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INCOME SMOOTHING AND FINANCIAL PERFORMANCE OF FIRMS LISTED ON THE NIGERIAN STOCK EXCHANGE: POST-IFRSS ADOPTION IN PERSPECTIVE

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Abstract: *The study examined the relationship between income smoothing and financial performance of firms listed on the Nigerian Stock Exchange after the adoption of IFRSs. Data for the study were quantitatively retrieved from the annual reports and accounts of the studied companies for the year 2013-2017. Pearson correlation and regression was used to analysed the data and it was revealed by fixed effect regression model that income smoothing had a positive and significant relationship with financial performance measured by ROA in Nigerian listed companies. For the control variable, corporate governance was proxed as board independence had a positive and significant relationship with firms' financial performance in Nigeria. The study therefore recommended that financial statements' users should be aware that managers can engage in income smoothing to manipulate the financial performance of the company and they should not base their decisions on the financial performance of the company except stronger corporate governance mechanisms are maintained. In addition, the management should maintain optimum number of percentage of outside directors (non-executive directors) on the total board members in order to continuously maximising the best return on their investments.*

Keywords: *Agency Theory; Financial Performance; Income Smoothing.*

1. Introduction

In recent times, smoothing income on the financial statements has attracted a tremendous global research attention. This is based on the fact that the information content of the financial statements is so paramount to the users, such as investors, creditors and other stakeholders when making business decisions. The financial statements serve as a medium used by managers to communicate the results of the business operation for the period to the owners of resources, thus the users heavily rely on the information content of the financial statements for many reasons. For instance, the investors use it to evaluate the performance of the company and reward managers, creditors can use it to evaluate the performance of the firm in order to predict the company's ability to meet a debt covenants as well as the going concern of the company, the financial analysts use it to predict share prices in the stock market, the employees use it to find out whether they are been short-paid on their wages and salaries and government used it to assess the firm's profit for the period in order to ascertain whether the company actually paid the required amount of tax. However, these users often focused only on income part of the information regardless of the procedure followed by the company to prepare the financial statements.

Based on this, managers take advantage on the loopholes that existed in the accounting standards and

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principles such as Generally Accepted Accounting Principles (GAAPs) to smooth(or manipulate) the income to achieve their predetermine objective. Income smoothing is therefore defined as a deliberate dampening of fluctuations about some level of earnings considered to be normal for the firm (Barnea, Ronen, & Sadan, 1976). Income smoothing according to Beidleman (1993), is defined as an attempt on the part of the firm's management to reduce abnormal variations in earnings to the extent allowed under sound accounting and management principles. On the bases of these definitions, the study is motivated to examine the possibility of listed firms in Nigerian Stock Exchange to engage in income smoothing after the adoption of international financial reporting standards (IFRSs).

On the premise of the above background, this study attempts to expand on literature because most of the previous studies done on the relationship between income smoothing and financial performance to the best knowledge of the researchers were based on GAAPs. Thus, with the introduction of International Financial Reporting Standards (IFRSs) by firms listed on the Nigerian Stock Exchange, there is the need to revisit some of these studied areas in accounting particularly the how the financial performance has been related to income smoothing of listed firms as the application of standards could impact on reporting behavior of the companies which were not existing under GAAPs. In addition, the study by Umobong and Ogbonna (2017) pointed out that previous studies in this subject were mainly carried out in the Industrialised and Asian nations with little or no empirical research in third world economies such as Nigeria and this may affects generalisation due to cultural, economic and technological disparity between countries researches. The author however investigated the subject in Nigeria, but focused solely on manufacturing companies, thus, it is probable that the nature of the industry-type and operations may affects the outcome of their result and therefore may impact on generalisation of result to other industries which do not share the same characteristics. To this therefore, this study attempts to fill the gap.

It is against this backdrop this study seeks to investigate the relationship between income smoothing and financial performance of firms listed on the Nigerian Stock Exchange after the adoption of IFRSs. The paper proceeds as follows: following the introduction, section two is literature review. Section three focuses on the methodology. Section four presents data analysis and results. Lastly, section five is conclusion and recommendations.

2. Literature Review

2.1 Conceptual Review

There are several definitions of income smoothing by various researchers both in the developed and undeveloped economies. Ronen and Sadan (1981) define income smoothing as a deliberate attempt by management to signal information to financial users about the financial position of the firm. Similarly, Barnea et al. (1976) defines income smoothing as a deliberate dampening of changes about some level of incomes considered to be normal for the firm. This implied that it is the behaviour of managers to curb changes in income and cause income to approach the level where management's utility is maximised (Copeland, 1968). However, Beidleman (1993) defined income smoothing as an attempt on the part of the firm's management to reduce abnormal variations in incomes to the extent allowed under sound accounting and management principles. It is a technique used by a company manager to reduce the change in the reported amount of income by means of artificial or real earnings management so that it can reach a desired income level (Vakilifard & Allamehaeri, 2001).

