Firms' Profitability and Financial Reporting Quality: Pre and Post IFRS Adoption in Nigeria

Lucky Izobo ENAKIRERHI[1*], Emmanuel A. L. IBANICHUKA[2] & Clifford O. OFURUM[3]
[1, 2, 3] *Department of Accounting, Faculty of Management Sciences, University of Port Harcourt, Choba, Rivers State, Nigeria*
**Corresponding Author*

Abstract: **- The study examines firms' profitability and the quality of financial reports: pre and post IFRS adoption in Nigeria. The main objective is to examine the effect of profitability on earnings quality of firms in addition to the impact IFRS has on the profitability of firms in Nigeria. The study uses the quantitative method of analysis, the multiple regression analysis to examine what effect ROE and ROA have on earnings quality and t-test of mean difference to test for difference between the mean of pre and post IFRS adoption. To analyse earnings quality, discretionary accrual is measured using the Jones' model. The results show that the effect of profitability on the quality of earnings after adoption of IFRS is mix depending on what measure of profitability was adopted. ROE has negative (positive) effect while ROA has positive (negative) effect on discretionary accruals (earnings quality). On the impact of IFRS adoption on profitability of firms, the results show a non-significant impact on the return on equity of firms and a statistically significant impact on the return on assets of firms. Overall, IFRS adoption has had a negative impact on the profitability of firms quoted on the floor of the Nigerian stock exchange.**

Key words: **Profitability, IFRS, Earnings Quality, Financial Reporting Quality, Earnings Management, Discretionary Accruals**

I. INTRODUCTION

The relationship that exists between profitability and reporting quality had been a subject of controversy over the years, especially as profitability or performance of a firm over an accounting period is an important and significant firm's data influencing the financial reporting quality of firms. Although, it is not uncommon to find studies such as Alsaeed, (2006), Haniffa & Cooke (2002), Nelson & George (2013) who found no significant effect of profitability on earnings quality, other authors such as Almed, Billings, Morton & Stanford-Harris (2002), Kamaluarifin (2016) argued that profitability influence on the quality of disclosure could be explained from two perspectives. The first is that management of more profitable firms tend to disclose more information to show forth their sustained performance in order to gain compensation arrangement and sustain their position. In other word, increase in profitability has the attendance effect of lowering earnings management and result in better quality of financial statement. On the other hand, less profitable firms disclose more information to explain reasons for their performance sustain support and maintain their integrity. In essence, profitability is directly (inverse) proportional to earnings manipulation (financial reporting quality).

Hassan and Farouk (2014) have identified profitability as a very essential firm level attribute that affect financial reporting quality of firms in Nigeria. However, empirical findings on how profitability affects financial reporting quality seem mix, putting forward an unclear direction and thus, the need for further research to clarify this. Some authors such as Davidson, Goodwin-Stewart& Kent (2005), Hashem, Bahman & Azam (2012), Klein (2002) arguing that more profitable firms tend to have increase in earnings manipulation indicating that as profitability of firm grow, so is their earnings management practice while others such Agyei-Mensah (2015), Agyei-Mensah (2012), Aljifri, Alzarouni, Ng & Tahir (2014) argued that more profitable firms tend to disclose more information to stakeholders and by implication, improve the reporting quality of the firms. The argument around profitability and its influence on financial reporting quality remain unresolved with few authors studying the Nigerian market. Apart from the above controversy, the issue of the impact of the adoption of international financial reporting standards on the performance (profitability) of firms have also generated mix results globally. Again, very little attention have been paid to it in the Nigeria context with authors such as Ibanichuka & Asukwo (2018) and Umobong & Ibanichuka (2016)examining the Petroleum marketing and manufacturing related firms. To this end, this study examine firms' profitability and financial reporting quality both in the pre and post IFRS adoption periods and also examine whether there have been differences in performance of firms due to the adoption of IFRS in Nigeria.

II. LITERATURE REVIEW

This section is dedicated to empirical review of literature relating to profitability and financial reporting quality and the impact of IFRS adoption.

