

# **Original Research Article**

## **Leverage of Firms and Earnings Management Practices in Nigeria Pre and Post IFRS Adoption Periods.**

### **Abstract**

*It has been argued that taking on more leverage in firm's capital structure will force managers to disclose more information in line with agency theory and theoretically, this is expected to increase in postIFRS periods. Whether, this theoretical assertion holds in the case of Nigeria is subject to academic debate.* Thus, the paper examines the association between leverage and earnings manipulative practice of firms in Nigeria pre and postIFRS periods and attempt to test the assertion of agency theory that higher leverage will be beneficial to improved earnings quality dues to pressure on managers by bondholders. The study incorporated data for 87 listed firms on the floor of the Nigeria Stock Exchange for 10 years, 5 years preIFRS(2007 to 2011) and 5 years postIFRS(2012 to 2016) making 870 firm year observations. It disaggregated the periods into pre and postIFRS to enable the researcher test for the effect of adoption. The panel regressions estimate(Random effect model) was used to test the effect of the association between the independent and dependent variables. The results deviate from norms and show that although taking on leverage in the capital structure of firms could be beneficial to earnings quality in line with agency theory in preIFRS, this benefit had been eroded after Nigeria's adoption of the global standards. In postIFRS, leverage has a positive association, indicating that more leverage resulted in increased manipulation. Performance of firms proved to be an important factor affecting earnings quality as the results showed that lower performance was likely associated with increased earnings management practice post IFRS. The study is original and deviate from norms, puncturing the beliefs that IFRS adoption would limit managers' ability to manipulate earnings. It also found, against popular assertion, that increased leverage may not be associated with reduced earnings manipulative practices. Leverage is unlikely to prevent earnings management practices.

**Key words:** Leverage, Agency Theory, PreIFRS, PostIFRS, Performance, Statement of accounting standards(SAS)

### **Introduction**

Firms who are in need of expansion within and across borders sometimes borrow to finance such capital needs. The capital requirements of businesses, especially for expansion and growth, may not be provided by equity owners alone. This is in addition to the standard requirements and difficulties in raising equity in the capital market. In this regard, firms planning on expanding and seeking more growth opportunity would likely borrow from players in capital market to finance such envisaged opportunities. This term is technically referred to as gearing or leverage in the capital structure of firms. Leverage is the proportion of debt in the capital structure of firms and as asserted by Okwoli (2009), it is often called

gearing ratio. Hassan and Farouk(2014) affirmed that leverage is a firm level data that has had a significant effect on financial reporting quality of firms. In other word, debt in the capital structure could determine to an extent whether managers manipulate earnings or not. This is because, not only that managers would be required to give good account to company's owners, they are obligated to present the financial standing of the firms to debt-holders who probably are interested in the short term viability and profitability of the firms in order for their debt obligations to be met. Alsaeed(2006) argued that higher leverage in the capital structure of firms is associated with higher agency costs and for the needs of creditors to be fully satisfied, there is pressure on management of the firm to disclose more information and reduce asymmetric information. Hence, more disclosure leads to more transparency, lower earnings manipulations leading to increase in the quality of reported table in annual reports. In essence, higher leverage ratio in the capital structure is desired to push for better earnings quality. However, researcher such as Waweru & Riro(2013) differs in their opinion. They argued that higher gearing is associated with higher bankruptcy risks, resulting in litigation risk. This would increase the tendency of management to manipulate its books in order to present desired results to creditors and reduce these perceived risks. This view was also echoed by Hashem,Bahman & Azam(2012),Nelson & George(2013) that higher leverage would force firms to engage in earnings management practice in order to present results that will enable them to attracts more external financing at a cheaper rate from debt-holders (lenders of fund). This way, leverage would be positively related to earnings manipulative ability of managers and negatively related to earning's quality in the annual reports. The conflicting arguments have put forward an unclear direction as to leverage effect on earnings manipulation. The argument is made more complicated by the adoption of International Financial Reporting Standards(IFRS) for the production of financial reports. For example, while the proponents of IFRS adoption argued that IFRS conferred the liability for detail disclosure on managers, that is, managers would disclose more information irrespective of debt status, others authors such as Sundvik (2019) and Belloa, Abubakar & Adeyemi (2016) argued that the principled based IFRS would allow more of discretion of managers and thus, would be associated more with earnings manipulation.

