

## **IFRS Adoption and Accounting Quality of Quoted Manufacturing Firms in Nigeria: A Cross Sectional Study of Brewery and Cement Manufacturing Firms**

**Asian A Umobong, Dike Akani**

Department of Accounting, Faculty of Management Sciences, University of Port-Harcourt, Nigeria.

---

**ABSTRACT:** *This paper investigates the differences in the quality of accounting information Pre and post IFRS adoption by manufacturing firms in Nigeria over a five year period. Multiple regression analysis was performed on accounting quality variables and t-test was carried out for equality of mean to compare pre and post IFRS. Results indicate a decline in accounting quality using earnings management, value relevance, and timely loss recognition as independent variables. Earnings and book value of equity are less value relevant and timely loss recognition is less in post-IFRS compared to pre-IFRS period*

**KEYWORDS:** IFRS, Accounting quality, Earnings management, Value Relevance, Timely loss recognition,

---

### **INTRODUCTION**

Financial crises and the collapse of a number of blue chip companies in western countries has energized accounting regulators to scrutinize reporting practices and accounting standards as never before thus generating pressures that motivated changes. These crises drew world attention to the quality of financial reports. The scrutiny necessitated review and globalization of accounting standards and adoption of IFRS. This adoption of IFRS have in recent times gained momentum across the world starting first in the western world and subsequently in developing countries. Moreover, the increasing globalization of world trade has made companies that were hitherto relying on their local capital markets for funds to now seriously increase search for debt and equity capital inside and outside their shores. Proponents of IFRS have advocated several merits of a single set of global accounting standards. One of the main advantages of a single set of global accounting standards as advocated by its supporters is that it enables international investors to compare different financial statements across several companies and across countries. The argument is that it should increase companies' access to global capital thereby reducing cost. These arguments resulted in a quest for global standards by regulators across the world including professional accountancy bodies as well as preparers of financial statements. For developing countries, the emergence of uniform standards enhanced comparability of financial statements prepared internationally by companies in developed economy with that prepared locally. This enhances sound cross border investment decision and improves the ability to attract investment capital across International boundaries. Despite the myriads of benefits of IFRS, it was the announcement made by European Commission in June 2000 that it was going to require all listed companies in the European Union (EU) to use International Accounting Standards (IAS) that brought about the real possibility of having global standards *ibid*. The proposed requirement changed financial reporting globally because regulators in many other countries followed Europe's lead *ibid*. IASB reports that almost 120 countries require or permit the use of International Financial Reporting Standards (IFRS) and this kind of report inspires countries hoping to attract foreign capital investment. In addition, there was an implicit political and economic pressure on countries to converge their accounting standards with more acceptable international accounting standards obviously this came about as a result of the 2007-2010 financial crisis (Ernst & Young,

2014). As evidenced by several available records IFRS adoption is currently enjoying acceptance in places where it was hitherto alien. Despite this fact there is surprisingly little research as to whether IFRS have improved accounting quality of firms that have adopted it in emerging markets especially the West African countries. Studies on Germany (Hung and Subramanyam, 2004 and Bartov, Goldberg, and Kim, 2004) and China (Eccher and Healy, 2003) provide mixed evidence on whether international accounting standards have improved reporting. Again, most of the studies on the impact of IFRS on accounting quality that were recently conducted were all carried out in European countries as well as (Callao, Jarne & Laínez, 2007; Ernstberger & Vogler, 2008; Gjerde, Knivsfå & Sættem, 2008; Jermakowicz, 2004; Paananen & Lin, 2009; Van der Meulen, Gaeremynck & Willekens, 2007; Van Tendeloo & Vanstraelen, 2005) in other developed countries like Australia (Goodwin, Ahmed & Heaney, 2008; Jeanjean & Stolowy, 2008, as cited in Alzoubi and Selamat, n.d.). This highlights a major gap in the literature “taking account of the differences that exist between developed and developing countries” (Alzoubi and Selamat, n.d.: 1). Hofstede and Hofstede (2010) as cited in Alzoubi and Selamat (n.d.) suggest that developing economies and their capital markets are at variance with advanced countries’ to a large extent in terms of the institutional, organizational and market aspects of the economy and society. Furthermore, because of the differences that exist in national standards, the accounting standards of less developed countries vary from those of developed market this again makes it very difficult for potential foreign investors to evaluate the true performance of firms in developing countries and also makes rational investment decision difficult for foreigners (Rashid & Islam, 2008 as cited in Alzoubi and Selamat, n.d.). According to Alzoubi and Selamat, (n.d.) the quality of financial statements in these so-called developing countries could be improved through a better accounting standard. Again Alzoubi and Selamat, (n.d.) postulated that the impact of the adoption of IFRS in developing countries is perhaps more widespread than those found in the western world. The recent adoption of this new set of accounting standards in West African region provides a good ground to study the quality of accounting figures immediately after the adoption of IFRS in a developing country. Alzoubi and Selamat, n.d., opined that the introduction of IFRS would give an advantage to a country due to the brilliant reputation, high credibility and good quality of the standard. According to Ball (2006) as cited in Alzoubi et al. (n.d.). f studies have examined the impact of IFRS adoption on accounting quality in developed countries this notwithstanding very little or no research has investigated the differences in accounting quality after the adoption of IFRS in less developed countries such as Nigeria. Thus, the research will focus on the differences in accounting quality before and after the IFRS adoption of listed manufacturing firms in Nigeria under the following aspect earnings management, value relevance and timely recognition of losses because existing research works and other literature Does not provide enough evidence to draw conclusions. The aim and objectives of the study is to ascertain the differences in accounting quality before and after the IFRS adoption of IFRS by quoted manufacturing firms in Nigeria. Specifically the following are the objectives of the research:

1. Examine the differences in earnings management before and after the adoption of IFRS
2. Examine the differences in value relevance before and after the adoption of IFRS.
3. Examine the differences in timely loss recognition before and after the adoption of IFRS