Dechow and Skinner (2000) characterised income smoothing as earnings management. That is, a situation whereby managers use accrual decisions to manipulate income resulting to "too much" smoothing. The motives behind managers engage in income smoothing are on different ways in the modern researchers. For instance, kirscheneiter and Melumad (2002) argued that

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managers use income smoothing to bring to the fore private information and future earnings. This implied that the level of reported earnings permit investors to forecast the level of permanent future cash flows. Continuous changes of earning increases uncertainty and reduces ability of investors to forecast permanent cash flows.

The motives why managers engage in income smoothing have been widely dealt with by many researchers. For instance, Healy (1985) points out that earnings management practice is significantly related to compensation or bonus and other rewards given to firm's senior executives and managers. Fuderberg and Tirrole (1995) added that managers may engage in income smoothing in order to secure job. This is therefore implied that equilibrium point will be obtained because managers seek to take additional risk tomaximise owners' value and this risk otherwise attract a high premium of compensation (Demski, 1998). Generally, Joo (1991) listed out that, managers' motivations for the phenomenon of income smoothing included; increasing shareholders' welfare, facilitating the capability of predicting income and enhancing the manager's welfare.

2.2 Theoretical Review

2.2.1 Agency Theory

This is one of the most applied theories in the accounting research (Chen & Deng, 2010). According to Sydserff and Weetman (1999), agency theory is the main theory used in the area of manipulation of accounts on the assumption that managers are not neutral in presenting the financial statements. Agency theory was propounded by Alchian and Demsetz in 1972 and further developed by Jensen and Meckling in 1976. The theory is based on the relationship between the principal (owners) and agents (managers). The separation of ownership from management in the modern organisation provides the contexts for the function of the agency theory. Amat and Gowthorpe (2005) noted that conflicts of interest inherent in agency relationships often were limited because owners (shareholders) overlooked and admit intentional manipulation of financial reports, which then become "Unwitting accessories to manipulation".

In addition, Davidson, Yu, and Ke (2004) argued that when management provided inaccurate financial reporting information, it introduced earnings management. As a result, managers could not be fully trusted. Therefore, strict monitoring of managers (agent) by the owners (principal) through their representatives, such as a firm's board which served as a fundamental mechanism to protecting shareholder's interest from being compromised when managers' maximised their self-interest at the expense of the organisation's profitability, was necessary.

Generally, agency theory assumes a model of a manager who is individualistic, self-serving and opportunistic in nature. Njuguna and Morong (2013) observed that non-conforming information was one source of the problems of agency conflicts such that the organisation's good performance depended on the importance of knowledge possessed by a decision maker and such information would never be fully revealed on the part of the managers due to agency problems. Hence, it held that managers would not act to maximise the returns to shareholders unless appropriate governance structures were implemented in the large corporation to safeguard the interests of shareholders (Jensen & Meckling, 1976).

2.3 Empirical Review

Hassan and Farouk (2014) investigated firm attributes and earnings quality of seven (7) listed oil and gas firms in Nigeria for the period 2007 to 2011 and used Dechow et al. (1995) model to proxy earnings quality. In addition, the study used multiple panel regression approach and collected data from secondary source through the annual reports and accounts. The result showed that profitability had a significant but negative influence on earnings quality as a result of income smoothing.

Umobong and Ibanichuka (2016) examined accounting manipulations using timing of assets (TATs)

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(independent variable) and firm's financial performance (dependent variable) using Return on assets, Return on Equity and Earnings per share. The study employed secondary data from Nigeria stock exchange and ascertained whether firms use TATs to manipulate financial results. TATs were subjected to Hausmann test and also regressed against performance variable. The findings indicated that TATs have significant relationships with ROA, ROE and EPS implying it could be used for accounting manipulations. The study confirmed a positive relationship of TATs with ROA and EPS indicating that an increase in TATs increases ROA and EPS. Conversely, the study finds that TATs also has a negative relationship with ROE confirming that a decrease in TATs increases ROE and vice versa.

The study by Umobong and Ogbonna (2017) evaluated the effect of income smoothing and earnings quality on performance of pharmaceutical firms Quoted on the Nigerian Stock Exchange using secondary data between 2006 and 2014. The study categorised the firms into smoother and non-smoother firms and assessed as to whether performance variables Price earnings ratio, Return on total assets and Return on equity are influenced by income smoothing and earnings quality using ANOVA and Independent T-test. The Findings indicated weak, insignificant and non-linear relationship between earnings quality and P/E ratio implying that earnings quality does not influence price of shares. In addition, the study found that earnings quality have a linear relationship and significantly correlate with ROE and ROA with negative coefficient. While, the inverse relationship implied that increase in earnings quality decreases ROE and ROA. This confirms that improved quality of earnings mitigates earnings management and reduces bloated earning thereby improving accounting quality. The study also confirmed no significant difference of ROA and P/E of smoother and non-smoother firms implying that smoothing does not alter the market price of shares and do not affect return on assets.