Arguably, leverage in the capital structure of a firm may reduce information asymmetry and agency problem as owners of firms and providers of fund will force managers to work in line with the interest of stakeholders (debt holders and equity holders) in support of the agency theory. A reduction in agency costs and asymmetry information will ultimately lead to lower earnings management and hence, higher financial reporting quality of firms. Studies which support this argument such as Tower, Hancock & Taplin (1999), Wallace, Naser & Mora (1994), Wallace & Naser (1995), Shehu (2012) asserted that in this regard, leverage will significantly and positively affect financial reporting quality of organisations. Although, this remains theoretical assumption, empirical results may suggest otherwise. As suggested by Karami & Akhgar (2014), extensive works have been carried out focusing on factors affecting financial reporting quality but very little attention has been paid to leverage as a factor. In addition, researches attempting to study leverage in the preIFRS and postIFRS era and compare the effect of adoption on leverage, relating to earnings quality are scarce. Will

leverage in firm's capital strongly and negatively correlate with earnings management and will this relationship be stronger in the aftermath of IFRS adoption? This question remains unresolved and as such, this paper examines Firms' leverage and earnings quality pre and post adoption of the global standards(IFRS) in Nigeria. *Examining leverage of firms and its relationship with earnings quality in a country such as Nigeria is very important and significant. Nigeria is the biggest economy in Africa and as such, very strategic to financial decisions in the continent. A failure of firms in Nigeria may as well spell catastrophe to both its economy and Africa economy which may ultimately spread to the world. Hence, study of this nature regarding Nigeria's economy is very important. Moreover, Nigeria adopted the use of IFRS in 2012 and since then, has domesticated the global standard with some research suggesting that its adoption has improved earnings quality while others suggested otherwise. Nigeria's adoption of the global standard would have strong effect on firms' ability to borrow to finance their activities since a firm that is perceived to be information bias may be rated poorly by lenders and otherwise if perceived low on information asymmetry. Since, all firms in Nigeria now use IFRS as a basis of preparing reports of its annual activities, researching on leverage effect on earnings quality becomes very important.*

## Literature Review

This section is dedicated to the review of related literature on firms' leverage and earnings quality of firms in preIFRS and postIFRS era in Nigeria. It is divided into two main subsections.

### 2.1 Agency Cost Theory

The theory was introduced by Jensen & Meckling(1976). The theory assumes that there is an agency relationship which exists between managers and providers of fund. Jensen and Meckling(1976) & Stulz(1990) argued that the use of external financing when asymmetric information is present results in conflict of interest. Managers are agent of shareholders and should act in their principals' best interests at all time. However, this will not always be the case resulting in conflicting interest. These conflicts are two in dimensions: that of managers and shareholders and shareholders and bondholders(Amjad, Bilal, & Tufail, 2013, Rehman & Rehman,2011). To deal with these and ensure shareholders' interest are adhered to, shareholders would have to set up monitoring devices which are usually costly (Ellili & Farouk, 2011, Ho-Yin Yue, 2011).

Consequently, Jucá, de Sousa & Fishlow (2012), Rehman & Rehman (2011) suggested that agency cost could be reduced through increase in borrowing. High gearing puts pressure on managers to generate enough cash flow to meet its debt obligation reducing the available cash to spend on opportunistic behaviour and therefore, managers and shareholders' interest would converge and align. Following this, increase debt in firm in an attempt to reduce conflict, result in another conflict with bond-holders. According to Amjad et al(2013), debt-holders are interested in the short term profit to guarantee repayment of interest but shareholders are willing, to gain capital appreciation and wealth maximization in the long run, relinquish short

term gain. Therefore, increase borrowing in attempt to reduce information asymmetry might be counter-productive as bankruptcy and financial distress risk would tend to increase. Hence, reducing asymmetric information and keeping debt at acceptable low level is more preferable. Adoption of IFRS is meant to increase transparency and reduce these conflicts by improving information quality, leading to lower cost of capital. The implications are that increasing leverage would be highly sensitive to earnings manipulation in the preIFRS era than in the postIFRS era due to increased quality. This is because high level financial reporting quality is expected to reduce asymmetric information and hence, there will be high predictors of earnings quality. In essence, leverage should have a positive effect on earnings manipulative tendency of managers in post IFRS era and a less significant effect on earnings manipulative tendency of managers in post adoption periods. Furthermore, it would be expected that leverage ratio would increase after adoption due to perceived transparency brought about by adoption of IFRS.