## LITERATURE/THEORETICAL BACKGROUND

### Accounting quality

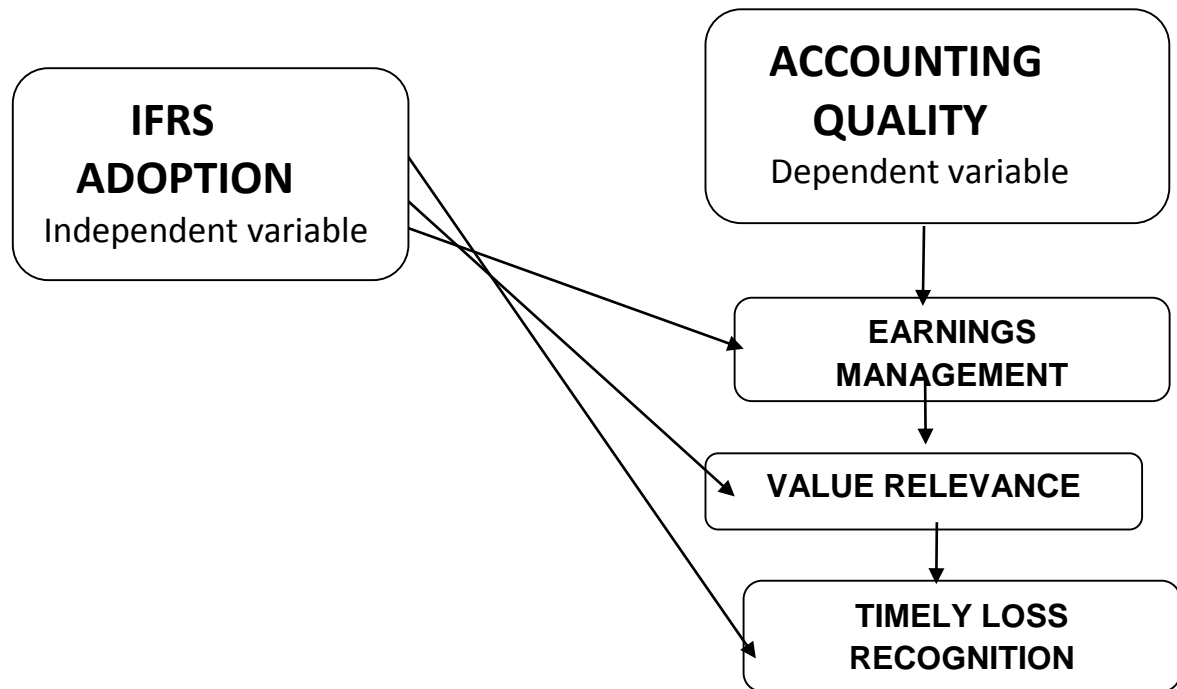
Despite the fact that accounting quality is a concept to which many research papers refer, there is no uniform definition of what accounting quality exactly comprises. Barth et al. (2008) define accounting quality as the ability of accounting measures to reflect the economic position and performance of a firm. According to Verleun, Georgakopoulos, Sotiropoulos, & Vasileiou (2011) this definition draws our attention mainly to the relevance of the financial information provided. Penman and Zhang (2002); Watts (2003) as cited in Verleun et al. emphasized that other definitions of accounting quality focus more on the reliability of financial information; according to this definition higher quality accounting information should benefit investors and other stakeholders by protecting them against opportunistic behavior of management. According to Verleun et al (2011) this sharp division between the different accounting quality definitions exposes one of the inherent problems which is common with the reporting of financial information, which is that if a financial report is reliable to some extent it might not be relevant vice versa. Verleun et al (2011) stated that this trade-off is also something that we see when we are measuring accounting quality since some measures focus more on relevance where others focus more on reliability. Verleun et al (2011) admit that while these concepts for sure sound contradictory this does not automatically mean that an increase in relevance cannot be equal to an increase in reliability. The definition provided above states that accounting quality applies to both the financial position and performance of a firm. Thus accounting quality affects both the statement of financial position and the profit or loss statement. So this probably means that, an increase in the relevance of statement of financial position information comes together with an increase in the reliability of income statement information. Therefore an increase in both relevance and reliability as a natural consequence gives justification for including three measures in the study.

### Accounting quality and its attributes

Verleun et al. (2011) stated that the attributes of accounting quality are divided into accounting-based and market-based. According to Verleun et al. (2011) accounting-based attributes are those characteristics of accounting numbers (like understandability, relevance, reliability and comparability) which are influenced only by how you incorporate and determine the book value of line items in the financial statements, i.e., the recognition and measurement principles (Verleun et al., 2011). A high level of accounting-based attributes means that the accounting numbers are reliable i.e., the figures which appear in the financial statement are based on facts and not on the mere wishes of the accountant (ibid.). Verleun et al. (2011) also pointed out that the accounting-based attributes are accruals quality, persistence of earnings, and predictability of earnings and smoothness of earnings. In the opinion of Verleun et al. (2011) the measurement of these four concepts does not refer to any market values and excludes any effects of disclosure quality. It is based on the idea that the function of earnings is to allocate cash flows into the accounting periods using accruals ibid. However, in the words of Verleun et al., (2011) another function of earnings is to reflect economic income as represented by market returns. According to Verleun et al., (2011) there are three attributes of accounting quality and they are market-based which means that they relate the accounting numbers to the market numbers (returns and/or prices). Verleun et al. (2011) further opined that these are the value relevance of accounting numbers, timeliness and conservatism. The quality of these attributes jointly depends on how financial statements items are incorporated and measured plus their disclosure quality. Again, in the opinion of Verleun et al. (2011) at the end of the day what matters is quality of market-based attributes because they embody the relationship between the accounting numbers and the investors' perception of the numbers.