Following this controversial result in literatures, this study formulates the following hypothesis in null form for testing:

H_1: There is no significant relationship between income smoothing and financial performance of firms listed on the Nigerian Stock Exchange after the adoption of IFRSs.

3. Methodology

The study adopted a cross-sectional and time series research design which involved a panel regression. The sample size is sixty two (62) randomly selected from the total population of one-hundred and eighty-six (186) listed companies as at 31st December, 2017 on the Nigerian Stock Exchange (NSE, 2013- 2017 Fact Sheet).

The study adopted panel data regression analysis to analyse the relationship between income smoothing and firm performance in Nigerian listed companies. In order to make our finding robust both fixed effect and random effect were employed in estimating the data set and a Hausman-test conducted to determine the most appropriate for the study.

3.1 Model Specification and Measurement of Variables

To test the hypothesis the study specified the following models; Performance= *f(Income Smoothing)*

Fixed Effect Regression Specification

$$ROA_{it} = \beta_0 + \beta_1 IS + \beta_2 BI + \sum_i^1 = 1 \beta idum + \varepsilon it \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots 3(1)$$

Random Effect Regression Specification

$$ROA_{it} = \beta_0 + \beta_1 IS + \beta_2 BI + u_i + \varepsilon it \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots 3(2)$$

From the equations;

ROA= Return on Assets

IS= Income Smoothing

BI= Board independence representing corporate governance

β = variables that vary across companies but do not vary over time

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μ = error terms over the cross section

Thus, in applying the regression analysis to examine the regression equations above, the following hypothesis was tested:

H0: βiz = 0

H1: βiz ≠ 0

Rejection of H0 and acceptance of H1 at the 1% and 5% level of significance confirms the existence of a moderating (interaction) effect.

3.2 Measurement of variables

3.2 .1 Dependent Variables

ROA = It is measured, dividing net profit after tax plus interest by total assets.

3.2.2 Independent variable

Income Smoothing (IS) = Change in profit margin for firm year "*t*" divided by Change in assets turnover for firm year "*t*"

3.2.3 Control Variable

Board Independence (BI) = It represent the number of non-executive directors on the board and it is measured by the percentage of outside directors (non-executive directors) on the total board members.

4. **Data Analysis and Results**

4.1 Descriptive Statistics.

The analysis of data begins with descriptive statistics which shows the level of average and risk variation of the listed sampled companies for the period of 2013 to 2017. The result is represented in the Table 4.1 below:

Table 4.1 Descriptive Statistics.

Variables	Mean	Median	Max.	Min.	Std. Dev.	Skewness	Kurtosis	Jarque-Bera	Prob	Sum	Sum Sq. Dev.
ROA	0.3	0.2	32.2	-11	0.1	0.1	13.1	1100.1	0.00	2110	3211
BI	0.5	0.1	28.1	0	0.1	0.1	11.0	970.7	0.00	3211	3543
IS	0.6	0.3	0.6	0.1	2.3	0.3	5.3	43.2	0.00	2102	3000

Source: Researchers' Computation (2018).

Table 4.1 showed the mean for each of the variables, their standard deviation and Jarque-Bera (JB) statistics for normality test. Firm performance revealed that on the average over the five-year period as measured by; return on assets was 30% and a standard deviation value of 10%. It meant that based on the absolute value, performance were high on the average value of listed firm in Nigeria. Board independence is on the average 50% and standard deviation of 10% which also indicated a high average value for the period of the sixty two (62) sampled listed companies studied, the mean income smoothing (IS) 60%suggests that listed companies in Nigeria have relatively high income smoothing.

4.2 Pearson correlation matrix

To examine the relationship between incomes smoothing and firm performance, Pearson correlation matrix was employed and the result was presented in Table 4.2 below;

Table 4.2: Correlation Matrix

	ROA	BI	IS
ROA	1		
BI	0.42	1	
IS	0.63	0.60	1

Source: Researchers'Compilation (2018).

As showed in table 4.2 above, it was indicated that income smoothing had strong and positive correlation with ROA at 0.63. This implied that the sampled companies' performance ware highly related with income smoothing in Nigeria. However, it was found

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that income smoothing had a strong and positive correlation with board independence at 0.60 and it indicated that the level of board independence in the board is highly related with firm performance in Nigerian Stock Exchange for the period under study.