## **2.2 Empirical Evidences**

As argued by Alsaeed (2006), higher gearing in the capital structure of firms could be associated with higher agency costs. For the needs of creditors to be fully satisfied, there is pressure on management of high gearing firm to disclose more information and reduce asymmetric information. Hence, more disclosure leads to more transparency, lower earnings manipulations and hence, increases quality of table presented in annual reports. Probably the reason Hassan and Farouk(2014) argued that it is one of the significant variables affecting quality of table in annual reports of firms. Empirical evidences on the difference between gearing ratio in preIFRS and postIFRS era are scarce but there are apple evidences on effect of leverage on qualitative financial reports. Among the few studies available are the study of Yahaya, Yusuf & Dania (2015) who analysed amongst other, the difference in reporting quality and other variables as occasioned by the adoption of IFRS. The results showed that there was no statistical difference between the mean of leverage, preIFRS and postIFRS era. The mean leverage in pre IFRS adoption was 0.992 while the mean leverage post IFRS was 0.993. Although, the average in post adoption periods was slightly higher than the average in pre adoption period, the research found no statistical difference at 5% level of significance. Again, Yahaya et al (2015) found that the mean leverage in banking sector was 16.6% in pre IFRS and 18% in post IFRS era. Although, mean leverage is higher in postIFRS era, the study was deficient as it did not test for the difference in significant of the individual variables used in the study. It rather tested for the overall significance of all the variables and found indifference significantly between variables in pre and postIFRS era.

Other empirical evidences examined leverage effect on the financial reporting quality of firms. Olowokure, Tanko & Nyor(2016) examined how leverage affect the financial reporting quality of listed deposit money banks in Nigeria and found that financial reporting quality does not significantly depend on the leverage of banks. This is expected as banks are highly geared because of lending and borrowing activities and hence, other factors such as efficiency of fund utilisation could be responsible for reporting quality. Aside financial sector results which showed an insignificant effect on qualities of table reported, other studies seem to unanimously agree on the significant effect of leverage. Echobu, Okika and Mailafia, (2017)

examined Agriculture and Natural Resources over a period of 8 years, from 2008 to 2015. Although they made no distinction between preIFRS and postIFRS adoption, their analysis was robust. Using modified Jones model by Dechow, Sloan and Sweeney (1995) as a proxy for earnings management, they signalled that leverage positively and significantly affect quality of accounting table reported in annual reports consistent with the perspective of agency theory. Whenever, there is high level of debt in the capital structure, managers are strictly monitored to ensure that obligations to providers of fund are meant and to show that an indebted firm is responsible, it is forced to disclose more information and hence improving the reporting quality. Similar results appeared in the manufacturing sector of the economy. Hassan (2013) analysed the manufacturing sector using 32 manufacturing related firms from 2007 to 2011. Hassan also used the modified Jones model as proxy for the quality of table reported in the annual statement and after robust statistical tests the results indicated that levered firms have higher earnings quality and that the relationship is proportionate. The two sectors results considered as vital economic sectors validate the assertions of Hassan and Farouk (2014) and showed that leverage in the financial structure of firms is important for good and quality earnings. However, the proportion of leverage that will erode this benefit is not known.

