IFRS Adoption and Financial Reporting Quality: Evidence from the Listed Industrial Goods Firms in Nigeria

¹Muhammad Salisu & ²Kassim Shika Yusha'u

¹Department of Social Science and Administration, School of Continuing Education, Bayero University, Kano ²Department of Accounting, Bayero University, Kano

Abstract

he study examines the Impact of International Financial Reporting Standard (IFRS) adoption on the value relevance of accounting information (quality of financial reporting) of the listed industrial goods firms in Nigeria. The sample comprises nine firms listed on the Nigerian stock exchange. Financial statement figures of 2006 to 2011 (pre-IFRS adoption period) and 2013 to 2018(post-IFRS adoption period) were used. Descriptive statistics, correlation matrix and Ordinary Least Square (OLS) regression was used to analyze the effect of IFRS adoption on the quality of accounting information and Ohlson Model was used to test the value relevance of accounting information. The results indicate that the earnings per share and book value per share of the Nigerian industrial goods firms have not improved following the IFRS adoption. Therefore, the study concludes that IFRS adoption does not improve the quality of financial reporting to equity investors of the Nigerian industrial goods firms. Hence, earnings reported under the Nigerian Statement of Accounting Standard (SAS) are more informative to equity investors in determining the market value of their investment. The fore, this study recommends that the policy makers should extensively and widely appraise imported policies/standards before thinking of replacing the local once to avoid adopting standards that would not add more value to the economic development but rather destroy it which would in turn affect the local investments and the investors adversely and consequently make the economic development unsustainable. In addition, while appraising imported standards, the policy makers should focus on the peculiarities and the nature of operation of the local firms and the economy to avoid unnecessary adopting standards that will end up serving the interest of foreign multinational firms at the detriment of the local firms.

Keywords: IFRS adoption, Value relevance, Accounting information, Financial Reporting Quality, Nigeria.

Corresponding Author: Muhammad Salisu

http://internationalpolicybrief.org/journals/international-scientific-research-consortium-journals/intl-journal-of-economics-vol8-no1-february-2020

Background to the Study

In the rise against the financial crises in late 1990s, the international community emphasized the observance of international standards and codes of best practices in order to strengthen global financial systems. The international community called for the preparation of Reports on the Observance of Standards and Codes (ROSC), an assessment of the degree to which an economy observes internationally recognized standards and codes. It was observed by the World Bank about Nigeria, that the Nigerian Accounting Standard Board (NASB) lacks the financial and human resources as well as the infrastructure for monitoring and enforcing compliance with its standards. The ROSC team observed from a review of published financial statements that there are compliance gaps between the (Statement of Accounting Standard) SAS and actual practice. The ROSC team recommends the creation of a new independent oversight body called the Financial Reporting Council which would monitor and enforce accounting and auditing requirements with respect to accounting standards that are consistent with international practices, inaugurated a Stakeholders' Committee on the Roadmap to the Adoption of IFRS in Nigeria on October 22, 2009.

In July 2010, the Nigerian Federal Executive Council approved the Roadmap to the Adoption of IFRS in Nigeria, it was iterated in the report that, that it will be in the interest of the Nigerian economy for reporting entities in Nigeria to adopt globally accepted, high-quality accounting standards by fully converging Nigerian accounting standards with International Financial Reporting Standards (IFRS) by following a Phased Transition effective January 1, 2012. The transition was made in three phases, Phase 1 relates to the publicly listed entities and significant public interest entities. They are to prepare their financial statements using applicable IFRS by January 1, 2012. Phase 2 relates to other public interest entities, which are expected to mandatorily adopt IFRS, for statutory purposes, by January 1, 2013. Phase 3 relates to Small and Medium-Sized Entities (SMEs) which are expected to mandatorily adopt IFRS for SMEs by January 1, 2014. Eventually, the IFRS adoption is expected to provide equity investors, with more relevant and useful information on the reported accounting data which is said to be related to the market value of their investment.

Value relevance of accounting data is defined as the ability of financial statements information to capture and summarize firm's value (Suadiye, 2012). Barth defines value relevance as the extent to which the accounting amount is associated with some measure of value e.g. share prices. It is thus, an evaluation of the relationship between accounting information and capital market values.

The adoption of IFRS by developing economies like Nigeria was controversial because on one hand, IFRS are considered as developed standards, which require a high level of economic development in order to be implemented successfully. On the other hand, developing countries are characterized by low human development indices, the predominance of the public sector and a relatively underdeveloped accounting profession. Some scholars believes in the effectiveness of IFRS adoption by developing countries for instance Wallace (1990), Larson (1993), Joshi and Ramadhan (2002). Another group of researchers and international organizations consider that IFRS are flexible enough to respond to the needs of developing

countries (Carmona and Trombetta, 2008). While, some other scholars opined that IFRS are not suitable to developing counties because these standards are very complicated, highly developed and influenced by the Anglo-American culture (Hove, 1986 and Perera, 1989). Hence, IFRS are supposed to provide equity investors, with more useful information on the true financial position of companies, which in turn should lead to higher coherence between reported accounting data and market value of listed companies (Escaffre & Sefsaf, 2011). Hence, the following questions arise: Does the IFRS adoption improve the Value relevance of accounting information.

