accr-51356>
- Lennox, C. S., Wu, X., & Zhang, T. (2016). Does Mandatory Rotation of Audit Partners Improve Audit Quality? *The Accounting Review*, 89(5), 1775–1803. <http://doi.10.2308/accr-50800>
- Lowensohn, S., Johnson, L. E., Elder, R. J., & Davies, S. P. (2017). Auditor specialization, perceived audit quality, and audit fees in the local government audit market. *Journal of Accounting and Public Policy*, 26(6), 705-732
- Minutti-Meza, M. (2015). Does auditor industry specialization improve audit quality?. *Journal of Accounting Research*, 51(4), 779-817.
- Nagy, A. L. (2017). Audit partner specialization and audit fees. *Managerial Auditing Journal*, 29(6), 513-526. <https://doi.org/10.1108/MAJ-11-2013-0966>
- NASB (2010). Report of the committee on road map to the adoption of international financial reporting standards in Nigeria. Nigerian Accounting Standard Board, Lagos. https://www.financialreportingcouncil.gov.ng/notice_board/report-of-the-committee-on-road-map-to-the-adoption-of-international-financial-reporting-standards-in-nigeria/#
- Neal, T. L., & Riley Jr, R. R. (2017). Auditor industry specialist research design.

- Auditing: *A Journal of Practice & Theory*, 23(2), 169-177.
- Otusanya, J. O., & Lauwo, S. (2015). The Role of Auditors in the Nigerian Banking Crisis, Accountancy Business and the Public Interest, 9, 159-204. https://www.researchgate.net/publication/267708256_The_Role_of_Auditors_in_the_Nigerian_Banking_Crisis
- Pricewatercoopers (2011). Optimising the benefits of IFRS transition in Nigeria. PwC Nigeria's IFRS Transition Cost Survey Report. <https://www.pwc.com/ng/en/assets/pdf/optimising-the-benefits-of-ifrs-transition-in-nigeria.pdf>
- Rajgopal, S., Srinivasan, S. & Zheng, X. (2018). Measuring audit quality. MIT Asia Conference. <https://www.scheller.gatech.edu/academics/conferences/Rajgopal-Srinivasan-Zheng.pdf>
- Scott, W. D., & Gist, W. E. (2018). Forced auditor change, industry specialization and audit fees. *Managerial Auditing Journal*, 28(8), 708-734, <https://doi.org/10.1108/MAJ-11-2012-0779>
- Singh, A., Kotha, H., Sultana, N., & Evans, J. (2019). Independent and joint effects of audit partner tenure and non-audit fees on audit quality. *Journal of Contemporary Accounting & Economics*.15(2), 186-205. <http://doi:10.1016/j.jcae.2019.04.005>
- Stanga, K. G., & Williams, J. R. (1979). The FASB's objectives of financial reporting. *The CPA Journal* (pre-1986), 49(000005), 30. <https://search.proquest.com/openview/745e6d1c53c55da42a820f5be6ac5cad/1?pq-origsite=gscholar&cbl=41797>
- Wang, K., Sewon, O., & Iqbal, Z. (2019). Audit pricing and auditor industry specialization in an emerging market: Evidence from China. *Journal of International Accounting, Auditing and Taxation*, 18(1), 60-72.
- Wang, P., Yuan, L., & Wu, J. (2017). The joint effects of social identity and institutional pressures on audit quality: The case of the Chinese audit industry. *International Business Review*, 26(4), 666–682. <https://doi:10.1016/j.ibusrev.2016.12.007>
- Willenborg, M. (2015). Discussion of “Brand Name Audit Pricing, Industry Specialization, and Leadership Premiums post-Big 8 and Big 6 Mergers”. *Contemporary Accounting Research*, 19(1), 111-116
- World Bank. (2011). Nigeria - Report on the observance of standards and codes (ROSC). World Bank. <http://documents.worldbank.org/curated/en/440581468099577387/Nigeria-Report-on-the-observance-of-standards-and-codes-ROSC>
- Yuan, R., Cheng, Y., & Ye, K. (2016). Auditor industry specialization and discretionary accruals: the role of client strategy. *The International Journal of Accounting*, 51(2), 217-239.
- Zaman, M., Hudaib, M., & Haniffa, R. (2018). Corporate governance quality, audit fees and Non-Audit services fees. *Journal of Business Finance & Accounting*, 38(1), 165–197. <https://doi.org/10.1111/j.1468-5957.2010.02224.x>