2.1Empirical Evidences on Profitability and Financial Reporting Quality in Pre and Post IFRS Era

The effect of profitability on financial reporting quality is one area that has not been fully studied in the Nigerian context with few authors such as Hassan & Farouk (2014) and Farouk & Hassan (2014) having studied this area without disaggregating into pre and post IFRS era. Also, the study of Farouk and Hassan test for performance instead of reporting

quality of firms report. Most studies on profitability and financial reporting quality are done in other economy other than Nigeria and consider other variables rather than profitability and financial reporting quality (Saliu & Adetoso, 2018). The lack of studies on this area in Nigeria is a key knowledge addition of this research. In the study of Saliu & Adetoso, although they found a positive relationship between financial reporting quality and performance (profitability), the study considered financial reporting quality to be determinant of profitability. In this study, profitability is regarded as an explained variable. Another study done in Nigeria is that of Eyenubo, Muhamed & Ali(2017) focusing on effect of audit committee and size on financial reporting quality but added profitability as a control variable. Their decision to use profitability as a control variable could be as a result of dearth of empirical evidence in this area. They controlled for pooled OLS, choosing rather the robust fixed effect estimation using hausman test after correcting for heteroskedasticity and autocorrelation problem. Using the level and extent of disclosure as a proxy for financial reporting quality, the result showed that there is a significant effect of profitability on the dependent variable. Their statistically significant results negate the study done in other countries (especially in the United Arab Emirates) as we shall see later indicating that that the influence of profitability on level of disclosure may be sensitive to country specific.

Agyei-Mensah (2015) who studied the Ghanaian market examined some firm level data including profitability and how they affect the quality of financial ratio and by extension the quality of financial statement. They used a longitudinal approach and examined 35 firms listed on the Ghana Stock Exchange for the year 2012. The results were quiet compelling as most firms in Ghana have not disclosed such financial ratios in their annual report. Hence, they fail to meet up with the qualitative characteristics requirements (relevance, reliability, comparability and understandability) of the International Accounting Standard which define the quality of a financial report. They further revealed profitability to be negatively related to financial ratio and disclosure. Earlier, Agyei-Mensah (2012) had examined how firm characteristics affect internet reporting in Ghana. The aim is to show firms that deepened their communication and level of disclosure through the use of internet. The results showed that out of the total firms observed, about 23% either have no functional website or have websites that could not be assessed indicating poor reporting. Further test showed that among the 77% that have their information disclosed on their websites, profitability proved to be an important determinant.

In other development, Aljifri, Alzarouni, NG &Tahir (2014) examined the effect of corporate characteristics of which profitability was a major variable on the level of corporate disclosure in the United Arab Emirates (UAE) using a total of 153 joint stock firms, both listed and unlisted but did not find a statistically significant relationship between profitability and level of disclosure in the UAE. Kamalluarifin (2016) examined corporate governance, firm characteristics and their impact on corporate internet reporting in top 95 Malaysia firms. Their objectives were to see how these factors affect the level of internet disclosure. The results amongst other showed that profitability of firm has a positive and significant effect on the level of internet disclosure in Malaysia similar to the results obtained by Eyenubo et al but again differ from the results obtained Aljifri, et al in the UAE. This might point to direction that the liberality of a nation could play an important role on the use of internet disclosure and consequently the level of reporting quality. UAE is probably a deeply Muslim and conservative kingdom. Although, Malaysia is known to be an Islamic nation, they are however liberal than other Islamic nations.

2.2 Empirical Evidence on Impact of IFRS on the Performance of Nigerian Firms

There have been apple studies on the effect of IFRS adoption on the performance (profitability) of firms in Nigeria. Amongst these studies are the works of Ibanichuka and Asukwo (2018) and Umobong and Ibanichuka (2016). Umobong and Ibanichuka (2016) examined the effect of IFRS adoption on the performance of Beverage and Pharmaceutical firms in Nigeria. They also tried to assert whether IFRS adoption has resulted in reduced earnings management in Nigeria. Using return on assets (ROA), return on equity (ROE) and earnings per share (EPS) as measured of performance, the results of paired sample t-tests indicated that there was no statistical significance between mean values of variables in pre and post IFRS adoption periods. They concluded that IFRS adoption has not impacted significantly on the performance of firms in Nigeria. Again, Ibanichuka and Asukwo (2018), in their contribution to the debate of IFRS adoption, studied the petroleum marketing firms in Nigeria and used ROA, ROE and EPS as measures of performance. The results were similar to that obtained in the study of Umobong and Ibanichuka in the case of ROA and ROE. However, it differs with EPS as the results showed that IFRS adoption has impacted significantly on the EPS of firms among the petroleum marketing firms in Nigeria. In the banking sector, Omaliko, Uzodimma & Okpala (2017) found IFRS to statistically impact on the performance selected variables (ROA and EPS) of firms at 5% level. Additionally, Akinleye (2016) who also examined the banking sector of the Nigerian economy found IFRS to positively impact on the performance measures of ROA and ROE lending credence to the findings of Omaliko, Uzodimma & Okpala.