Studies conducted to investigate the Value relevance of IFRS Adoption are common in Europe having developed capital market with growing interest in developing countries (Devalle, Onali and Riccardo, 2010; Clarkson, Hanna, Richardson, and Thompson, 2011), Daneail, (2015) and Nijam and Jahfer (2018). Attempts to explore the impact of IFRS adoption on the value of accounting information in Nigeria focused on a specific economic sector or industry (e.g. Akpaka (2011), Enang (2015). Obeiche and Anene (2017) and Ilu and Bahamman (2018) due to the fact that the structure and accounting practices of firms in different economic sector may significantly differ (e.g financial service firms and manufacturing firms) and none of the previous studies to the best of researchers' knowledge covers industrial goods sector. Hence, this suggests the need for investigating the value relevance of accounting data in the Nigerian industrial goods sector.

The aim of this study is to evaluate the Impact of IFRS adoption on the Value relevance of accounting information (quality of financial reporting) in the listed industrial goods firms in Nigeria. To achieve this, the paper adopts the perspective of stock market investors and focuses on value-relevance research. The study is expected to add to reviewers of academic research in the area and it would assist accounting standard setters and policymakers like Financial Reporting Council and Security and Exchange Commission (SEC) by providing research evidence that will help inthe decision-making process on financial reporting issues. The paper is structured as follows; section two presents the literature review, section three is the research methodology, section fours is data analysis and discussion of findings and finally section five presents the conclusion and recommendations.

Literature Review

The two primary qualitative characteristics of information in financial statements are relevance and faithful representation. Information in financial statements is relevant when it is capable of making a difference to a financial statement user's decisions. Relevant information has confirmatory qualitative characteristics distinguish more useful information from less useful information. They enhance the decision-usefulness of financial reporting information that is relevant and faithfully represented. Faithful representation means that the information reflects the real-world economic phenomena that it purports to represent. Relevance and faithful representation make financial statements useful to the users (Palea, 2013). There are also some enhancing qualitative characteristics, which are complementary to the fundamental characteristics: comparability, verifiability, timeliness, and understandability. Enhancing qualitative characteristics distinguish more useful information from less useful information.

According to Barth, Beaver and Landsman (2001) in accounting literature, an accounting number is defined as value-relevant if it has a predicted association with share prices. This, in turn, happens only if the amount reflects information relevant to investors in valuing a firm and is measured reliably enough to be reflected in share prices. Equity values therefore reflect an accounting amount only if the two are correlated. Moreover, value-relevance research interprets accounting amounts or information that are more value-relevant as being of higher quality (Barth, Landsman, and Lang, 2008). Therefore, in this study value relevance of accounting information is referred to as the quality of financial reporting.

Empirical Studies on IFRS Adoption and Value Relevance of Accounting Information

Prior empirical studies on IFRS adoption and Value relevance reported inconsistent findings. Some studies reported that IFRS adoption has significantly improved the quality of accounting data while other studies reported otherwise. On one hand, for instance, Karğın (2013) study explores the value relevance of accounting information in pre- and post-financial periods of IFRS application for Turkish listed firms from 1998 to 2011. The results show that market value is related to book value and earnings per share by using the Ohlson model (1995). Overall book value is value relevant in determining market value and stock prices. This indicates that value relevance of accounting information has improved in the post-IFRS period (2005-2011) considering the book values while improvements have not been observed in value relevance of earnings. Similarly, Muller (2014) investigates the impact of the mandatory adoption of IFRS starting with 2005 on the absolute and relative quality (measured through value relevance) of financial information supplied by the consolidated accounts for companies listed on the largest European stock markets(London, Paris, and Frankfurt stock exchanges). The results shows an increase of consolidated statements quality (value relevance) once IFRS were adopted, thus suggesting also that the IFRS adoption in Europe led to better complying with the OECD Corporate Governance Principle of high quality disclosure and transparency. Moreover, the study reports an increase in the quality surplus supplied by group accounts compared to parent company individual accounts once the IFRS adoption became mandatory for preparing consolidated financial statements.