## Earnings Management

Earnings management is a term often used to describe a situation where the manager who is responsible for the preparation and presentation of the financial statements has more information than other stakeholders; this kind of situation usually creates an information asymmetry problem between managers and stakeholders, which is caused by imperfect markets where the stakeholders do not have all the correct necessary information on a timely basis. A recent definition of earnings management is formulated by Stolowy and Breton (2004) as cited in Verleun et al., (2011) they defined “accounts manipulation as the use of management’s discretion to make accounting choices or to design transactions so as to affect the possibilities of wealth transfer between the company and society (political costs), funds providers (cost of capital) or managers (compensation plans).” Meaning, management can make accounting decisions that can affect financial statement information positively or negatively. But also, management can act in their self-interest and increase their own wealth (agency theory). However, Palepu et al. (2007) argues some earnings management are not carried out with the intention of manipulating earnings but that some accounting choices are driven by the signaling or informativeness role of earnings management which is ordinarily aimed at informing outsiders of the changing business. Hoogendoorn (2004) observed that there are five forms of earnings management: (1) loss maximization also known as ‘big bath accounting’, (2) loss minimization, (3) profit maximization for reputation purposes, (4) profit minimization for political cost purposes, and (5) income smoothing. Income smoothing combines the first four forms of earnings management together. According to Verleun et al., (2011) companies would minimize profit in profitable years in order to ‘reserve’ profit for rainy days of losses, this reserve will be used to boost the profitability to arrive at a stable level of profit (growth). Verleun et al., (2011) also stated that one of the reasons management indulge in income smoothing is to create a stable risk profile for the firm in order to reduce fluctuations in share price of the company, which positively influences the reputation of the firm. Manipulation of earnings figures misleads stakeholders about the true economic performance of a company. Thus, earnings management has a negative effect on decision-making and consequently decreases the usefulness or relevance of financial statement information for outsiders. As a result, the value relevance of accounting information reduces. The diagram for the conceptual framework is illustrated in Figure 1. In this conceptual framework, IFRS adoption and accounting quality are independent and dependent variables respectively. The present study thus attempts to bridge the gap through providing a basis for a comprehensive and perceptive discernment of the impact of IFRS adoption on accounting quality. Although the causal relationships among the constructs shown in Figure 1 seem to be straightforward, in order to make practical statements about IFRS adoption and its associations with accounting quality, the conceptual framework requires further analysis.



**Figure 1: Conceptual Framework**

## METHODOLOGY

This study adopted the cross-sectional field survey [i.e. an examination of companies (or subjects) annual financial reports] of the quasi-experimental research design by examining the interrelationship among a number of variables between pre and post IFRS adoption in Nigeria.. Only firms for which data are available over the entire sample period for all the variables needed to calculate the quality measure are included in the final samples. This study use a number of accounting characteristics suggested by previous research such as Barth et al, 2006. The research focus is on the quality of accounting (financial reporting) before and after the adoption of IFRS in Nigeria. Following previous research, the researchers divided the measures into three groups: earnings management, value relevance and timeliness of loss recognition (Leuz et al., 2003; Lang et al. 2003; Lang et al. 2005)

## Data

The research was limited to accessible population which constitutes all listed cement and brewery firms listed in Nigeria. Available data from Nigeria Stock Exchange (NSE) as well as the fact book revealed a total of 4 listed cement manufacturing firms and 7 listed breweries companies making up of a total of 11 listed cement and breweries manufacturing companies. The study adopted the census approach as it was unnecessary for sampling or sample size determination. Data used in the study were collected from secondary sources of data. extracted from corporate financial statements of the firms, fact book as well as the relevant companies' websites. The data covered a period of five years from 2009 to 2013.



## Variables

All the variables of the study were measured with the use of interval scale. . The main variables of the study are IFRS adoption as independent variable and accounting quality, value relevance, earnings management and time loss recognition as dependent variable. In this study IFRS does not have any proxies because the study is a comparative analysis that assesses accounting quality pre- and post-IFRS adoption in the manufacturing sector of Nigeria, however, a dummy variable was developed to distinguish pre and post IFRS periods in the data analysis as shown below: Post-adoption = 1, Pre-adoption = 0 . The general assumption is that better accounting standards could increase the quality of financial statements in the adopting countries.

**Earnings management:** Earnings management cannot be observed out of financial statement, so a model by Jones was followed. Thus earnings management is measured as discretionary accrual. Discretionary accrual was measured following the modified Jones model where the residual is the proxy for earnings management. According to Verleun et al., (2011) there are two general ways to measuring earnings management; with discretionary accrual models or models based on the distribution of earnings. The researcher made a choice on a discretionary accrual model since metrics based on earning distributions are surrounded by ambiguity (see McNihols, 2000 as cited in Verleun, Georgakopoulos, Sotiropoulos & Vasileion, 2011). As stated by Verleun et al., (2011) discretionary accrual models are also not free from errors but to a lesser degree. Besides most prior research regarding earnings management have used discretionary accrual models to measure earnings management. Therefore comparability increases with the application of a discretionary accrual model (Verleun, et al., 2011).

**Value relevance:** this is measured as the explanatory power (i.e. the coefficient) of market price per share regressed on per share book value and earnings per share (i.e. book values).

**Timely loss recognition:** this refers to the coefficient of interaction obtained by regressing earnings per share over market price on annual stock return (this is calculated as ending share price plus dividends minus beginning share price).

## MODEL SPECIFICATION

### Earnings Management

For the measurement of discretionary accrual the total accruals have to be calculated first. This is done according to the following model (Dechow et al., 1995 as cited in Verleun et al., 2011):

$$TA_{it} = (\Delta CA_{it} - \Delta CL_{it} - \Delta Cash_{it} + \Delta DEBT_{it} - DEP_{it}) / (A_{it-1}) \quad (1)$$

Where, for firm  $i$  and year  $t$ : TA = total accruals;  $\Delta CA$  = change in current assets;  $\Delta CL$  = change in current liabilities;  $\Delta Cash$  = change in cash and cash equivalents;  $\Delta DEBT$  = change in debt included in current liabilities; DEP = depreciation and amortization expense; A = total assets. After the total accruals are calculated this amount should be decomposed in a discretionary and a non-discretionary part:

$$TA_{it} = NDA_{it} + DA_{it} \quad (2)$$

Where, for firm  $i$  and year  $t$ : NDA = non-discretionary accruals; DA = discretionary accruals.