Elsewhere, Karami & Akhgar (2014) examined leverage and size as major firm level determinants of the qualitative accounting table in Tehran Stock exchange. They used the systematic sampling technique to eliminate inactive firms leaving a total of 120 active firms analysed over 10 years, 2003 – 2012 making 1200 firm year observations. They also employed panel data approach and used the Hausman test to choose between the Fixed Effect model(FEM) and the Random Effect model(REM).The Fixed Effect model(FEM) results showed both size and leverage of firms significantly affect the quality of accounting numbers reported in the annual reports. However, leverage seems to impact reporting quality positively indicating increase in leverage results in better earnings quality. It should be noted that, there several reasons firms would engage in manipulative earnings activities. For example, companies falsify financial metrics to stay within mandated CSR boundaries, according to Bansal and Kumar (2021), who looked at how mandatory corporate social responsibility drives earnings management in India using panel data from the post-legislation period (from 2015 to 2019). Firms with operating revenue close to the threshold, according to the data, overstate their operational revenue. The employment of real and accrual earnings management by a corporation when it is nearing its net worth or net profit threshold will drive earnings down. Using small businesses as a case study, Krishnan, Krishnan, and Liang (2020) emphasized the need of internal control in ensuring the quality of financial reporting. They used signed and unsigned discretionary accruals as a FRQ measure in their study, which used an empirical research approach. PRESOX, SOX 302, SOX 404a, and SOX 404b are the regulatory regimes examined by the authors, as are adopters and non-adopters from 2000 to 2010. According to the findings, the majority of adopters and non-adopters profited from SOX 302 and 404a compared to the PRESOX period. However, only non-adopters reaped incremental benefits from the move from SOX 302 to SOX 404a. Section 404b of the PRESOX Act rewarded companies with major faults as well as companies with no serious flaws who had the lowest reporting quality during the PRESOX period. Fund managers' involvement may discourage enterprises from managing earnings, at least in the United

States, as shown by Farooqi, Jory, and Ngo(2020) research. It is important to know that the authors used Cremers and Petajisto's classification of mutual funds in (2009) based on active share and tracking error volatility to distinguish between active and passive mutual funds. The quality of portfolio business earnings is evaluated by the authors using accruals earnings management and real earnings management. According to the authors' findings, portfolio businesses of active fund managers do a better job of manipulating earnings. To put it another way, the quality of the material in yearly reports appears to increase with increased fund manager activity. When it comes to earnings management, fund holdings go hand in hand, and this relationship is especially strong among concentrated active fund managers.

Most of the studies reviewed used the percentage of debt to total assets as a measure of leverage while others used debt to equity ratio. It is the believe of the author(s) that debt to total assets ratio better measure the proportion of fund provided by bondholders because the total assets of firms are financed by equity and borrowing. Hence, the study adopts this as the measure of leverage.

## **Methodology**

### **3.1 Population and Sample**

The study uses all quoted firms in the Nigeria stock Exchange as its population. However, the sample selected were 87 non-financial firms which published annual reports for the 10 years covered, from 2007 to 2016. The years were carefully chosen to reflect five years(2007 - 2011), preIFRS and five years(2012 - 2016) postIFRS in order to test for IFRS-adoption effect in Nigeria. The sample permitted survival bias as firms must be listed and remained listed on the floor of the Nigerian Stock Exchange(NSE) within the research period to be included. Again, all firms which do not have the complete 10 years data or unavailable data were dropped to permit a balanced panel for the purpose of analysis. In addition, financial firms were dropped due to their differences in regulations culminating in a final sample of 87 firms over 10 years making a total of 870 firm year observation.

### **3.2 Method of Data Analysis**

Quality of accounting table reported in the annual reports is not observed directly but could be measured by observing any break down in the reporting process. A break down in the reporting process may signal lower earnings quality and vice versa. One of the best ways of doing this is by measuring the extent of earnings manipulation engaged in by managers. Although, it is not the only way, it is the best for quantitative research of this nature. Due to the nature of the research and the data sourced, the study applies the quantitative approach and used the Jones (1991), as modified by Dechow et al(1995) to calculate discretionary accruals(earnings management) both in pre and post adoption. However, the interest of the researcher is not to measure increasing or decreasing earnings management as a result, the absolute values of the discretionary accruals were used as measure of earnings management of firm. The model is stated below

$$TACC_{it} / A_{it-1} = \alpha_1 t (1/A_{it-1}) + \alpha_2 i [(\Delta REV_{it} - \Delta REC_{it}) / A_{it-1}] + \alpha_3 i [PPE_{it} / A_{it-1}] + \varepsilon_{it} \text{-----Model 1}$$