Bolibok (2014)investigated the impact of IFRS adoption on the value relevance of fundamental accounting data announced by banks listed on the Warsaw (Poland) Stock Exchange over the period 1998–2012, the analyses were based on the Ohlson residual income valuation model. The empirical evidence shows an increase in the value of both book values of equity and residual incomes of banks after introduction of IFRS but is statistically insignificant. In the same vein, Chebaane and Othman (2014) examined the effect of mandatory adoption of International Financial Reporting Standards on the value relevance of earnings and the book value of equity in emerging economies of African and Asian regions. They focus on value relevance considered as a market based measure of earnings quality. The result reveals that EPS improved over the post IFRS adoption period. More so, Umoren and Ekwere (2015) empirically examines whether the mandatory adoption of IFRS has improved the value relevance of financial information in the financial statements of commercial banks in Nigeria. The sample comprises of twelve listed banks in Nigeria. Specifically, financial statement figures of 2010 and 2011 (pre-adoption period) and 2012 and

2013 (post-adoption) were utilized. Descriptive statistics and least square regression were conducted to analyse the effect of IFRS adoption on the accounting quality. The result indicates that the equity value and earnings of banks are relatively value relevant to share prices under IFRS than under the previous Nigerian SAS. Results also indicate that earnings per share is incrementally value relevant during post-IFRS period while book value of equity per share is incrementally less value relevant during the post-IFRS period. Okafor, Ogbuehi, and Anene (2017) analyzed the effect of IFRS adoption on value relevance of book value, earnings per share, and cash flow from operations in Nigerian consumer goods firms. A sample size of 12 firms were selected on the basis of availability of data and a period of eight years (2008-2015) was covered by study. Multiple regression analysis was used in analyzing the data. The findings revealed that IFRS adoption has an incremental effect on the value relevance of book value, earnings per share, and cash flow from operations, with earnings per share showing the highest increment.

Lastly, Nijam and Jahfer (2018) investigated the impact of IFRS adoption on value relevance of accounting information in Sri Lanka by comparing value relevance of accounting information in pre- and post-IFRS adoption periods. The study explains market value per share (MVPS) using earning per share (EPS) and book value of equity per share (BVEPS). The pre-IFRS period is covers 2010 to 2011, and the post-IFRS period covers 2012 to 2014. The sample comprises 188 firms and 935 firm-year observations which nearly constitute to all firms listed in Colombo Stock Exchange except those not having at least two annual reports before and after the year 2012 and those having extreme and incomplete data. The study reports that both BVEPS and EPS significantly and positively explain MVPS during the periods followed by IFRS adoption although EPS was not a significant predictor of MVPS prior to IFRS adoption.

On the other hand, studies like Aubert and Grudnitsk (2011) investigates a Mandatory IFRS adoption across 15 European Countries 2004–2005 using Earnings per share as accounting Measure and Incremental association test Return regression with a dummy variable for accounting standards. The result shows that IFRS adoption is not value relevant. Likewise, Clarkson, Hanna, Richardson, and Thompson (2011) investigates the value relevance of the European and Australian firms from 15 countries post IFRS implementation. They conclude that IFRS adoption don't enhance quality of financial reporting. As such, they found no value relevance of book value of equity and earnings difference between Local standards (GAAPs) and IFRSs. They associate the result with capital market orientation of countries involved and that most local standards were presumably close to IFRSs. Similarly, Akpaka (2015) investigates the impact of IFRS adoption on value relevance of financial information of listed Deposit Money Banks (DMBs) in Nigeria. The study used data on Earnings per Share (EPS), Change in Earnings per Share (CEPS), Book Value per Share (BVPS) share price (SP). Moreover, Edwards Bells and Olhson (1995) model was adopted to conduct a pre (2006-2009) and post (2010-2013) IFRS analyses on seven (7) listed banks. Using the Generalized Least Square (GLS) the study documented that: Pre- IFRS financial information is value relevant; post IFRS financial information has very weak value relevance and post IFRS financial information has no relative value relevance over pre-IFRS financial information.

In addition, Chado (2017) examines the impact of IFRS adoption on the value relevance of accounting information. The study used price regression model based on a re-modified Ohlson's (1998) model Market share price (MSP); the dependent variable with accounting information was proxy by Book value per share (BVS), Earnings per share (EPS), Dividend per share (DPS), Cash flow from operations (CFO), IFRS served as independent variables in both pre and post IFRS adoption eras. Data was collected from a sample of 20 listed insurance firms for the period 2009–2014. Ordinary least square regression model was used in estimating the weight of the coefficient of models of the study. The overall result shows that the adoption of IFRS has decreased the value relevance of accounting information in the listed insurance firms, however, the individual independent variables EPS, DPS & BVS showed an increase after the adoption of IFRS and positive relationship with market per share. The study recommends that investors should rely more on DPS as a measure of accounting information as it has the greatest contributory value than other variables used in the study. In line with this, Akpan and Ekeria (2018) investigated the value relevance of accounting information (book value and earnings) on the market price of shares before and after the adoption of the International Financial Reporting Standards (IFRS) in the Nigerian Banking sector. Using a sample of 10 quoted Nigerian Banks for 10 years (2007 – 2016) and the ordinary least square (OLS) regression as well as correlation matrix for data analysis, the result shows an insignificant relationship between book value per share (BVS) and market price per share (MPS) as well as insignificant relationship between earnings per share (EPS) and market price per share (MPS) before and after the IFRS adoption respectively. A comparison of the results for the periods before and after adoption, indicates that the book value per share and earnings per share of banks are not more sensitive to share prices under IFRS than under the previous Nigerian SAS.

