

# IFRS Adoption and the Value Relevance of Accounting Information in Nigeria: An Empirical Study

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The objective of this article is to determine the effect of International Financial Reporting Standards (IFRS) adoption on value relevance of accounting information in Nigeria. The study therefore empirically analyzed the effect of IFRS adoption on value relevance of book value, earnings per share, and cash flow from operations in Nigerian firms - evidence from consumer firms sector. Three hypotheses guided the study. The ex-post facto research design was used. The population is made up of 25 consumer firms listed in Nigerian Stock Exchange. A sample size of 12 firms selected on the basis of availability of data among other considerations was used. The study covers a period of eight years (2008-2015). Secondary data collected from annual reports of firms and database of Capital Assets (<http://www.capitalassets.com.ng/>) were used. Multiple regression analysis was used in analyzing the data with the aid of Statistical Package for Social Sciences (SPSS) Version 22. 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. Based on the findings, the researchers recommended that investors should consider the values of earnings, book values of equity, and cash flow from operations in the annual reports of firms prepared in accordance with IFRS before making any investment decision. However, more emphasis should be laid on earnings.

*Keywords:* financial reporting, value relevance, Nigeria, IFRS adoption, earnings, cash flow, book value

## Introduction

Accounting is useful for the provision of financial information which should be duly communicated to the stakeholders to enhance decision-making. This implies that the ability of the financial statement to effectively and satisfactorily guide investors on their investment decisions depends on the value relevance of the information in it. According to Barth, Beaver, and Landsman (2001), value relevance is the ability of financial statement information to capture or summarize information that affects share values. Also, Holthausen and Watts (2001) saw value relevance as the empirical relation between stock market values (or changes in values) and particular accounting numbers for the purpose of assessing the numbers used or proposed to use in

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accounting standard. Investors normally rely on the information in the financial statement in assessing the value of a firm before deciding on whether to invest or not. Moreover, for any meaningful investment to take place, quality accounting information regarding share price and other performance indicators are essential. According to Palea (2013), financial information influences investors' behavior with respect to portfolio selection which in turn affects security prices and, the terms on which a firm obtains additional financing. Ikpefan and Akande (2012) stated that accounting is business language while financial reporting is for communicating and they are both regulated by Generally Accepted Accounting Practices (GAAP) which is usually country-based. Moreover, financial reporting inconsistencies have persisted due to varying reporting standards and requirements in different countries and as such posed great challenges to international investors (Pologeorgis, 2013).

In view of the above, the International Accounting Standards Board (IASB) sought a workable solution to alleviate the existing complexity, conflict and confusion created by inconsistency and the lack of streamlined accounting standards in financial reporting (Pologeorgis, 2013). However, the need for a better comparability and relevance in accounting statement across the globe gave rise to the development and adoption of International Financial Reporting Standards (IFRS). From 2005, some countries globally adopted IFRS in the preparation of their financial statements.

The move for the adoption of IFRS in Nigeria started 2010 following the Federal Executive Council's approval of the road map for the adoption of the standards. This was followed with the enactment of Financial Regulation Council of Nigeria Act in 2011 which led to the transformation of the Nigeria Accounting Standard Board (NASB) to Financial Regulation Council (FRC). The FRC among other things is charged with the responsibility of implementing the roadmap for the adoption of IFRS in Nigeria. In 2012, Nigeria commenced adoption of IFRS, with companies quoted on the stock exchange and companies with significant public interest required to comply in the first phase.

There is need to examine whether implementing IFRS has improved value relevance of accounting information in Nigeria since the financial statements have been presented in accordance with IFRS for almost four years.

### **Statement of Problem**

Financial statement of firms shall contain accounting information that shows the true and fair view of the firms' value. This will give prospective investors the ability to assess these firms based on the reported financial information. The inability of financial statements to reflect economic and business reality leads to capital sub-optimally deployed, resource misallocation, investors paying huge opportunity cost by investing in companies with unrealistic, inflated values, and better investments by-passed (Osaze, 2007). The Enron and WorldCom scandals, capital market crash, and economic meltdown revealed that firms that were proved to be profit-making became insolvent and as such pose a big question as to whether reporting under GAAP is value relevant.