Where,

TACC = Total Accruals of firm i in year t and

Total Accruals = Earnings - Operating Cash flows  
 $A_{it}$  = Total Assets of firm  $i$  in year  $t$   
 $\Delta REV_{it}$  = change in operating revenues of firm  $i$  in year  $t$   
 $\Delta REC_{it}$  = change in net receivables of firm  $i$  in year  $t$   
 $PPE_{it}$  = gross property, plant, and equipment of firm  $i$  in year  $t$

After estimating the model 1 above, the discretionary accrual measuring the extent of earnings manipulation which is also the residual of the model was generated. The residual forms the dependent variable in the model 2 below in order to measure the effect of leverage on earnings management of firms. This was done in pre-IFRS and post-IFRS adoption years and the results analysed.

$$DA = \beta_0 + \beta_1 Levit + B_2 Perf_{it} + \varepsilon_{it} \text{-----Model 2}$$

Where

$DA_{it}$  = Discretionary accruals from model 1 of firm  $i$  in year  $t$

$Levit$  = Leverage ratio measured by long-term debt divided by total assets of firm  $i$  in year  $t$

$Perf_{it}$  = Performance of firms measured by return on assets (ROA) of firm  $i$  in year  $t$

$\varepsilon_{it}$  = Error term

The authors believe that earnings management may not be solely determined by just the presence of leverage in the capital structure of firms but rather, how performing a company could be. Managers would want to manage earnings upwards to show consistent results in times of down turn and vice versa. Thus, to capture this likely behaviour of managers, performance has been added as a control variable in this study.

Once the effect of leverage on financial reporting quality has been determined, the study tests for adoption effect on leverage of firms using the test of mean difference adopted from the study of Enakirerhi, Ibanichuka & Ofurum (2020), Ibanichuka & Asukwo (2018) and Omaliko, Uzodimma & Okpala (2017) and stated below:

$$t = \frac{\hat{x}_1 - \hat{x}_2}{\sqrt{\left(\frac{s_1^2}{n_1} + \frac{s_2^2}{n_2}\right)}}$$

Where:

$\hat{x}_1$  and  $\hat{x}_2$  sample mean of leverage in preIFRS and postIFRS era

$s_1^2$  and  $s_2^2$  variances for preIFRS and postIFRS period

$n_1$  and  $n_2$  sample size for preIFRS and postIFRS period

## Results and Discussion

### 4.1 Discretionary Accruals in Pre and Post IFRS

To generate the discretionary accruals which are the residuals, we used the multiple regression analysis represented in model 1 above. This was done in both preIFRS and postIFRS era and the discretionary accruals were generated. However, since the data are

panel in nature, there was the need to determine the most appropriate variants of the panel analysis to be used in order to generate an efficient analysis. Thus, the diagnostic tests were used to determine the suitability or otherwise of the pooled OLS estimated. The results are stated below:

Table 1. Panel Diagnostic Tests

Tests	Pre-IFRS Adoption		Post-IFRS Adoption	
	Chi Square (p-value)	Decision	Chi Square (p-value)	Decision
Joint Significance Test	47.3403 (0.000***)	Reject OLS for panel	20.431 (0.000***)	Reject OLS for panel
Breusch-Pagan test	710.155 (0.000***)	Reject OLS for panel	487.082 (0.000***)	Reject OLS for panel
Hausman test	0.719 (0.867)	Reject Fixed Effect for Random Effect Model	24.514 (0.000***)	Reject Random Effect Model for Fixed Effect Model

Source: extracted from Results of various Regression Analysis

\*\*\* Significant at 1% level

As seen above, both in pre and postIFRS, the joint significant and breusch pagan tests rejected the pooled OLS in favour of the panel estimates while the hausman test rejected fixed effect(FEM) for random effect model(REM) in preIFRS era and random effect for fixed effect in post IFRS era. Consequently, the discretionary accruals were generated and described along with leverage and the control variables(return on assets) in table 2 below. To be precise, the absolute value of the discretionary accrual was used as the dependent variable. This is because the researchers are more interested in measuring earnings management before and after the adoption of the global standards and comparing the table than the type of earnings manipulation which happened, whether income decreasing or income increasing earnings management behaviours of managers.