4.3 Regression Results

Table 4.4 Balanced Panel Regression Results

VARIABLES	EXPECTED SIGN	FIXED EFFECT MODEL (ROA)	RANDOM EFFECT MODEL (ROA)
C		3.00 (2.01) [0.77]	3.34 (0.25) [0.62]
IS	+	0.05 (0.03) [0.00]**	0.10 (0.07) [0.00]**
BI		1.5 (1.1) [0.00]**	0.22 (0.10) [0.03]*
R-Squared		0.7924	0.8712
Adj-R-Squared		0.2390	0.1261
F-Statistic		1.18 (0.00)	2.10 (0.05)
Durbin Watson		1.9999	1.4321
Hausman Test		18.00(0.00)	-
Observation		310	310

Note: (1) Parentheses ( ) are t-statistic while bracket [ ] are p-values

(2) * *1% level of significance and * 5% level of significance.

In selecting from the two balanced panel data models, the Hausman Test was conducted and the result is presented in Table 4.5 below:

Table 4.5 Hausman Test (Relationship between IS and ROA)

Correlated fixed Effects – Hausman Test
Equation: Untitled
Test cross-section fixed effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section fixed effects	18.00	2	0.0000

Source: Researchers'Compilation (2018).

The result from Table 4.5 showed that we should accept fixed effect model and reject random effect model because of the significance of the Hausman Test (0.0000). The coefficient of multiple determination of the fixed effect model suggested a value of R-squared of 0.7924 and Adjusted R-squared of 0.2390. This showed that all the independent variables jointly explained about 79% of the systematic variations in firm performance across the listed firms sampled in this study over the five-year period (2013-2017). The F-statistics value of 1.18 and its p-value (0.00) showed that a significant linear relationship existed between the dependent and independent variables. Also, the Durbin-Watson statistic of 1.99 is very close to 2.00 and indicative of the absence of the problem of multicollinearity in the regression variables.

Therefore, it should be noted that fixed effect panel regression models indicated that income smoothing (IS) had a significant and positive relationship with firm performance measured by return on assets (ROA=0.05). The positive coefficient value means that an increase in income smoothing by companies, would lead to increase profitability performance by the sampled companies and statistically significant at 1% level of significance. In addition, the control variable, board independence (BI) had a significant and positive relationship with firm performance measured by return on assets (ROA=0.22). The positive coefficient value means that an increase in the number of outside executive members in the board by companies, would lead to increase profitability performance by the

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sampled companies and statistically significant at 1% level of significance.

4.4 Test of Hypothesis

Hypothesis 1 Restated. ***There is no significant relationship between income smoothing and financial performance of firms listed on the Nigerian Stock Exchange.***

The relationship between income smoothing and financial performance as measured by return on assets (ROA) was positively correlated at a t-value of 0.63 with a probability value 0.00< P = 0.01 at the 1% level of significance. The positive coefficient value (0.05) means that an increase in income smoothing by companies, would lead to increase in operating performance by the sampled companies and statistically significant. Hence, the null hypothesis of no significant relationship between income smoothing and financial performance of firms listed on the Nigerian Stock Exchange could not be accepted. The result was not at variance with the apriori significant positive relationship.

4.5 Discussion of Findings

The relationship between incomes smoothing and firm performance as measured by accounting base (ROA) of the sampled companies was positive and significant. The result of the positive and significant relationship was not at variance with the position of Hassan and Farouk (2014) and Umobong and Ibanichuka (2016) who found that income smoothing by firms has a significant relationship with firm performance in Nigerian listed firms. However, the result contradicted with the position of Umobong and Ogbonna (2017) who found that income smoothing by firms has no significant relationship with firm performance in Nigerian listed firms. Finally, the result is not at variance with the agency theory that managers either manipulated the financial statements to reflect a better performance in order to gain better compensation or bonus package or secure their job.

5. Conclusion and Recommendations

5.1 Conclusion

In general, the study investigated the relationship between income smoothing and firm performance in Nigerian listed companies. The final conclusion is that income smoothing has a positive and significant relationship with firm financial performance in Nigeria. For the control variable, the study also concludes that the level of board independence maintained by the Nigerian listed companies is significantly related with financial performance.

5.2 Recommendations

Following the findings of this study, the study suggests that financial statements' users should be aware that managers can engage in income smoothing to manipulate the financial performance of the company. Therefore, their decisions should not be based on the financial performance of the company except stronger corporate governance mechanisms are maintained. In addition, the management should maintain optimum number of percentage of outside directors (non-executive directors) on the total board members in order to continuously maximising the best return on their investments.

The study therefore suggests to future researches that the market based performance indicator should be examined on how it relate with income smoothing in Nigeria. Finally, observation period should take longer period, and wider time-frame to make sure that the data collected are useful.

5.3 Contribution to Knowledge

The findings of this study contributed to the existing body of knowledge by providing empirical evidence under the new regime of IFRSs in Nigerian listed companies on the relationship between income smoothing and financial performance.

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