Based on the above problems and scandals, accounting profession arose to the need of providing value relevant information by introducing a single set of accounting standards for global use known as IFRS. Nigeria as a nation is also faced with the accounting problems in question, and most researches carried out on the relevance of accounting information under IFRS adoption in Nigeria are based mainly on financial institutions, with mixed results arising from them. There is a need to carry out an empirical review on other firms quoted in the Nigeria stock market, to determine whether the relevance of accounting information prepared using IFRS is of more value than the one prepared using Nigeria GAAP, so as to help prospective investors in assessment of the firms' value. This study is therefore motivated by the desire to fill this gap.

### Objectives of the Study

The broad objective of the study is to ascertain the effect of IFRS adoption on the value relevance of accounting information. Specific objectives of the study are:

- (1) To determine whether there is variation between the value relevance of book value before and after the adoption of IFRS;
- (2) To ascertain whether there is difference between the value relevance of earnings before and after the adoption of IFRS;
- (3) To determine whether there is difference between the value relevance of cash flow from operations before and after the adoption of IFRS.

### Research Hypotheses

The research hypotheses are as follows:

Hypothesis 1:  $H_0$  – There is no significant difference between the value relevance of book value before and after adoption of IFRS.

Hypothesis 2:  $H_0$  – There is no significant difference between the value relevance of earnings before and after adoption of IFRS.

Hypothesis 3:  $H_0$  – There is no significant difference between the value relevance of cash flow before and after adoption of IFRS.

### Review of Related Literature

The concept “value relevance” over the years has been defined by researchers and scholars judging from their experiences. The value relevance of accounting information has been studied from many perspectives. Miller and Modigliani’s (1966) study was one of the first studies investigating relations among accounting figures and other financial parameters. Miller and Modigliani (1966) investigated equity values that involved cost of capital in electric utility industry. Value relevance can be measured by the statistical relations between information that financial statements present and stock market values or returns (Suadiye, 2012). Even though the concept is not new, the term “value relevance” was used for the first time in the related literature by Amir, Harris, and Venuti in 1993 (Carnevale, Giunta, & Cardamone, 2009; Suadiye, 2012).

Veith and Werner (2010) defined value relevance as a proxy for the information content of financial accounting data and is usually measured as the association between some accounting numbers and market measure(s). Defining value relevance as a proxy for information content is not clear as other scholars see information content as different construct with its own meaning.

Thinggaard and Damkierb (2008) asserted that value relevance is the difference between return on the long position and return on the short position, that is, the market adjusted return that can be earned on long position and the return on market adjusted position that can be lost on short position.

In his opinion, Beuselinck (2013) defined value relevance from accounting quality perspective by noting that value relevance approach is an instrument to estimate quality of accounting information which is of prime importance to the well-functioning of an economy. Value relevance approach can be used to assess usefulness of accounting information for stockholders.

Sing and Meng (2005) further observed that value relevance jointly involves both relevance for investor’s decision-making and reliability of measurement. However, to assess value relevance, it is essential to determine how accounting information records are reflected in stock prices.

In confirmation, Barth et al. (2001), Keener (2011) and Khanagha (2011) defined value relevance as the association between accounting amounts and security market values.

Barth et al. (2001) further stated that value relevance suggests testing whether accounting amounts explain the cross sectional variation in share prices. For the most part, the valuation models that form the basis for tests in the valuation literature are developed in terms of the level of firm value.

Viewing the aim of value relevance, Dahmash and Qabajeh (2012) opined that the objective of value relevance research is to relate annual financial statement figures to a measure of firm value and to assess the relation of such information to the determination of value. This statement gives an insight to the fact that the relationship between accounting figures and stock price will determine if analyst and investor can depend on accounting figures in other to make reliable investment decision or a fair forecast into the capital market.