Here is where the modified version of the Jones-model actually comes into the calculation. The special feature of this modified version is namely the way in which the non-discretionary accruals are calculated:

$$NDA_{it} = \alpha_0 + \alpha_1(1/A_{it-1}) + \alpha_2(\Delta REV_{it} - \Delta REC_{it})/A_{it-1} + \alpha_3(PPE_{it})/A_{it-1} \quad (3)$$

Where, for firm  $i$  and year  $t$ :  $\Delta REV$  = change in revenues scaled by lagged total assets;  $\Delta REC$  = change in net receivables scaled by lagged total assets;  $PPE$  = gross property, plant and equipment (fixed assets) scaled by lagged total assets. If (3) is fit into (2) the following formula is obtained:

$$TA_{it} = \alpha_0 + \alpha_1(1/A_{it-1}) + \alpha_2(\Delta REV_{it} - \Delta REC_{it}) + \alpha_3(PPE_{it}) + DA_{it} \quad (4)$$

This is equal to the following regression equation:

$$TA_{it} = \alpha_0 + \alpha_1(1/A_{it-1}) + \alpha_2(\Delta REV_{it} - \Delta REC_{it}) + \alpha_3(PPE_{it}) + E_{it} \quad (5)$$

Where, for firm  $i$  and year  $t$ :  $E$  = unstandardized residual.

Thus, this un-standardized residual serves as the proxy for the amount of discretionary accruals. The mean of the un-standardized residuals is of course zero. However, for the purpose of this research the direction of earnings management is not important; rather the degree of earnings management is the variable of interest. Therefore the absolute value of all the residuals should be taken as the proxy for earnings management. After this is done, the degree of earnings management can be obtained by calculating the mean of the absolute residuals. By comparing these amounts before and after IFRS adoption it can be examined whether there has been a change in the degree of earnings management. Prior studies (e.g., Bartov et al. 2001; Lang et al. 2003, 2006; van Tendeloo and Vanstraelen 2005) document that firms' discretionary accruals are affected by business environmental factors such as firm size, financial leverage, sales growth, auditors and other factors.

## Value Relevance

All value relevance studies are based on an assessment between market values and book values. With this type of regressions the main variable of interest is the explanatory power of the model (adjusted  $R^2$ ); a higher adjusted  $R^2$  indicates a higher information content of book values (Francis and Schipper, 1999). However, the coefficients on the independent variables could also reveal interesting information regarding the relationship between the dependent and the independent variables. The Ohlson (1995) model is the most popular model for measuring value relevance. This model is especially applicable when value relevance is examined over multiple periods because it allows for inter-period comparison. This model regresses market values on book values. Subsequently the explanatory power of this regression can be used as a proxy for value relevance. This is done on a per share basis to scale for firm size effects:

$$P_{it} = \alpha_0 + \alpha_1 BVE_{it} + \alpha_2 EPS_{it} + \varepsilon_{it} \quad (6)$$

Where, for firm  $i$  in year  $t$ :  $P$  = price per share;  $BVE$  = per share book value;  $EPS$  = earnings per share;  $\varepsilon$  = error term. In this model the coefficient on  $\alpha_1$  describes the relation between the book value of equity and the market value of the firm and  $\alpha_2$  describes the relation between the earnings of a firm and its market value. However the combined value relevance of book values is best summarized by the explanatory power of the model, therefore this is the primary figure of interest. After these figures are obtained for both the pre- and post-IFRS period a comparison can be made between these periods. In this way it can be examined whether there has been a shift in value relevance after IFRS.

### Timely loss recognition

Basu (1997) suggested a proxy for timely loss recognition by regressing earnings on returns, a bad news dummy variable, and the interaction of these independent variables. If earnings report losses in a timely manner, then the coefficient on the interaction variable should be larger the timelier the losses are reported.

Basu (1997) applies a reverse regression, where annual earnings are regressed on current annual returns, because this leads to better-specified test statistics (Beaver et al. 1980). This results in the following model:

$$EPS_{it}/P_{it-1} = \alpha_0 + \alpha_1 DR_{it} + \beta_0 R_{it} + \beta_1 R_{it} * DR_{it} + \varepsilon_{it} \quad (7)$$

Where, for firm  $i$  and year  $t$ ; EPS = annual earnings per share; P = price per share; R = annual stock return; stock return is calculated as: ending share price + dividends – beginning share price. DR = 1 if  $R < 0$ , and 0 otherwise;  $\varepsilon$  = error term. DR represents the bad news dummy variable which is 1 in the case of a negative return for the year. Therefore  $\beta_1$  measures the difference in sensitivity of earnings to negative returns additionally to positive returns. However, with this model it is not possible to make a comparison between the pre-IFRS adoption and post-IFRS adoption period. Therefore pre-IFRS period  $\beta_1$  must be compared to post-IFRS period to be able to measure whether there is a difference in timely loss recognition between the two periods.

## RESULTS AND FINDINGS

Descriptive statistics in the form of tables is used in the study to present relevant data.s. In addition, correlation and comparative (difference between groups) data analysis were applied in the research. The relationship between the independent and dependent proxies of accounting quality was determined by Regression analysis and after that a period comparison is carried out using Independent Samples t-test. The hypotheses were tested with Statistical Package for Social Sciences (SPSS) version 20 using Ordinary Least Square (OLS) Regression and Independent Samples T-Test for Equality of means in order to compare the Value Relevance (Adjusted R<sup>2</sup>) difference between pre- and post-IFRS adoption periods.

## RESULTS

### Hypothesis 1.

H<sub>01</sub>: The degree of earnings management has not declined in the post-IFRS period.

The result of the analysis is presented in table 3 and 4 to enable **Comparison** of Mean Discretionary Accrual pre- and post-IFRS Adoption of quoted Cement and Breweries Companies in Nigeria

**Table 1: Descriptive statistics of discretionary accruals in pre- and post-IFRS periods.**

PERIOD	N	Mean	Std. Deviation	Std. Error Mean
Pre-IFRS	3	.07950195810	.037670033735	.021748804117
Post-IFRS	2	.13537880749	.005249143086	.003711704672



**Table 2: Comparison of mean discretionary accruals between pre- and post-IFRS periods.**

	t-test for Equality of Means		
	T	Df	Sig. (2-tailed)
Equal variances assumed	-1.980	3	.142
Equal variances not assumed	-2.533	2.115	.120

$p < 0.01$ ,  $p < 0.05$  and  $p < 0.10$ , respectively

Source: SPSS version 20 Output, Computed from table data 2009-2013.