#### 4.2 Descriptive Statistics of the Dependent and Independent Variable

Table 2 Descriptive Statistics of Selected Firm Level Data (Pre & Post-IFRS)

Statistic	Lev	ROA	Dis.Accrual
<i>Panel A: Pre-IFRS Period</i>			
Mean	0.1288	0.095	16.1557
Std. Dev.	0.1522	0.13	62.129
Minimum	0	-0.441	0.6536
Maximum	0.4002	0.809	622.362
<b>Obs</b>	<b>435</b>	<b>435</b>	<b>435</b>
<i>Panel B: Post-IFRS period</i>			
Mean	0.1838	0.038	27.1165

Std. Dev.	0.1875	0.155	71.7342
Minimum	0	-1.194	0.0534
Maximum	0.5349	0.793	742.563
<b>Obs</b>	<b>435</b>	<b>435</b>	<b>435</b>

Source: Author's Computation

Discretionary accrual shows a mean value of 16.1557 in preIFRS and 27.1165 in postIFRS adoption periods amongst Nigerian non-financial sector firms. This means that there had been increased earnings management activities and consequently, lower reporting quality of the content of financial reports after Nigeria adopted the global standards. Evidently, firms reported more earnings management activities after the adoption of IFRS, a result that defies the theoretical beliefs that adoption would reduce the ability of management of firms to engage in earnings manipulation. As earlier reported, Sundvik (2019) and Belloa, Abubakar & Adeyemi (2016) argued that IFRS is a principled based standard compared to the local GAAP which was ruled based. A principled based standard would allow more discretion of managers. Managers' discretion means that treatment of items might be guided by the perception of those who handled the accounting procedure and this would be highly subjective. Thus, there is likelihood for more manipulation as seen in the empirical evidences. Coincidentally, performance measured by return on assets had decreased after adoption. Earlier, it was noted that the authors believe that earnings management may not be solely determined by the presence of leverage in the capital structure of firms but rather, how performing a company would be. Managers would want to manage earnings upwards to show consistent results in times of down turn and vice versa in order to send a message to stakeholders that all is well with the firm. As shown by the empirical results, earnings management increased after adoption and at the same time, performance decreased. Thus, the increased earnings management activities might be due to decrease performance and the desire of firms to show consistent result once a conservative earnings pattern has been established. The results of analysis also shows that the pre adoption mean debt financing of firms is 13% of total assets with a standard deviation of 0.1522, a minimum of 0% and a maximum of 40% of total assets (*see table 2*). The post adoption witnessed an increase in the proportion of total assets financed by debt with an average of 18%. Although, postIFRS adoption witnessed increased leverage, the earnings management activities were also increased as portrayed by the higher discretionary accruals. Thus, increase in the rate of borrowing postIFRS might not be a reflection of greater disclosure, reduction in transaction cost, decreased asymmetry information and reduced agency problem but might be attributed to other factors such as increased needs for fund, expansion and probably increased borrowing due to economic contraction of 2016 in Nigeria. The decrease in performance would mean that firms need more money or fund to finance their activities and since raising equity might not readily be easy, debt financing might be the easiest option available.

#### 4.3 Leverage and Discretionary Accruals

After describing the data, the paper examines leverage and association with discretionary accruals (earnings management) both in preIFRS and postIFRS periods. As pointed out

earlier, the data is pooled and hence, to test the validity of classical assumption, the author used diagnostic tests to determine the adequacy or otherwise of the pooled OLS model which is usually the starting point.

Table 3 Panel Diagnostic Tests

Tests	Pre-IFRS Adoption		Post-IFRS Adoption	
	Chi Square (p-value)	Decision	Chi Square (p-value)	Decision
Joint Significance Test	90.314 (0.000***)	Reject OLS for panel	4.472 (0.000***)	Reject OLS for panel
Breusch-Pagan test	771.367 (0.000***)	Reject OLS for panel	139.75 (0.000***)	Reject OLS for panel
Hausman test	1.451 (0.483)	Reject Fixed Effect for Random Effect Model	3.073 (0.215***)	Reject Fixed Effect for Random Effect Model
White Test for Heteroskedasticity	7.479 (0.1873)	No heteroskedasticity error present	7.478 (0.1874)	No heteroskedasticity error present

Source: Author's Extract

The OLS regression analysis was run and panel diagnostic tests applied to test the validity of the OLS and the result is in table 3 above. In both preIFRS and postIFRS periods, the pooled OLS results were rejected, with the hausman test favouring the random effect estimates in table 4 below. The white tests also indicated the absence of heteroskedasticity error.