The above definitions of value relevance put together suggest that an accounting item is deemed value relevant if it explains variation in share price, that is, value relevance revolves around the security market value which determines the value of a firm. Once an accounting number has a significant positive relationship with share price then it is considered value relevant. In other words, they can be relied on to make informed decision without fear of being misled.

IFRS on the other hand are set of guidelines and rules set by the International Accounting Standards Board (IASB) that companies and organizations can follow when compiling financial statements (Psaroulis, 2011). Since financial information is a medium of communicating financial transactions, it became imperative that different countries' accounting standards be harmonized to form a single set of accounting standards, to improve the rate at which investment and credit decisions are taken and aid international comparability of companies' performance both within and outside the reporting countries (Herbert, Tsegba, Ohanele, & Anyahara, 2013).

In 2001, the International Accounting Standards Committee (IASC) was taken over by IASB with an aim to develop global standards and related interpretations that are now collectively known as IFRS.

The accounting rules were then known as "International Accounting Standards" (IAS). After the IASB replaced the IASC in 2001, a lot of these accounting rules remained. Therefore, many of the standards forming part of IFRS are still known by the older name of IAS (Gornik-Tomaszewski & Showerman, 2010). This reorganization became very necessary since accounting is the language of business, then business enterprises cannot continue to speak in different languages to each other while exchanging financial numbers from their international business.

With the advent of globalization, the world capital market has witnessed rapid expansion, diversification and integration which have brought about a shift away from local reporting standards to global standards. In 2005, EU Commission issued a legislation requiring the use of IASB standards for all listed firms thereby making IFRS mandatory. In response to this, over 115 countries have adopted IFRS, of which Nigeria is not an exception (Akpaka, 2015).

### **Theoretical Framework**

This research is anchored on clean surplus theory model as it specifies the relation between market value of equity and accounting information such as earnings, cash flow and book value.

The Ohlson model of 1995 propounded the clean surplus theory otherwise known as the Residual Income Valuation Model (RIVM). The main importance of Ohlson's RIVM is its assertion that the market value of an entity can be functionally linked to numbers within its balance sheet and profit and loss components (Akileng,

2013). However, in view of the fact that the modified Ohlson model builds up a linear link with the market information, e.g., market capitalization and share prices and accounting information (earnings, dividends and book value of equity), it becomes so popular in the field of market valuation.

Ohlson (1995), who based his theory of valuation on the RIVM, stated that given specific assumptions, share price of an entity's equity is equal to the book value of the equity plus the discounted value of future residual income (Beisland, 2008). Ohlson's clean surplus theory shows that the market value of the firm can be expressed in terms of income statement and balance sheet items (Che, 2007). The model has generated much empirical research examining the comparative value relevance of the balance sheet and the income statement components. It has become prominent in the accounting literature because it has had some success in explaining and predicting actual market firm value (Babalola, 2012).

Under the RIVM, the main approach used in the valuation of earnings is the price model. The model is an offshoot of the standard valuation model which posits that price is the discounted present value of expected net cash flow. It equates current earnings with abnormal earnings and book value with the present value of expected future normal earnings. The fulcrum of the model is based on three assumptions. The first assumption states that the expected value of expected dividends determines the market value of equity. The second assumption states that accounting information and dividends conform fully to the clean surplus relation, which implies that dividends reduce the book value of equity without affecting current earnings. The third assumption of the price model states that a linear model depicts the stochastic time-series behavior of abnormal returns (Barth et al., 2001).

### **Empirical Review**

Ayed and Abaoub (2006) examined the value relevance of accounting earnings and components in the Tunisia Stock Exchange. Employing a sample of 262 firm-years, over the period from 1997 to 2004, in which the new accounting system of companies was introduced, but before the introduction of the standard of consolidation in 2005 in Tunisia. The objective of the study is to determine if the operating earnings before taxes, earnings components, and cash flow from operations are more value relevant in explaining returns. The study showed that operating income before taxes, special items and income taxes are value relevant for firm valuation and that cash flow from operation and accruals are not value relevant.