III. RESEARCH METHODOLOGY

3.1 Population and Sample

The population of the study comprises all non-financial firms quoted on the floor of the Nigerian Stock exchange. However, a final sample of 87 firms was selected based on data availability. Thus 87 seven firms were selected for a 10 years period, 2007 to 2011 (pre IFRS) and 2012 to 2016 (post IFRS) adoption periods.

3.2 Method of Data Analysis

The study uses quantitative method to examine profitability of firms and quality of financial reports. To measure quality of financial report, we try to find evidence of earnings management by calculating for discretionary accruals in pre and post IFRS adoption. To detect use of earnings management, we used the Jones (1991) as modified byDechow, Sloan & Sweeney. (1995) and used the absolute value of the residual of the model below as our discretionary accruals.

TACC *it* / A *it -1* = α1*t* (1/A *it* -1)] + α2*i* [(ΔREV *it* - ΔREC *it*)/ A *it* -1] +α3*i* [PPE *it* /A *it* -1] + ε *it* ----------**Model 1**

Where,

TACC = Total Accruals and

Total Accruals = Earnings - Operating Cash flows

.*Ait* =Total Assets

ΔREV= change in operating revenues

ΔREC=change in net receivables.

PPE= gross property, plant, and equipment

The residual (discretionary accruals) generated from the model above became our measures of earnings quality. After, the two performances or profitability variables (ROE and ROA) used in this study were regressed against the discretionary accruals from model one to determine the effect of the explanatory variables on the explained variables in the model 2 below:

DA *it* = $\beta_0 + \beta_1$ (ROEit) + β_2 (ROAit) + ε*it*----------**Model 2**

Where

DA = Discretionary accruals from model 1

ROE = return on equity of firms

ROA = return on assets of firms

ε = Error term

Furthermore, to test for the impact of IFRS adoption of performance, we used the test of mean difference. Hence, the paired sample t-test was used to test for statistical difference between the means of ROE and ROA pre and post IFRS adoption era.

IV. RESULTS AND DISCUSSION

4.1 Regression Results for Discretionary Accrual in Pre and Post IFRS Adoption Periods in Nigeria

Table 4.1.1. Earnings Management Model Panel Regression– Pre-IFRS (2007 – 2011)

	Dependent variable: TACCit			
	Pooled OLS		Radom Effect Estimate	
Variable	*Coefficient*	*p-value*	*Coefficient*	*p-value*
Const	−7.77481 (6.909)	0.2636	−7.65663 (6.87506)	0.2654
Tait	1394730 (3874)	0.0005	1497370 (114035)	0.000***
RevRecit	323027 (313382)	0.3055	347987 (82504.1)	0.000***
PPEit	−0.776133 (0.3440)	0.0266	−0.895562 (0.112858)	0.000***
R-squared	0.059094			
Adjusted R-squared	0.052545			
F(3, 86)	280.5543	(0.0000***)		

Standard errors in parenthesis.
Significance levels: ***1%, ** 5% and *10%
Source: extracted from regression output

Table 4.1.2 Panel Diagnostic Test

Test	*chi Square*	*p-vaue*	*Decision*
Joint Significance	68.2472	0.000***	Reject pooled OLS
Breusch-Pagan	752.949	0.000***	Reject pooled OLS
Hausman	0.1737	0.9817	REM is Consistent

Source: Extracted from diagnostic test results

Table 4.1.3 Earnings Management Model Panel Regression– Pre-IFRS (2012– 2016)

	Dependent variable: TACCit			
	Pooled OLS		Radom Effect Estimate	
variable	*Coefficient*	*p-value*	*Coefficient*	*p-value*
Const	−26.9174 (31.7802)	0.3994	70.7069 (26.4638)	0.009***
Tait	−801844 (2495220)	0.7487	−3.56525e+07 (13280400)	0.0087***
RevRecit	−16764.2 (10565.2)	0.1162	34422.9 (9142.26)	0.0003***
PPEit	33.0912 (45.0565)	0.4647	−121.322 (48.2379)	0.0138**
R-squared	0.010491		0.830363	
Adjusted R-squared	0.003555		0.088569	
F(3, 86)	0.879739	0.454948		

Standard errors in parenthesis.