Descriptive results for the modified Jones-model are reported in table 1. From table 2 above; Earnings Management is implicated as having insignificant difference at 1%, 5% and 10% level. Hence, we accept the null hypothesis and conclude that the degree of earnings management has not statistically significantly declined post- IFRS period in the manufacturing sector in Nigeria. This result is consistent with the findings of Ames (2013), who found that earnings quality is not significantly improved post IFRS adoption in South Africa. However, the result is inconsistent with Barth (2006), who found that firms applying IAS evidence less earnings management in the US.

## Hypothesis 2

H<sub>02</sub>: Earnings and book values are less value relevant in the post-IFRS period compared to the pre-IFRS period.

**Table 3. Explanatory power of book values on market values regression.**

Model:  $P_{it} = \alpha_0 + \alpha_1 BVE_{it} + \alpha_2 EPS_{it} + \varepsilon_{it}$

YEAR	Adjusted R <sup>2</sup>
2009	.987
2010	.999
2011	.993
2012	.884
2013	.258

**Table 4 Descriptive statistics of value relevance Adjusted R<sup>2</sup> in pre- and post-IFRS periods.**

	PERIOD	N	Mean	Std. Deviation	Std. Error Mean
ADJUSTED R <sup>2</sup>	PRE-	3	.99300	.006000	.003464
	POST-IFRS	2	.57100	.442649	.313000

**Table 5 Comparison of value relevance (adjusted R<sup>2</sup>) between the pre- and post-IFRS periods.**

	t-test for Equality of Means		
	T	Df	Sig. (2-tailed)
Equal variances assumed	14.005	3	.168
Equal variances not assumed	10.469	1.006	.406

$p < 0,01$ ,  $p < 0,05$  and  $p < 0,10$ , respectively

Source: SPSS output, Computed from table data 2009-2013

Table 4 presents the test result on the value relevance of earnings and book value using the relation between book value and market value. Table 4 shows there is indeed a sharp decrease in the explanatory power of book value of equity and earnings per share for the regression model after IFRS adoption in Nigeria. In order to examine whether the decrease in value relevance is statistically significant t-test is conducted (see table 5). The outcomes show that the value relevance is less in the post-IFRS period compared to the pre-IFRS. All differences are statistically insignificant at conventional levels and this also holds if unequal variances are assumed. The result of the t-test for Equality of Means showed that there is a statistically insignificant difference between pre- and post-IFRS value relevance, therefore we accept the null hypothesis that the earnings and book values are less value relevant in the post-IFRS period compared to the pre-IFRS period. This result is consistent with the finding of Ames (2013), Paananen and Lin (2008); who found a decrease in value relevance of companies in South Africa and Germany respectively.

### Hypothesis 3

H<sub>03</sub>: Timely loss recognition is less in the post-IFRS period compared to the pre-IFRS period.

### Table 6 & 7: Regression comparing timely loss recognition between the pre- and post-IFRS periods.

Model:  $EPS_{it}/P_{it-1} = \alpha_0 + \alpha_1 DR_{it} + \beta_0 R_{it} + \beta_1 R_{it} * DR_{it} + \varepsilon$

### Table 6 Pre-IFRS period Coefficient of timely loss recognition

#### Coefficients<sup>a</sup>

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	.694	.512		1.356	.195
DR	-1.460	1.084	-.517	-1.347	.198
R	-.013	.016	-.237	-.797	.438
R*DR	-.046	.113	-.149	-.409	.688

$p < 0,01$ ,  $p < 0,05$  and  $p < 0,10$ , respectively

Source: SPSS output, Computed from table data 2009-2013

**Table 7: Post-IFRS period Coefficient**

OLS Method

**Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	2.081	2.058		1.011	.346
1 R	-.028	.069	-.190	-.402	.700
R*DR	.094	.188	.236	.500	.632

p &lt; 0,01, p &lt; 0,05 and p &lt; 0,10, respectively

Source: SPSS Version 20 output, Computed from table data 2009-2013.

Table 7 shows that the  $\beta_1$  (coefficient) of the post-IFRS period is 0.094 which is larger than the pre-IFRS period of -0.046 reported in table 6. Unfortunately for both periods the coefficients are not significant at conventional levels. The coefficient on R\*DR measures the degree of timely loss recognition. Its value is 0.094 (0.632) for the post-IFRS period which is insignificantly larger than the corresponding figure for the pre-IFRS period. Thus, we accept the null hypothesis that timely loss recognition is less in the post-IFRS period compared to the pre-IFRS period. This result is consistent with the results of Paananen and Lin (2008) in the UK.

**DISCUSSION**

The overall results of hypotheses testing suggest that IFRS adoption has not improved accounting quality of listed cement and breweries companies in Nigeria. The investigation showed that: 1) The degree of earnings management has not declined in the post-IFRS period. 2) Earnings and book values are less value relevant in the post-IFRS period compared to the pre-IFRS period. 3) Timely loss recognition is insignificantly larger in the post-IFRS period compared to the pre-IFRS period. The results of this analysis are reported in Table 1-7. While George (2008) found a decrease in earnings management in the United Kingdom post IFRS adoption, Zhou et al. (2009) found a decrease in earnings management in Chinese firms and Morais and Curto (2008) found a decrease in earnings management in Portuguese firms, though Elbannan did not find the same thing in Egyptian firms. He attributes his findings to the lack of enforcement by regulators and a lack of training for those preparing and auditing the financial statements. The same issues may be at play in this fellow African country. Given the positive impact of IFRS adoption on other economies, these results suggest that more careful implementation and enforcement of IFRS standards may be required in Nigeria, and perhaps other countries with similar enforcement characteristics. Numerous studies indicate that accounting quality is not determined by accounting standards alone. Accounting quality is also partly determined by the incentive firms have to provide high-quality financial statements. There is evidence that firms' dependence on external capital increases their incentives to report higher-quality accounting information and to provide more useful financial disclosures (e.g. Francis et al. 2005). Empirical evidence from studies of individual countries also suggests that improvements in financial reporting quality under IFRS occur mainly among firms with greater financial reporting incentives (e.g. Christensen et al., 2008). In the case of Nigeria, several institutional factors can influence firms' reporting incentives in relation to the demand for external capital. First, the Nigerian economy is to some extent driven by the manufacturing sector. Firms in this industry are associated with higher growth opportunities and greater competition for external capital than their counterparts in other industries. Thus, if IFRS enables firms to improve financial reporting to entice external