Table 4 Panel Regression Results for Explanatory and Explained Variables

Independent Variables	Dependent Variable (Discretionary Accruals)	
	Pre-IFRS (p-value)	Post IFRS (p-value)
	Random Effect Model	Random Effect Model
Constant	18.2845 (0.0066***)	17.3448 (0.0000***)
Leverage	-2.6199 (0.7528)	4.1054 (0.6489)
Performance (ROA)	-11.4754 (0.1575)	-28.6135 (0.0045***)
S.D. dependent var	62.8619	28.3344
S.E. of regression	62.7927	27.9621
Akaike criterion	4840.132	4136.313
Hannan-Quinn	4844.957	4141.139
Durbin-Watson	2.045812	1.615035

Source: Extracted from Regression Results

The effect of leverage on managers' ability to manipulate earnings measured by discretionary accruals seems negative in preIFRS and positive in postIFRS era *with the regression coefficient being -2.6199 4.1054 respectively*. Increasing leverage seems to have a negative effect on managers' ability to manipulate earnings and consequently a positive effect on quality of accounting table presented in the annual reports of firms in support of the agency theory in the period prior to the adoption of the global standards. The pre-adoption results

underscore the view of Alsaeed(2006) Shehu (2012) who argued that higher gearing ratio of firms is associated with higher agency costs and for the needs of creditors to be fully satisfied, there is pressure on management of the firm to disclose more information and reduce asymmetric information. However, the association between leverage and discretionary accruals changed after the adoption of the global standards as the coefficient of regression becomes positive. In the whole, under the rule based standards where managers' discretions are limited, higher debt forced management to disclose more information and reduce earnings manipulation. However, after adoption where there have been increased in the discretion of managers, higher leverage resulted in increased earnings management practices. This view was echoed by Hashem et al(2012), Nelson & George (2013) that higher leverage would force firms to engage in earnings management practice in order to present results that will enable them to attract more external financing at a cheaper rate from shareholders (lenders of fund) in support of the capital need theory.

Importantly, the effect of leverage on ability of managers to manipulate table seems not to be significant as evidenced *by the higher p-values of 0.7528 and 0.6489* in both preIFRS and postIFRS era respectively. This justified the addition of the control variable, performance measured by ROA and emphasises our earlier assertion that leverage might not be the only or significant factor responsible for earnings management behaviour of firms but the performance. As seen in the report, performance seems to be more influential variables on earnings management with higher coefficients and lower p-values in both preIFRS and postIFRS era. Decrease performance was associated with higher earnings management activities and this is more pronounced and significant after the adoption of IFRS in Nigeria where performance was not only negatively associated with IFRS but the effect was significant at 1% level. Incidentally, earnings management was higher in postIFRS periods while performance was lower as evidenced by the various means value in table 4 above. The results of this paper contradicts the results of the studies of Hashem et al(2012), Nelson & George (2013) who found higher leverage to result in better reporting quality. The negative and significant effect of performance on earnings management exemplify the view being echoed that once management has established a conservative earnings pattern, it would engage in increasing or aggressive upward review of earnings to present consistent results to providers of funds. This, they do to avert bankruptcy risk and attract more capital at a cheaper rate.

#### 4.4 Effect of IFRS Adoption on Leverage of firms in Nigeria.

The study takes a step further to established what effect the supposed transparent standards would have on the leverage of firms by comparing the mean of borrowing in preIFRS and post periods.