However, some studies had attributed the change in the value relevance of accounting information to other factors than IFRS adoption. These include Alnodel (2018) who investigated whether the adoption of IFRS increases the value relevance of accounting information for insurance firms listed in the Saudi stock market. The study employs the Ohlson model (1995) and the Easton-Harris valuation model (1991) in order to examine the association among stock market value and book value and earnings per share. The data was collected for 21 insurance companies listed in the Saudi stock market during the period 2007–2014, which covered pre and post-IFRS periods. The results reveal that the book value of equity becomes less value relevant whereas earnings are more value relevant. Further analysis suggests that the increase in the value relevance of accounting information is positively influenced by companies' attributes, especially profitability and size rather than IFRS adoption. In addition, Kwon (2018) investigated the value relevance change before and after the mandatory adoption of IFRS in the listed Korean financial markets. The study tests the value relevance change by dividing sample data into the periods before (2008–2010) and after (2011–2013) IFRS adoption. The study also categorises sample data into several subgroups by firm size (large versus small and medium). The empirical results suggest that the value relevance of book value, accounting earnings, operating income, cash flows, and operating cash flows significantly changed before and after IFRS adoption. This result suggests the possibility of a new debate regarding the primary value relevant factor before and after IFRS adoption among the companies listed on the Korea Stock Exchange.

From the foregoing, it could be observed that studies in this area has been of different nature and approach, some studies are multinational, some are country specific while others are carried out in a specific economic sector of a country. Though, studies in this area are mainly in the developed economies but a growing interest in developing countries has been noticed. A number of studies compare the value relevance of IFRS, US-GAAP and local GAAP (SAS in the case of Nigeria) in other countries and used the Ohlson model. It has been noticed that the studies are either on relative value relevance or incremental value relevance. However, the review shows that the results from existing empirical studies reports mixed and incoherent evidence on the impact of IFRS on value relevance of IFRS adoption, therefore, the need for more studies in the area.

Data and Methodology

Population, Sample Selection and Source of Data

For the purpose of this research 12 firms categorized as industrial goods in the Nigerian Stock Exchange (NSE) are the population of the study. For sample selection and for the purpose of computing the average equity price, only companies with December as financial year end are considered in this study. Moreover, only firms with the available financial statement are also considered. After considering this filter, the remaining firms are 9 which form the sample size.

Methods of Data Analysis

The methods of data analysis deals with the various statistical analysis involved in the description of the collected data and consequently, making decisions and possible inferences about the phenomena represented by the data. In this study, the descriptive statistical methods employed include numerical techniques such as the minimum, maximum, mean and standard deviation. For the estimation of the models, the method of data analysis employed in this study is the OLS regressions on pooled data. The choice of regression is due to the fact that the study is interested in cause and effect relationship and since secondary data is available, regression is better for the analysis (Gujarati, 2007).

Variables Measurement and Model Specification

To find the value relevance of accounting information, our data covers the period from 2006 to 2018. The period is divided as pre-IFRS Adoption 2006-2011 and post-IFRS Adoption 2012-2018 periods to observe improvements or otherwise on the value relevance of accounting information. Market Value per Share (MVPS) or stock prices, Book Value per Share (BVPS), and Earnings per Share (EPS) data was collected from Nigerian Stock Exchange (NSE), Capital Asset database and Cash Craft database. The Ohlson, Model 1995 which consists of two major indicators from financial reports (balance sheet and income statement), is used to test the value relevance of financial reporting in many studies is modified in order to capture effect of IFRS Adoption as stated by Ohlson (1995). Therefore the choice of this model in testing the value relevance is influenced by previous studies e.g Muller (2014), Bolibok (2014), Umoren and Enang (2015). Ohlson model (1995) is adopted to explore relations between equity market value with two main financial reporting variables, namely the equity book value per share (represents balance sheet) and earnings per share (represents income statement). The

model is based on Clean Surplus accounting theory. The theory connects the relationship between earnings, book value and share price with any other factor that affects share price. Clean surplus accounting exists when the change in book value equals earnings minus dividends, where dividends are net of capital contributions (Bryant, 2003).