investors, this effect would be expected to be greater in the manufacturing sector.. These expected benefits are based on the premise that mandating the use of IFRS increases transparency and improves the quality of financial reporting. However, there is evidence that accounting standards play only a limited role in determining observed reporting quality. The application of accounting standards involves considerable judgment and the use of private information, and as a result, IFRS (like any other set of accounting standards) provide managers with substantial discretion. How far this discretion is used depends on firm-specific characteristics (reporting incentives and operating characteristics) (Burgstahler et al., 2006), and national legal institutions (e.g., Ball et al., 2000, 2003). Table 2 reports the results for the significance tests on the differences of the amount of mean discretionary accruals between the pre- and post-IFRS period. The results for the t-tests, both assuming equal and unequal variances, show that there is no decrease in discretionary accruals and is highly insignificant with p-values being more than 1% for all occurrences. These findings provide convincing evidence that earnings management has not declined after IFRS was adopted. It could however be that either the pre-IFRS observations are so much influenced by other factors not mentioned that they result in a bias in the findings or the post-IFRS period is too small to show any expected results. Data analysis also indicates that in the post-IFRS period there is almost no difference in value relevance. This could be evidence of an undervaluation of manufacturing firms in the post-IFRS period. The explanation for this is that, *ceteris paribus*, the market value of firms are to a bigger extent based on intangible assets (e.g. Aboody and Lev, 1998; Kallapur and Kwan, 2004). The recognition principles for intangibles are nevertheless much stricter than for tangible assets within the IFRS. Thus, it would be logical that there is a smaller association between book values and market values.

Table 1 represents the first test of  $H_{01}$ , that IFRS adoption will decrease subsequent earnings management. A significant drop-off in reported earnings post-IFRS adoption would be consistent with a decrease in earnings management as aggressive, earnings-enhancing reporting practices are eliminated or reduced. The results of this test indicate that there is no significant difference in the change in reported earnings post IFRS adoption, but the direction is positive as opposed to the negative coefficient anticipated (p-value  $<.05$ ). This finding is different from expectation based on  $H_{01}$  as previously discussed. A brief discussion of possible factors that could contribute to this finding seems appropriate. These results could potentially be attributable to macroeconomic factors. It may certainly be the case that the post-adoption period in Nigeria yielded better results, on average, across the economy. This is an especially intuitive explanation given the status of Nigeria as a rapidly developing country and economy. Taken together, it seems unlikely that macroeconomic factors are driving this increase in reported earnings post-IFRS adoption. It may also be the case that IFRS is, in fact, less conservative with respect to revenue recognition. Street et al. (1999) study 221 companies claiming to comply with International Accounting Standards (IASs) in 1996. Their findings reveal significant non-compliance with a long list of IASs including “use of LCM for inventories; violation of the all-inclusive requirement for reporting profit/loss and of the strict definition of extraordinary items; failure to capitalize certain development costs; failure to provide all required disclosures for property, plant, and equipment, particularly those associated with revaluations; failure to comply with pension disclosure requirements; for companies operating in hyperinflationary economies, failure to restate foreign entities in accordance with IAS 29; and charging goodwill to reserves or amortizing goodwill over a period in excess of the 20 year limit” (Street et al. 1999). Based on these findings, it seems unlikely that an overabundance of conservatism is behind the increase in reported earnings. In a related note, it may be the case that auditors are more lenient under the new standards, either because their perceived risk is lower, or because auditing the new standards represents implementation problems. Finally, it may be the case that a monetary change or hyperinflation may have caused these differences. Indeed, as reported by Leuz et al. (2003), inflation in Nigeria between

1990 and 1998 (in the pre IFRS adoption period) averaged 10.41% annually. This is roughly consistent with other developing nations such as India, Indonesia and Pakistan. In fact, the stated goal of regulators in the post adoption period was 3 to 6% inflation annually, according to Selassie (2011). It thus seems likely that inflation is a culprit in the surprising results found in table 2. Nevertheless, Leuz et al. (2003) do not consider the inflation rates of Nigeria to qualify as hyperinflation, and keep Nigeria data in their tests. Regardless of the cause, these results do not support  $H_{01}$ . By this measure, the quality of accounting numbers reported in Nigeria remained relatively unchanged before and after IFRS adoption. This is also inconsistent with expectations as described in  $H_{01}$ . The second measure of accounting quality—value relevance is tested in Table 5  $H_{02}$  it showed that earnings and book values are less value relevant in the post-IFRS period compared to the pre-IFRS period while alternative Hypothesis says that post-IFRS adoption, an increase in value relevance should be observed as investors pay more attention to reported values. The dependent variable is the trading price of the firm in period t relative to the reported financial statement items.

## **IMPLICATION FOR RESEARCH AND PRACTICE**

The results of this research confirm that the adoption of IFRS does not automatically translate to higher quality accounting. The findings of this research have implication for our understanding of earnings management, value relevance of accounting numbers and timely loss recognition aspect of accounting quality as well as for researcher estimating discretionary accruals, earnings management and earnings quality. It can also be used as evidence to support theory in extrinsic share valuation or financial analysis.