*Table 5 Two Sample t-test for the Means of Leverage of Firms (Pre & Post-IFRS)*

Variable	Obs.	Mean	Std. Dev.	[95% Conf.	Interval]
Lev PRE	435	0.1288	0.15220		
Lev POST	435	0.1838	0.18754		
Difference		-0.05498	0.19367	-0.07323	-0.03673
Difference = mean (Lev PRE) - mean (Lev POST)		t-Statistics (Sign Two Tailed)= -5.921 (0.0000***)			

The paired sample tests show a mean difference of -0.05498, a standard deviation of 0.19367, a t-statistics of -5.921 with a p-value of 0.000, indicating that there is a significant difference between the mean of leverage preIFRS and postIFRS adoption periods. The results of this study, although agrees with Yahaya, Fagbemi & Oyeniya (2015) and Yahaya et al (2015) that leverage increased in post IFRS. It however finds that there is also a statistical difference between the pre and postIFRS periods as against Yahaya et al (2015) and Yahaya et al (2015) who found no statistical difference. These two sets of authors examined the banking industry. Also, in addition to higher gearing results in postIFRS, the study results exposed that IFRS adoption might not be solely responsible for increased leverage as supposed by the proponents of IFRS. This is evidently so as the results showed lower financial reporting quality in the aftermath of the adoption of the global standards in Nigeria.

#### 4.5 Summary of Findings

The following are the summary of findings of our study

- i. Surprisingly, the study finds that managers' manipulative abilities were increased postIFRS in Nigeria, indicating that quality of reports were lowered after adoption and thus, punctured the thinking that IFRS adoption would result into higher reporting quality due to increased associated disclosure of information.
- ii. Increased gearing resulted in increased earnings manipulation after IFRS adoption. Hence, the thinking that higher leverage would force firms to engage in earnings management practice in order to present results that will enable them to attract more external financing at a cheaper rate from shareholders (lenders of fund) was strengthened post IFRS in Nigeria.
- iii. The results suggest that the lower reporting quality or increased manipulation observed after the adoption of the global standards in Nigeria might be as a result of decreasing performance of firms. Once, a conservative earning pattern has been established, managers would want to manage earnings upwards to show consistent results in times of down turn and vice versa
- iv. Taking on more debt in firms' structure of capital could be beneficial and lead to improved quality of table reported in the annual reports in line with agency theory in pre IFRS periods but this benefit has been eroded with higher gearing resulting in lower quality reporting in post IFRS. Thus, IFRS adoption was highly significant to how debt affect earnings quality.
- v. Performance seems to be the main determinants of quality of accounting table in this study as increasing performance seems to lead to lower earnings management practice but when performance falls, managers' smoothing of earnings increased.

- vi. Adoption of IFRS in Nigeria led to increased borrowing by firms, although this does not result in much gain in quality of accounting table reported in the books.

### **Conclusion and Recommendation**

The study examined leverage and quality of reports presented in the annual reports of firms in Nigeria. The study further examined IFRS effect and how leverage behaved preIFRS and postIFRS in Nigeria. Having analysed the results, the paper concludes that although taking on leverage in the capital structure of firms could be beneficial to earnings quality in line with agency theory in preIFRS, this benefits had been eroded after Nigeria's adoption of the global standards. In post IFRS, leverage has a positive association, indicating that more leverage resulted in increased manipulation. Also, performance of firms proved to be an important factor affecting earnings quality as the results showed that lower performance was likely associated with increased earnings management practice post IFRS. *The practical implication of the paper is that managers of firms that are highly geared usually increase earnings manipulation to present favourable outcome to shareholders. However, since leverage is not the major factor driving accruals, managers should practically increase their performance in order not to manipulate earnings to attract loans from lenders since increase performance will offset the perceived bankruptcy cost associated with increased gearing. This way, managers will endeavour to increase quality of earnings through good performance while pursuing higher borrowing.* Given that earnings manipulation measured by discretionary accruals increased after the adoption of IFRS in Nigeria compared with when the nation was using the statement of accounting standards(SAS), the study recommends the domestication of IFRS by incorporating the seemingly good aspect of the local Nigeria standard prior to adoption. A principled based standard would allow more discretion of managers as opposed to rule based local GAAP. Managers' discretion means that treatment of items might be guided by perception and subjectivity, hence increased earnings smoothing observed. Since this study used the absolute value of discretionary accruals, a further study would be needed to determine whether or not firms in Nigeria engaged in income decreasing or income increasing earnings management practices in both pre and post IFRS years.

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