The paper evaluates the impact of IFRS adoption on the Value relevance of accounting information in the listed industrial goods firms in Nigeria through value-relevance tests using a relative and incremental value relevance research design. To measure the value relevance of book value and earnings using least-square regression the study adopts the adjusted coefficient of determination (adj. \mathbb{R}^2) as the unit of measurement Umoren and Enang (2015).

Dependent Variable

Share Price (SP): For the purpose of this study, I computed average closing share prices from 31 March to 30 April of each year if the accounting year end is 31 Dec. Otherwise the appropriate date is considered, ensuring that the companies have already published the annual reports for the preceding year. I consider that using average closing prices for a certain period of time (as opposed to using the closing price of a certain day) for example 31 April or 31 December has the advantage of neutralizing possible daily fluctuations of the prices, caused by factors that are not linked to the financial information published in the annual reports. This is in line with Müller (2014).

Independent Variables

Earnings Per Share (EPS): can be calculated by dividing the profit after tax of the period attributable to shareholders by the number of ordinary shares outstanding.

Book Value of Equity (BVE): This is computed by dividing the shareholders fund by the number of ordinary shares outstanding for the accounting period.

Model Specification

Model (1) is based on the explanatory power from a regression of the share price on the book value of equity and earnings per share while models. Model (2) is designed to evaluate the Incremental value relevance. All the Models are analysed under pre and post IFRS adoption periods.

```
SPi,t = \alpha0 + \alpha1BVEi,t + \alpha2EPSi,t + \epsiloni,t(1)
SPi,t = \alpha0 + \alpha1BVPSi,t + \alpha2EPSi,t + \alpha3P + \alpha4P x BVEi,t + \alpha5P x EPSi,t + \epsiloni,t(2)
```

Where Pit is the price of common stock of the firm i three months after fiscal year's end. This means that the selected price of year t will be the price of March t+1, EPS it is the earnings per share of firm i during the year t, BVE it is the book value per share of firm i at the end of year t and ɛi,t is the error term.

P is a dummy variable set equal to 1 for the post-IFRS period and 0 for the pre-IFRS period. P x BVPS is the interaction variable between P and BVPS P x EPS is the interaction variable between P and EPS.

For the purpose of this study, I computed average closing share prices for 31 March to 30 April of each year, ensuring that the companies have already published the annual reports for the preceding year. I consider that using average closing prices for a certain period of time (as opposed to using the closing price of a certain day for example 31 April or 31 December has the advantage of neutralizing possible daily fluctuations of the prices, caused by factors that are not linked to the financial information published in the annual reports. This is also in line with the Müller (2014).

Results and Discussion Descriptive Statistics

The general characteristics of study variables; Earnings per share, book value per share and the stock market price for pre-IFRS and post-IFRS are presented in Table 1 and 2. For pre-IFRS period, the share price varies from №1.80 to №66.21 with a mean of №17.40 and a standard deviation of №14.60 which indicates moderates dispersion of the data. The Earnings per share ranges from №0.06 to №3.55 with a mean of №1.33 and a standard deviation №1.07 whereas the book value per share has a minimum of №0.69 and a maximum of №57.80 with a mean of №7.65 and a standard deviation of №11.11, meaning that the data clusters around the mean value.

The post IFRS period share price varies from №1.40 to №76.85 with a mean of №18.62 and a standard deviation of №19.04. The Earnings per share ranges from №-0.09 to №4.78 with a mean of №1.35 and a standard deviation №1.29 whereas the book value per share has a minimum of №0.02 and a maximum of №25.99 with a mean of №7.86 and a standard deviation of №7.66. From the descriptive statistics of the study variables presented in Table 1 and 2 reveals that the data does not follow a normal distribution because of the larger difference between the Minimum and the maximum values for both periods. However, the mean values for share price, Earnings per share and Book Value per share shows a slight increase from pre IFRS to Post IFRS adoption. This may indicates a slow economic growth and capital market between pre-IFRS and Post-IFRS adoption periods.

Table 1: Descriptive Statistics Pre-IFRS

				Std.
Variable	Minimum	Maximum	Mean	Deviation
Share price pre-IFRS	1.80	66.21	17.40	14.60
Earnings per share pre-IFRS	0.06	3.55	1.33	1.07
Book value per share pre-IFRS	0.69	57.80	7.65	11.11

Source: Compiled by the Researcher using Stata 13 (2019)

Table 2: Descriptive Statistics Post-IFRS

				Std.
Variable	Minimum	Maximum	Mean	Deviation
Share price post-IFRS	1.40	76.85	18.62	19.04
Earnings per share post-IFRS	-0.09	4.78	1.35	1.29
Book value per share post-IFRS	0.02	25.99	7.86	7.66

Source: Compiled by the Researcher using Stata 13 (2019)

Correlation Matrix

The correlation matrix seeks to establish relationships that exist between variables used in the study. This helps to understand the relationship that exists among variables especially the independent variables.