## **CONCLUSION**

The research goal was to examine whether the quality of accounting (or financial reporting) has increased in Nigeria after the adoption of IFRS in 2012. The researcher's results suggest that there has been no increase in financial reporting quality over the first two years after the adoption. This study compares the characteristics of accounting amounts using a sample of quoted manufacturing companies reporting under NGAAP during 2009-2011, and IFRS during 2012-2013. Specifically, the researcher investigated whether there is a change in accounting quality during these two time periods. Following prior research, the research uses accounting quality with earnings management, value relevance, and timely loss recognition metrics. Contrary to our expectations, the research results suggest a decrease in accounting quality over the last years. The research shows that earnings and book value of equity are becoming less value relevant during the IFRS period compared to the pre-IFRS period. The findings on earnings management and timely loss recognition corroborate largely our findings with respect to the value relevance of accounting information. The researcher's results consistently indicate that accounting quality has declined in the first two years. Interestingly enough, the results from this analysis provides stronger evidence that the quality of financial reporting has decreased in Nigeria after the adoption of IFRS. It is of course dangerous to draw conclusions about the quality of financial reporting using this kind of measures. However, as a group they do offer some evidence of the informativeness of financial reporting and could be a first indication that the adoption of IFRS may have been overwhelming to many Nigeria companies and has not resulted in a more efficient capital market. Although, further research needs to be done overtime and in other sectors in order to corroborate the results of this study using more and more



representative data. In summary, it may be that the decrease in accounting quality is mainly driven by institutional factors (such as cost of initial implementation) and not the new adopted standards.

## FUTURE RESEARCH

Findings from this study have provided valuable insights that are of interest to practitioners, scholars, investors and policy makers. Certain issues arising from the firms provide avenues for further research agenda as follows: The study considered the influence of IFRS adoption on accounting quality of quoted manufacturing companies. Future research might incorporate the impact of legal tradition on reported accounting quality in a pre- and post-IFRS adoption setting. Furthermore, researchers might study the incidence of earnings management and value relevance of reported values pre- and post -IFRS adoption in a setting in which the previous standards were consistent with GAAP as opposed to IFRS. Further research can extend this study by replicating the methodology to investigate data of companies in the financial sector and other industries.

## REFERENCES

- Abdul-Baki Z., Uthman A. B., & Sanni M. (2014). *Financial ratios as performance IFRS and Nigerian GAAP*. Accounting and Management Information System, Vol. 13, No. 1, pp. 82-97.
- Aboody, D., & Kasznik, R. (2010). *Executive Compensation and Financial Accounting*. Foundation and Trends in Accounting. Vol 4, No. 2 pp 113-108, 2009
- Aharony, J, Barniv, R and Haim, F. (2010). “*The impact of mandatory IFRS adoption on equity valuation of accounting numbers for security investors in the EU*”, European Accounting Review, vol. 19, no. 3, pp. 535–578.
- Alzoubi, E. S. S. and Selamat, M. H. (n.d.) *The adoption of IFRS-based accounting standard and earnings quality: Literature review and proposing conceptual framework*. College of Business, Universiti Utara Malaysia, 06010 UUM Sintok, Kedah, Malaysia email: he03ma@gmail.com.
- Ames D., (2013). *IFRS adoption and accounting quality: The case of South Africa*. Journal of Applied Economics and Business Research JAEBR 3(3): 154-165
- Armstrong, C., Barth, M., Jagolinzer, A., & Riedl, E. (2009). *Market Reaction to the Adoption of IFRS in Europe*. Accounting Review, Forthcoming.
- Arum, E. D. P. (2013). *Implementation of International Financial Reporting Standards (IFRS) and the Quality of Financial Statement Information in Indonesia*. Research Journal of Finance and Accounting. Vol. 4, No. 19, 2013.
- Badloe, S.H. (2011). *The Quality of Accounting Information: A Case of the Netherlands*. Erasmus University Rotterdam, Faculty Erasmus School of Economics, Master Thesis Accounting, Auditing & Control.
- Basu, S., 1997, *The Conservatism Principle and the Asymmetric Timeliness of Earnings*, Journal of Accounting and Economics 24, 3-37.
- Ball, R. (2006). *International Financial Reporting Standards (IFRS): pros and cons for investors*. Accounting and Business Research, 36(Special Issue), 5-27.16
- Barth, M., R. W.R. Landsman, M.H. Lang (2008). *International Accounting Standards and Accounting Quality*. Journal of Accounting Research, 46, (3), 467-496
- Bartov, E., Goldberg, S. and Kim, M. 2005, ‘*Comparative Value Relevance Among German, U.S. and International Accounting Standards: A German Stock Market Perspective*.’ Journal of Accounting, Auditing and Finance, vol. 20, no. 2, pp. 95-119.