Significance levels: ***1%, ** 5% and *10%
Source: extracted from regression output

Table 4.1.4 Panel Diagnostic Test

Test	*chi Square*	*p-vaue*	*Decision*
Joint Significance	19.22	0.000***	Reject pooled OLS
Breusch-Pagan	495.99	0.000***	Reject pooled OLS
Hausman	23.4474	0.000***	FEM is Adequate

Source: extracted from result of Analysis

The table 4.1.1, 4.1.2, 4.1.3 and 4.1.4 above show the model used to generate the discretionary accrual or the dependent variable in the pre and post IFRS periods. Table 4.1.2 and 4.1.4 show that diagnostic tests carried out. The pre-IFRS adoption model rejected the fixed effect model in favour of the random effect model while post-IFRS model favoured the fixed effect model. In pre-IFRS, total assets and the difference in changes in revenue and receivable show a positive effect on total accrual while plant, property and equipment shows a negative effect while in post-IFRS, only the difference in changes in revenue and receivable shows a positive effect on total accruals. All variables in both pre and post IFRS periods show a statistical significant effect.

4.2 Descriptive Statistics of the Variables of research

Table 4.2 Descriptive Statistics

	Pre IFRS Adoption 2007 to 2011			
Variable	Mean	Min	Max	Std. Dev.
DAit	5.52E-14	-625.14	85.896	64.792
ROE	0.1115	-20.7140	2.14741	1.04098
ROA	0.087147	-0.5006	0.81682	0.13942
	Post IFRS Adoption 2012 to 2016			
DAit	3.71E-15	-242.57	200.35	32.481
ROE	-1.5077	-709.599	3.7061	34.0307
ROA	0.042544	-0.71272	0.79268	0.1345

Source: *Extracted from results of analysis*

From the above, discretionary accruals seems lower after adoption of but with a high standard deviation in both periods, it shows that earnings management practices amongst firms varied considerably and are far away from the mean. In terms of return on equity and return on assets, firms performed better on the average before the adoption of IFRS in Nigeria as evidenced in lower mean values for the periods of 2012 to 2016. Next we examine the effect of performance indices on quality of earnings.

4.3 Firm's Profitability and Quality of Financial Report in Pre and Post IFRS Periods

Table 4.3.1 Regression Results of the Independent and Dependent Variable

	Dependent variable: DAit			
	Pre-IFRS Model		Post -IFRS Model	
variable	*Coefficient*	*p-value*	*Coefficient*	*p-value*
Const	−2.64004 (7.28074)	0.7169	−1.21044 (0.97204)	0.2164
ROEit	20.9624 (7.86395)	0.0077	−2.15336 (14.4975)	0.8823
ROAit	−6.26387 (20.6408)	0.7615	32.9214 (19.8396)	0.1007
R-squared			0.016974	
Adjusted R-squared			0.012391	
F(3, 86)			2.789642	0.067012

Source: extracted from regression Output

Table 4.3.2.Panel Diagnostic tests for both Pre and Post IFRS Adoption Models

	Pre-IFRS			Post-IFRS			
Test	*chi Square*	*p-vaue*	*Decision*	*chi Square*	*p-vaue*	*Decision*	
Joint Significance	71.186	0.000***	*Reject pooled OLS*	0.164709	1	*Pooled OLS is adequate*	
Breusch-Pagan	753.349	0.000***	*Reject pooled OLS*				
Hausman	0.779874	0.6771	*REM is consistent*				