From table 3, it could be observed that Share price has a positive relationship with the Earnings per share and Book Value of equity in pre-IFRS period then in post-IFRS period. This means that earnings attracts higher prices but this is higher in pre-IFRS period the in post-IFRS period.

Table 3: Pre and Post IFRS Correlation Matrix

	PRE-IFRS ADOPTION			POST-IFRS ADOPTION		
	SP EPS BV.E			SP	EPS	BV.E
SP	1.00			1.00		
EPS	0.56	1.00		0.12	1.00	
BV.E	0.58	0.47	1.00	0.16	0.33	1.00

Source: Compiled by the Researcher using Stata 13 (2019)

Diagnostic Tests

In this section, regression diagnostic tests are conducted on the model to ensure that it satisfies certain assumptions that could at least guarantee the presence of unbiased estimates in the model. The test includes the normality test for the residuals, multi collinearity, the heteroskedasticity test and the Ramsey reset test.

Table 4: Post Estimation Tests

	VIF	Breusch-Pagan Godfrey test for heteroscadasticity	Ramsey Reset	
EPS	1.18	0.727	0.8112	
BE	1.18	0.727	0.0112	

Source: Compiled by the Researcher from Stata 13 (2019)

The test of residuals was conducted to assess the normality of the model residuals, when residuals are not normally distributed it indicates the presence of significant outliers in the data which affects the standard errors and then the significance levels of the coefficients. The variance inflation factor (VIF) explains how much of the variance of a coefficient estimate of a regressor has been inflated, as a result of collinearity with the other regressors. Ideally, VIFs

above 10 shows a serious collinearity problem. As observed in table 4, the VIF's values are less than 2 hence none of the variables has indication of multi collinearity. The test for heteroskedasticity was carried out on the residuals. The results showed probabilities above 0.05 which inform us to reject the presence of heteroskedasticity in the residuals. The performance of the Ramsey RESET test showed high probability values that were greater than 0.05, indicating that there was no significant evidence of miss-specification.

Regression Models

Relative Value Relevance

Table 5 Present result of the regression for pre and post IFRS adoption, the results shows a sharp decrease of R² between pre IFRS and Post IFRS periods from 65% to 3%. This Indicates that the earnings per share and book value of equity reported under Local SAS explains more about share prices as compared to the IFRS. The coefficients of EPS and BV.E also deceases from 3.43 to 1.18 for EPS and from 0.86 to 0.32 for BV.E. This shows deterioration in the post IFRS period. The explanatory power of Earnings per share and Book value per share is very low for post IFRS period.

Table 5: Value relevance for Earnings per share and Book value of equity for pre and post IFRS adoption periods

Models	Regression Coefficients		R^2	F Value	
ivioueis	EPS	BV.E	K	1 value	
(1) Pre-IFRS adoption	3.43*	0.86	0.65	79.08*	
	(1.84)	(10.33)	0.03		
(1) Post-IFRS adoption	1.18*	0.32	0.03	0.78***	
(1) FOSI-IFKS adoption	(0.62)	(0.75)	0.03	0.78	

^{***, *} denotes significance at 0.1, 0.05 and 0.01 levels respectively. The two tailed test statistics is shown in parenthesis Source: Compiled by the Researcher using Stata 13 (2019)

Incremental Value Relevance

To assess whether the book value per share and earnings per share are incrementally value relevant in the post IFRS period, coefficients α_4 and α_5 in Model 2 has to be positive and significantly different from zero as determined by two tailed test. From Table 5 we can see that the R² is 26%. The coefficients of EPS and BV.E are 3.39 and 0.87 respectively. The coefficient of the interactive variables PXEPS and PXBV.E are -2.20 and -0.54. The coefficient of EPS and BV.E are significant at 5% and 1% respectively while the coefficients of interactive variables are significant at 10% and 5% respectively. The coefficients of EPS and BV.E are positive whereas the coefficient of PXEPS and PXBV.E are negative. This result indicates that EPS and BV.E were relevant in pre-IFRS and irrelevant in the post-IFRS period. This result is consistent with that of Table 4. This is in-line with the result obtained from the studies of Aubert and Grudnistsk (2011), Clarkson et al (2011), Akpa (2015) as well as Muhammad (2017). The result contradicts the findings of Muller (2014), Bolibok (2014) and Umoren and Ekwere (2015), Okafor et al (2017) and Nijam and Jahfer (2018). Thus, the result indicates that the Equity Values and Earnings per share of industrial goods firms are not sensitive to their share prices following the IFRS adoption. This may equally imply that earnings reported by

industrial goods firms under the Nigerian SAS are more informative to equity investors in determining the equity market value. Hence, this study finds that IFRS adoption does not improve the quality of financial reporting to equity investors.