- Callao, S., J.I. Jarne, J.A. Lainez (2007). *Adoption of IFRS in Spain: Effect on the comparability and relevance of financial reporting*. Journal of International Accounting, Auditing and Taxation, 16, 148-178
- Chen, H., Tang, Q., Jiang, Y. and Lin, Z. 2010, *'The Role of International Financial Reporting Standards in Accounting Quality: Evidence from the European Union.'* Journal of International Financial Management and Accounting, vol. 21, no. 3, pp. 220-278.
- Cheong, C.S., Kim, S. and Zurbrugg, R. (2010), "The Impact of IFRS on financial analysts' forecast accuracy in the Asia-Pacific region: The case of Australia, Hong Kong and New Zealand", Pacific Accounting Review, Vol. 22, pp. 124-146.
- Christensen, H.B., E. Lee, and M. Walker. 2007. *"Incentives or Standards: What Determine Accounting Quality Changes Around IFRS Adoption?"* Working Paper Manchester Business School.
- Chua, W. F., Taylor, S. L., 2008. *The rise and rise of IFRS: An examination of IFRS diffusion*. Journal of Accounting and Public Policy, 27, 462-473.
- Core, J. E., Guay, W. R., & Van Buskirk, A. (2001). *Market Valuations in the New Economy: An Investigation of What has Changed*. JAE Boston Conference, June 2001. <http://dx.doi.org/10.2139/ssrn.262619>.
- Devalle, A., Onali, E. and Magarini, R. (2010). *'Assessing the Value Relevance of Accounting Data After the Introduction of IFRS in Europe.'* Journal of International Financial Management and Accounting, vol. 21, no. 2, pp. 85-119.
- Ernst & Young. (2014). International GAAP 2013 Generally Accepted Accounting Practice under International Financial Reporting Standards. Retrieved from <http://www.wileyinsightifrs.com>
- Francis, J., Scipper, K.(1999) *Have the Financial Statements Lost Their Relevance?* Journal of Accounting Research, 37(2).
- Gjerde, Ø., Knivslå, K., & Sættem, F. (2008). *The value-relevance of adopting IFRS: Evidence from 145 NGAAP restatements*. Journal of International Accounting, Auditing and Taxation, 17(2), 92-112.18
- Goodwin, J., Ahmed, K., & Heaney, R. (2008). *The effects of International Financial Reporting Standards on the accounts and accounting quality of Australian firms: A retrospective study*. Journal of Contemporary Accounting & Economics, 4(2), 89-119.
- Healy, M. P., & Wahlen, M. J. (1999). *A review of the earnings management literature and its implications for standard setting*. Accounting Horizons, 13(4), 365-383.
- Hellstrom, K.,(2006). *The Value Relevance of Financial Accounting Information in the Transition Economy: The Case of Czech Republic*. European Accounting Review, 15(3), 325-349.
- Heaney, R., Goodwin, J., & Ahmed K. (2007). *The Effects of International Financial Reporting Standards on the Accounts and accounting quality of Australian firms: a retrospective study*.
- Hofstede, G. H., Hofstede, G. J., & Minkov, M. (2010). *Cultures and organizations: software of the mind: intercultural cooperation and its importance for survival*: McGraw-Hill Professional.
- Hoogendoorn, M. (2004). *Beleidsaspecten inzake de jaarrekening . Externe Verslaggeving in Theorie en Praktijk*, Available at: <http://dare.uva.nl/record/94404>.
- Hung, M., and K.R. Subramanyam. 2007. *"Financial statement effects of adopting international accounting standards: the case of Germany."* Review of Accounting Studies. 12: 623-657.
- Hung, M. 2001. *Accounting standards and value relevance of financial statements: an international analysis*. Journal of Accounting and Economics 30: 401-420.
- Ijiri, Y. (1975). *Theory of Accounting Measurement*, Studies in Accounting Research, No 10 (American Accounting Association, 1975)
- Introduction to Financial Accounting Theory. (2009). McGraw-Hill Australia

- Jeanjean, T., & Stolowy, H. (2008). *Do accounting standards matter? An exploratory analysis of earnings management before and after IFRS adoption*. Journal of accounting and public policy, 27(6), 480-494.
- Jensen, M. and Meckling, W. 1976, 'Theory of the firm: Managerial behavior, agency costs and ownership structure.' Journal of Financial Economics, vol. 3, no. 4, pp. 305-360.
- Jermakowicz, E. K. (2004). *Effects of adoption of international financial reporting standards in Belgium: the evidence from BEL-20 companies*. Accounting in Europe, 1(1), 51-70.
- Jones, J. J. (1991). *Earnings management during import relief investigations*. Journal of Accounting Research, 29(2), 193-228.
- Kothari, S.P., A.J. Leone and C.E. Wasley. (2005). *Performance matched discretionary accrual measures*. Journal of Accounting and Economics 9:163-197. Doi:10.1016/j.jacceco.2004.11.002, <http://dx.doi.org/10.1016/j.jacceco.2004.11.002>
- Lang, M., Raedy, J. S., & Yetman, M. H. (2003). *How Representative Are Firms That Are Cross-Listed in the United States? An Analysis of Accounting Quality* Journal of Accounting Research, 41(2), 363-386.
- Landsman, M. Lang, and C. Williams. 2006. "Accounting Quality: International Accounting Standards and US GAAP." Working paper.
- Leuz, C., R. Verrecchia (2000). *The economic consequences of increased disclosure*, Journal of Accounting Research, 38, 91-124
- Leuz, C., Nanda, D. and Wysocki, P. (2003), *Earnings management and investor protection: an international comparison*, Journal of Financial Economics, 69, 505-527.
- Li, X. (2009). *Accounting conservatism and cost of capital: International analysis*. The Accounting Review, Available at SSRN: <http://ssrn.com/abstract=1261971.19>
- Paananen, M., & Lin, H. (2009). *The development of accounting quality of IAS and IFRS over time: The case of Germany*. Journal of International accounting research, 8(1), 31-55.
- Palepu, K., Healy, P., Bernard, V., & Peek, E. (2007). *Business analysis and valuation*. IFRS Edition. South-Western Cengage Learning.
- Penman, S.H. and X-J. Zhang. (2002). *Accounting conservatism, the quality of earnings and stock returns*. The Accounting Review 77: 237-264. Doi:10.2308/accr.2002.77.2.237, <http://dx.doi.org/10.2308/accr.2002.77.2.237>
- Rashid, K., & Islam, S. M. N. (2008). *Corporate governance and firm value: econometric modelling and analysis of emerging and developed financial markets* (Vol. 23): Emerald Group Publishing.
- Ronen, J., & Yaari, V. (2008). *Earnings Management, Emerging Insights in Theory, Practice, and Research*. Springer Science+Business Media, LLC.
- Sekirin, E. (2010, July 07). Major Factors Influencing Economic Growth. Retrieved June 13, 2011, from [www.ehow.com: http://www.ehow.com/list\\_6706424\\_major-factors-influencing-economic-growth.html](http://www.ehow.com/list_6706424_major-factors-influencing-economic-growth.html)
- Shehata, N. F. (2014). Theories and Determinants of Voluntary Disclosure. Accounting and Finance Research, 3(1), 18-26.
- Stolowy, H., & Breton, G. (2004). *Accounts Manipulation: A Literature Review and Proposed Conceptual Framework*. The Review of Accounting and Finance, 3 (1), 5-66.
- Tendeloo, B. van and A. Vanstraelen (2005). *Earnings Management under German GAAP versus IFRS*, European Accounting Review, 14, (1), pp.155-180