Oyerinde (2009) investigated the value relevance of accounting data in the Nigerian Stock Market, with the objective of establishing the relationship between accounting numbers and share prices in the Nigerian Stock Market. The study measures value relevance by the correlation coefficient between stock prices and some accounting numbers. The study shows that accounting information has the ability to capture information that affects equity values and that there is a relationship between accounting numbers and share prices in Nigerian Stock Market.

Halonon, Pavlovia, and Pearson (2013) employed a simplified Ohlson's (1995) model and investigated value relevance of financial reporting in Sweden after the introduction of the International Financial Reporting Standards in 2005. They found that value relevance of book values had increased but the value relevance of earnings had decreased over the period.

Melissa (2013) addressed the relationship between share price and bottom line accounting information as dividends, earnings and book value in the Nairobi Stock Exchange. The study shows that earnings and book values are significantly associated with share values, though book value was found to be least significant of the three variables.

Ayzer and Cema (2013) examined the value relevance of financial statement information in Turkish Stock Markets during the period 1997-2011, using the Ohlson (1995) model. Their result showed that combined book values and earnings are significantly value relevant in explaining stock prices in the Turkish Stock Markets. Book values and earnings were individually significantly value relevant, with book values having higher explanatory power than earnings.

Adaramola and Oyerinde (2014) examined the trend in value relevance of accounting information, using a sample of 66 listed companies in the Nigerian Stock Exchange. The study found that value relevance of accounting information did not follow any trend, but it was lower in the period of military dictatorship and global economic crisis.

Kargin (2013) examined the pre and post effect of IFRS adoption on accounting information on Turkish firms listed on Istanbul Stock Exchange excluding financial sector from 1998 to 2011, using Ohlson (1995) model to test value relevance of accounting data for firms with positive earnings. The study documented that value relevance of book value has increased with IFRS adoption but earnings have no significant incremental value relevance.

Lee, Walker, and Zeng (2013) conducted a research on Chinese industrial firms listed on Shanghai and Shenzhen Stock Exchange over the period from 2003 to 2009 and used pre-post analyses with 2007 as benchmark. It comprises of 10,017 firm-year observations which were split into treatment and control group based on time of IFRS adoption, that is, firms in treatment group consist of firms reporting based on Chinese GAAP before 2007 and IFRS as from 2007 while the control group consists of firms that have been reporting with IFRS even before 2007. The result showed no significant change in value relevance of accounting information for firms in the control group while firms in the treatment group experienced significant change in value relevance which can be attributed to IFRS adoption.

Asselman (2012) examined the influence of IFRS on the value relevance of earnings and cash flows in the Netherlands, based on a sample of 74 Dutch firms. The value relevance of earnings and cash flows is measured by regressing earnings and cash flows on stock prices and stock returns. The study shows that the value relevance of earnings has decreased after the adoption of IFRS while that of cash flow has increased after the adoption of IFRS.

Agostino, Drago, and Silipo (2011) in a study titled, *The Value Relevance of IFRS in the European Banking Industry*, investigated the market valuation of accounting information in the European banking industry before and after the adoption of IFRS. The objective was to find out the effects of earnings and book value on share prices on the adoption of IFRS. The study shows that the IFRS introduction enhanced the information content of both earnings and book value for more transparent banks.

Chalmers, Clinch, and Godfrey (2011) investigated if the adoption of IFRS increased the value relevance of accounting information for firms listed on the Australian Securities Exchange. Using a longitudinal study that covers pre-IFRS and post-IFRS periods during 1990-2008, the study finds that earnings become more value relevant whereas the book value of equity does not.

### **Research Methodology**

This study made use of the ex-post facto research design. Here the researchers observe the independent variables (which has already occurred) and study it retrospectively. Consequently, the study which is set to analyze the effect of IFRS adoption on value relevance of accounting information in Nigeria is best carried out using ex-post facto research design.

The population of the study is made up of all the consumer firms listed on the Nigerian Stock Exchange as at 2015. These consumer firms are 25 in number as published in Nigerian Stock Exchange website.