This finding could be extensively discussed in-line with the argument by scholars in this area. Some scholars believe in the effectiveness of IFRS adoption by developing countries (Wallace, 1990; Larson, 1993; Joshi & Ramadhan, 2002). Another group of researchers and international organizations consider that IFRS are flexible enough to respond to the needs of developing countries (Carmona & Trombetta, 2008). While, some other scholars opined that IFRS are not suitable to developing counties because these standards are very complicated, highly developed standards are influenced by the Anglo-American culture (Hove, 1986 & Perera, 1989). IFRS are supposed to provide equity investors, with more useful information on the true financial position of companies, which in turn should lead to higher coherence between reported accounting data and market value of listed companies (Escaffre & Sefsaf2011). Therefore, this study concur with the opinion of (Hove, 1986 & Perera, 1989) that IFRS are not suitable to developing counties because these standards are very complicated, highly developed standards are influenced by the Anglo-American culture. However, the following reasons could be proffered for getting a result of this nature. Firstly, the time and the level of preparation by Nigerian firms to meet the challenges of IFRS adoption Secondly, the BV.E shows a general view of a firm's Equity and Net Asset position and IFRS adoption involves valuing assets at a point in time and as such increases the volatility in book values of firms. Secondly, with IFRS adoption the definition of intangible asset changed. The Implication is that items that were usually considered as assets and treated in the balance sheet are now expensed in the income statements.

Table 6: Incremental Value relevance of Earnings and book value per share

Model	Regression coefficient					\mathbb{R}^2	F Value
	EPS	BV.E	P	PXEPS	PXBV.E	K	1 value
2	3.39**	0.87*	8.13***	-2.20***	-0.54**	0.26	31.89*
	(1.87)	(10.43)	(1.24)	(-0.83)	(-1.21)	0.20	

***,**,* denotes significance at 0.1, 0.05 and 0.01 levels respectively. The two tailed test statistics is shown in parenthesis

Conclusion and Recommendations

This study examines the value relevance of accounting information of the listed manufacturing firms in Nigeria. The findings of this study show that the earnings pershare and book value per share of the industrial goods firms in Nigeria have not improved following the IFRS adoption. On the basis of this therefore, the study concludes that IFRS adoption does not improve the quality of financial reporting to equity investors of the Nigerian industrial goods sector. Hence, earnings reported under the local SAS by industrial goods firms are more informative to equity investors in determining the market value of their equity investment. It is therefore recommended that the policy makers should extensively and widely appraise imported policies/standards before thinking of replacing the local once to avoid

adopting standards that would not add more value to the economic development but rather destroy it which would in turn affect the local investments and the investors adversely and consequently make the economic development unsustainable. In addition, the policy makers should focus on the peculiarities and the nature of operation of the local firms and the economy to avoid unnecessary adopting standards that will end up serving the interest of foreign multinational firms at the detriment of the local firms.

References

- Adebimpe, O. U, & Enang, E. R. (2015). IFRS Adoption and Value Relevance of Financial Statements of Nigerian Listed Banks, *International Journal of Finance and Accounting*, 4(1) 1-7.
- Ahmed, A., Ilu, S., & Bahamman, S, (2018). Effect of the adoption of international financial reporting standards (IFRSS) on value relevance of accounting information of Nigerian quoted oil and gas companies. *Journal of Accounting and Financial Management*, 4(6) 12-30.
- Alnodel, A. (2018). The impact of IFRS adoption on the value relevance of accounting information: evidence from the insurance sector. *International Journal of Business and Management*, 13(2), 138-156
- Akpaka, N. C. (2011). International Financial Reporting Standards (IFRS) adoption and value relevance of financial information of listed deposit money banks in Nigeria. (Unpublished M.Sc Dissertation) Ahmadu Bello University, Zaria, Nigeria.
- Aubert, F., & Grudnitski, G. (2011). The impact and importance of mandatory adoption of International Financial Reporting Standards in Europe. *Journal of International Financial Management and Accountin*, 22(1), 1–26.
- Barth, M. E., Beaver, W. H., & Landsman, W. R. (2001). The relevance of the value relevance literature for financial accounting standard setting: Another view. *Journal of Accounting and Economics*, 31(1), 77–104.
- Barth, M. E., Landsman, W., & Lang, M. (2008). International Accounting Standards and Accounting quality. Journal of Accounting Research, 46(3), 467–498.
- Bolibok P. (2014). The impact of IFRS on the value relevance of accounting data of banks listed on the Warsaw Stock Exchange. Copernican *Journal of Finance & Accounting*, 3(1), 33–43.
- Bryant, L. (2003). Relative value relevance of the successful efforts and full cost accounting methods in the oil, 5–28.