Source: Extracted from Diagnostic Tests results

4.3.1 Profitability and Quality of Financial Reports in Pre and Post IFRS in Nigeria

The table 4.3.1 and 4.3.2 above show the regression results on the effect of the independent variables on quality of financial reports measured by discretionary accruals. In pre IFRS era, the panel diagnostic test rejected the pooled OLS estimate in favour of Random effect model as seen above. In post IFRS era, the panel diagnostics test shows that the pooled OLS estimate is adequate in explain the effect of profitability of earnings quality. ROE has a positive effect on discretionary accruals in, indicating that higher performance was associated with higher earnings manipulation in line with the assertions of Davidson, Goodwin-Stewart& Kent (2005), Hashem, Bahman & Azam (2012) and Klein (2002). However, after the adoption of IFRS, there seems to be a reduction on how ROE influence earnings management. This is evidenced in the negative effect, although insignificant, of ROE on discretionary accruals. In effect, better performance resulted in lower earnings manipulation, probably as a result of IFRS adoption, especially considering the fact that profitability measured by ROE was lowered after adoption of IFRS. The reverse is the case for ROA as it shows a negative effect on discretionary accruals before adoption and a positive effect after adoption. Increases in ROA result in increase in discretionary accruals after the adoption of IFRS. However, before adoption, increase in profitability resulted to decrease in earnings manipulations as argued by Agyei-Mensah (2015), Agyei-Mensah (2012) and Aljifri, Alzarouni, Ng & Tahir (2014). Thus, earnings quality improved with increase in ROE after adoption of IFRS and +decreased with increase in ROA after adoption.

4.3.2 Impact of IFRS Adoption on the Profitability of Firms in Nigeria

Table 4.3.3 Two Sample t-test for the Means of Profitability (ROE) of Firms (Pre & Post-IFRS)

Variable	Obs.	Mean	Std. Dev.	[95% Conf.	Interval]
ROE PRE	435	0.1115	1.0409		
ROE POST	435	-1.5077	34.0307		
Difference		1.61920	34.0352	-1.5881	4.8265

Difference = mean (ROE PRE) - mean (ROE POST) t-Statistics (Sign Two Tailed)= 0.992 (0.322)
Ho: diff = 0 H1: diff ≠0 Degrees of freedom = 434
Source: Extracted from results output

From the results of the paired sample t-test above, it could be seen that the t-statistics value is 0.992 with a p-value of 0.322, indicating that there is no significant difference between the two periods. Hence, IFRS adoption has not impacted significantly on the profitability of firmsproxy by return on equity (ROE). This agrees with previous findings of Ibanichuka & Asukwo (2018) and Umobong & Ibanichuka (2016) who analysed the petroleum marketing firms and manufacturing related firms quoted in different sectors of the economy respectively.

Table 4.3.4 Two Sample t-test for the Means of Profitability (ROA) of Firms (Pre & Post-IFRS)

Variable	Obs.	Mean	Std. Dev.	[95% Conf.	Interval]
ROA Pre-IFRS	435	0.0871	0.13942		
ROA Post-IFRS	435	0.0425	0.1345		
Difference		0.0446	0.1493	0.03053	0.05867
Difference = mean (ROA PRE) - mean (ROA POST) t-Statistics (Sign Two Tailed)= 6.231 (0.000***)					
Ho: diff = 0 H1: diff ≠0	Degrees of freedom = 434				

From the paired sample t-test in table 4.3.4 above, there seems to be a statistical difference in means of both periods. The t-statistics of the test is 6.231 with a p-value of 0.000, indicating the difference is statistically significant at 1%. Given that post adoption mean is lower than pre adoption mean, IFRS adoption has impacted negatively and significantly on the return to shareholders of firms in Nigeria. The result on statistical impact agrees with Omaliko, Uzodimma & Okpala (2017) and Akinleye (2016), although they studied the banking sector there result was statistically positive. This shows that impact of IFRS could vary depending on sector of study.

V. CONCLUSION

The study examined the effect of profitability on earnings quality of firms in addition to the impact IFRS has on the profitability of firms in Nigeria. The results showed that the effect of profitability on the quality of earnings after adoption of IFRS is mix depending on what measure of profitability was adopted. In essence, the result is dependent on the measure of performance used. On the impact of IFRS adoption on profitability of firms, the results show non-significant impact on the return on equity of firms and a statistically significant impact on the return on assets of firms. Again, in terms of level of significance, the impact of IFRS is mix depending on the measure of profitability adopted. Overall, IFRS adoption has had a negative impact on the profitability of firms quoted on the floor of the Nigerian stock exchange.