APPENDIX

PRE-IFRS

Dependent Variable: AQ
 Method: Least Squares
 Date: 10/21/21 Time: 10:15
 Sample: 1 90
 Included observations: 90

Variable	Coefficient	Std. Err
C	1.257017	0.21600
AST	-0.023200	0.01210
EPS	-0.084442	0.78840
LEV	0.008621	0.84580
CFO	-0.713269	0.22390
SAF	0.018761	0.01230
BIG4	0.293711	0.11310

R-squared	0.588350	Mean dep
Adjusted R-squared	0.571773	S.D. deper
S.E. of regression	0.254363	Akaike inf
Sum squared resid	6.081848	Schwarz c
Log likelihood	-1.900772	Hannan-Q
F-statistic	41.52412	Durbin-W
Prob(F-statistic)	0.000000	

POST-IFRS

Dependent Variable: AQ
 Method: Least Squares
 Date: 10/21/21 Time: 11:49
 Sample: 1 90
 Included observations: 90

Variable	Coefficient	Std. Err
C	0.520577	0.08660
AST	0.156698	0.03240
EPS	0.125577	0.01070
LEV	0.121462	0.27140
CFO	0.104134	0.81010
SAF	0.198712	0.14760
BIG4	0.187912	0.13810

R-squared	0.897161	Mean dep
Adjusted R-squared	0.889137	S.D. deper
S.E. of regression	0.173002	Akaike inf
Sum squared resid	2.813392	Schwarz c
Log likelihood	36.64511	Hannan-Q
F-statistic	2.023198	Durbin-W
Prob(F-statistic)	0.002363	

Null Hypothesis: AQ has a unit root
 Exogenous: Constant
 Lag Length: 0 (Automatic - based on SIC, maxlag=

Augmented Dickey-Fuller test statistic

Test critical values:	1% level	-3.497727
	5% level	-2.890926
	10% level	-2.582514

*MacKinnon (1996) one-sided p-values.

Null Hypothesis: AST has a unit root
 Exogenous: Constant
 Lag Length: 0 (Automatic - based on SIC, maxlag=12)

	t-Statistic	
Augmented Dickey-Fuller test statistic		-3.950767
Test critical values:	1% level	-3.497727
	5% level	-2.890926
	10% level	-2.582514

*MacKinnon (1996) one-sided p-values.

Null Hypothesis: EPS has a unit root
 Exogenous: Constant
 Lag Length: 0 (Automatic - based on SIC, maxlag=12)

	t-Statistic	
Augmented Dickey-Fuller test statistic		-3.936679
Test critical values:	1% level	-3.497727
	5% level	-2.890926
	10% level	-2.582514

*MacKinnon (1996) one-sided p-values.

Null Hypothesis: LEV has a unit root
 Exogenous: Constant
 Lag Length: 0 (Automatic - based on SIC, maxlag=12)

	t-Statistic	
Augmented Dickey-Fuller test statistic		-4.112039
Test critical values:	1% level	-3.497727
	5% level	-2.890926
	10% level	-2.582514

*MacKinnon (1996) one-sided p-values.

Null Hypothesis: CFO has a unit root
 Exogenous: Constant
 Lag Length: 0 (Automatic - based on SIC, maxlag=12)

	t-Statistic	
Augmented Dickey-Fuller test statistic		-8.652268
Test critical values:	1% level	-3.497727
	5% level	-2.890926
	10% level	-2.582514

*MacKinnon (1996) one-sided p-values.

Null Hypothesis: SAF has a unit root

Exogenous: Constant

Lag Length: 0 (Automatic - based on SIC, maxlag=

Augmented Dickey-Fuller test statistic

Test critical values: 1% level
 5% level
 10% level

*MacKinnon (1996) one-sided p-values.

Null Hypothesis: BIG4 has a unit root

Exogenous: Constant

Lag Length: 6 (Automatic - based on SIC, maxlag=

Augmented Dickey-Fuller test statistic

Test critical values: 1% level
 5% level
 10% level

*MacKinnon (1996) one-sided p-values.