- Carmona, S., & Trombetta, M. (2008). On the global acceptance of IAS/IFRS. *Journal of Accounting and Public Policy*, 27, 455–461.
- Clarkson, P., Hanna, J. D., Richardson, G. D., & Thompson, R. (2011). The impact of IFRS adoption on the value relevance of book value and earnings. *Journal of Contemporary Accounting and Economics*, 7, 1-17.
- Devalle, A., Onali, E., & Riccardo, M. (2010). Assessing the value relevance of accounting data after the introduction of IFRS in Europe. *Journal of International Financial Management and Accounting*, 21(2), 85-119.
- Escaffre L., & Sefsaf, R. (2011). Comparing the value relevance of earnings and book value in IFRS and GAAP standards: Bankers, markets and investors.
- Gujarati, D. (2007). Basic econometrics. McGraw Hill International, New York.
- Hellstrom, K. (2006). The value relevance of financial accounting information in a transition economy: The case of the Czech Republic. *European Accounting Review*, 15(3), 325-349.
- Hove, M. R. (1986). Accounting practices in developing countries: colonialism's legacy of inappropriate technologies. *International Journal of Accounting*, 1, 81–90.
- Joshi, P. L. & Ramadhan, S. (2002). The adoption of international accounting standards by small and closely held companies: Evidence from Bahrain. *The International Journal of Accounting*, *37*, 429–440.
- Kaaya, A. I. D. (2005). The Intenational Financial Reporting Standards (IFRS) and value relevance: A review of empirical evidence. *Journal of Finance and Accounting*, *3*(3), 37-46
- Kwon, J. (2018). Changes in the value relevance of accounting information before and after the adoption of K-IFRS: Evidence from Korea. *Afro-Asian Journal of Finance and Accounting* 8(1), 12-32.
- Larson, R. K. (1993). An empirical investigation of the relationship between international accounting standards, equity markeys and economic growth in developing countries. (Ph.D. Dissertation) University of Utah
- Muhammad, A. C. (2017). IFRS adoption and value relevance of accounting information: A study of listed insurance firms in Nigeria. (Unpublished Masters Dissertation) Ahmadu Bello University Zaria, Nigeria.

- Nigerian Accounting Standard Board (2010). Report of the committee on road map to the adoption of IFRS. [Online] Available: www.financialreporting council.gov.ng/.../Roadmap%20Final%20Report
- Nijam, H., & Jahfer, A. (2018). IFRS adoption and value relevance of accounting information: evidence from a developing country. *Sage Journals*, 19(6) 1416-1435.
- Ohlson, J. A. (1995). Earnings, book values, and dividends in equity valuation. *Contemporary Accounting Research*, 11(2), 661-687. Retrieved from http://dx.doi.org/10.1111/j.1911-3846.1995.tb00461.x
- Perera, M. H. B. (1989). Accounting in developing countries: A case for localized uniformity. *British Accounting Review*, *21*, 141-158.
- Sawcen, C. & Hakim, B. O. (2014). The impact of IFRS adoption on value relevance of earnings and book value of equity: the case of emerging markets in African and Asian regions. *Procedia Social and Behavioral Sciences, 145*, 70 80 Available online at www.sciencedirect.com
- Sibel, K. (2013). The impact of IFRS on the value relevance of accounting information: Evidence from Turkish Firms. *International Journal of Economics and Finance*, *5*(4)
- Suadiye, G. (2012). Value relevance of book value & earnings under the local GAAP and IFRS: Evidence from Turkey. *Ege Academic Review, 12*(3), 301-310.
- Okafor, T. G, Ogbuehi, A. & Anene, O. N. (2017). IFRS adoption and the value relevance of accounting information in Nigeria: An empirical study. *Journal of Modern Accounting and Auditing*, 13(10), 421-434 doi: 10.17265/1548-6583/2017.10.001
- Umoren, A. O. & Enang, E. R. (2015). IFRS adoption and value relevance of financial statements of Nigerian Banks. *International Journal of Finance and Accounting*, 4(1), 1-7.
- Umoren, A., Akpan, P., & Ekeria, E, (2018). Value relevance of accounting information in Nigerian listed financial companies. Advances in Research, *16*(2) 1
- Vera, P. (2013). IAS/IFRS and financial reporting quality: Lessons from the European experience. *China Journal of Accounting Research*, *6*, 47–263.
- Victor-Octavian, M. (2014). The impact of IFRS adoption on the quality of consolidated financial reporting. *Procedia Social and Behavioral Sciences* 109, 976 982 Retrieved from www.sciencedirect.com
- Wallace, R. S. O. (1990). Accounting in developing countries: A review of the literature. *Research in Third Word Accounting*, 1, 3-54.