REFERENCES

[1] Agyei-Mensah, B.K (2012). Corporate financial reporting: firm characteristics and the use of internet as a medium of communication by listed firms in Ghana. *African Journal of Business Management*, *6*(6), 2299 – 2309.

[2] Agyei-Mensah, B.K. (2015). The determinants of financial ratio disclosures and quality: Evidence from an emerging market. *International Journal of Accounting and Financial Reporting, 5*(1), 188 – 211.

[3] Akinleye, G.T. (2016).Effect of international financial reporting standards (ifrs) adoption on the performance of money deposit banks in Nigeria.*European Journal of Business, Economics and Accountancy*, *4*(4), 87-95

[4] Aljifri, K., Alzarouni, A., NG, C. &Tahir, M.I. (2014).The association between firm characteristics and corporate financial disclosures: Evidence from uae companies. *The International Journal of Business and Finance Research*, *8*(2), 101 – 123.

[5] Almed, A., Billings, B., Morton, R. & Stanford-Harris, M. (2002).The role of accounting conservatism in mitigating bondholder - shareholders conflict over dividend policy and in reducing debt cost.*The Accounting review*, *77*(4), 867 – 890.

[6] Alsaeed, K. (2006). The association between firm-specific characteristics and disclosure: The case of Saudi Arabia. *Managerial Auditing Journal*, *21*(5), 476 – 496.

[7] Davidson, R; Goodwin-Stewart, J & Kent, P. (2005).Internal governance structures and earnings management.*Accounting and Finance, 1 – 27.*

[8] Dechow, P., Sloan, R. & Sweeney, A. (1995). Detecting earnings management.*The Accounting Review70*(2), 193–225

[9] Eyenubo, S.A., Muhamed, M. & Ali, M (2017). An empirical analysis on the financial reporting quality of the quoted firms in Nigeria: Does audit committee size matter?*International Journal of Academic Research in Business and Social Sciences, 7*(9), 50-63.

[10] Hashem N., Bahman B., &Azam S. (2012). An empirical analysis of earnings management motives in firms listed on Tehran stock exchange. *Journal of Basic and AppliedScientific Research, Res., 2*(10), 9990-9993.

[11] Hassan, S.U. & Farouk, M.A. (2014). Firm attributes and earnings quality of listed oil and gas companies in Nigeria. *Research Journal of Finance and Accounting*, *5*(17), 10 -18.

[12] Ibanichuka, E.A.L. &Asukwo, I. S. (2018).International financial reporting standards adoption and financial performance of petroleum marketing entities in Nigeria.*International Journal of Advanced Academic Research | Accounting & Economic Development 4*(2), 1-15

[13] Jones, J. (1991). Earnings management during import relief investigations.*Journal ofAccounting Research*, 29(2), 193-228.

[14] Kamalluarifin, W.F.S.W. (2016). The influence of corporate governance, firm characteristics on the timeliness of corporate internet reporting by top 95 companies in Malaysia.*7th International Economics and Business Management Conference Held of 5thA& 6Th October 2015. Procedia Economics and Finance*, *35*, 156 – 165.

[15] Klein, A. (2002). Economic determinants of audit committee independence.*Accounting Review*, *77*, 435 – 452.

[16] Nelson M. W. & George K. R; (2013).Corporate governance, firm attributes and earnings management in an emerging economy.*JAMAR, 11*(1), 43 -64.

[17] Omaliko, E., Uzodimma, A. &Okpala, N. (2017).Effect of international financial reporting standard adoption on financial performance of listed money depositing banks in Nigeria.*European Journal of Business and Management*, *9*(17), 11-17

[18] Saliu, P.O. &Adetoso, A.J. (2018).Relevance of financial reporting on profitability of quoted companies in Nigeria.*International Journal of Economics, Commerce and Management*, *6*(3), 357 – 374.

[19] Umobong, A.A. &Ibanichuka, E.A.L. (2016).Ifrs implementation and firms' financial performance in Nigeria.*International Journal of Innovative Finance and Economics Research 4*(4),50-59