In selecting the sample for the study, the following were considered: sampled firms must be listed each year over the period from 2008 to 2015; sampled firms must have prepared their 2012-2015 financial reports in accordance with IFRS; sampled firms must have published financial statements for the eight years period from 2008 to 2015; and the shares of sampled firms must be actively traded in the period under consideration.

Based on the considerations above, 12 firms were selected. Therefore, the data used in the analysis consist of 12 consumer firms quoted on the Nigerian Stock Exchange from 2008 to 2015, a period of eight years. This gave a sample of 96 firm-years (observations). Moreover, this study focused on secondary sources of data. Historical data of earnings per share, book value per share, and cash flow from operations were collected from published annual reports and accounts of firms available on the firms' website. Also, closing share prices data (three months after year end) of sampled firms were collected from the database of Capital Assets (<http://www.capitalassets.com.ng/>).

The secondary data extracted were analyzed using the multiple regression technique in order to test the formulated hypotheses. Moreover, supportive analyses were carried out using descriptive statistics which provided information on the mean, standard deviation, minimum and maximum values of the set of data analyzed.

Variables used in the study are as follows:

Dependent variable:

Market share price (MSP): The share price used in the research is the price of firms' shares three months after the firms' year end, as suggested by Dung (2010), using prices sometime after year end has the advantage of impounding more fully the accounting information at year end.

Independent variables:

(1) IFRS: In this study, the value "0" is assigned to the pre-IFRS period while the value "1" is assigned to the post-IFRS period;

(2) Book value per share (BV);

(3) Earnings per share (EPS);

(4) Cash flow per share (CF).

### Model Specification

The study adapted the Ohlson (1995) valuation model, which states that the firm value is a linear function of book values of owners' equity and earnings. Moreover, Ohlson model was modified to accommodate cash flow from operations, as it may provide additional information about firms' financial situations not captured in earnings and book value in the context of the Nigerian economy (Ortega, 2006). The model is further modified to see the changes in the value relevance of accounting data after IFRS adoption.

The basic model derived within the Ohlson (1995) framework, stated as:

$$MSP = \alpha_0 + \beta_1 BV + \beta_2 EPS + \varepsilon \quad (1)$$

The basic model was modified to accommodate cash flow, thus the model is stated as:

$$MSP = \alpha_0 + \beta_1 BV + \beta_2 EPS + \beta_3 CF + \varepsilon \quad (2)$$

The model was further modified to see the changes in the value relevance of accounting data after IFRS adoption:

$$MSP = \alpha_0 + \beta_0 IFRS + \beta_1 BV + \beta_2 EPS + \beta_3 CF + \beta_4 IFRS * BV + \beta_5 IFRS * EPS + \beta_6 IFRS * CF + \varepsilon \quad (3)$$

Pre- and post-IFRS dummy variables (IFRS) were used, so as to detect changes in coefficients. “0” was used for pre-IFRS period (2008-2011) and “1” was for the post-IFRS period (2012-2015).

In order to test the formulated hypotheses, the model is split as follows:

$$\text{Model 1 for H1; } MSP = \alpha_0 + \beta_0 IFRS + \beta_1 BV + \beta_2 IFRS * BV + \varepsilon \quad (4)$$

$$\text{Model 2 for H2; } MSP = \alpha_0 + \beta_0 IFRS + \beta_1 EPS + \beta_2 IFRS * EPS + \varepsilon \quad (5)$$

$$\text{Model 3 for H3; } MSP = \alpha_0 + \beta_0 IFRS + \beta_1 CF + \beta_2 IFRS * CF + \varepsilon \quad (6)$$

where  $\alpha_0$  is the slope which is the coefficient of the independent variables,  $MSP$  is market share price,  $BV$  is book value of owners' equity per share,  $IFRS*BV$  is the interaction effect between IFRS and book value of owners' equity per share,  $EPS$  is earnings per share,  $IFRS*EPS$  is the interaction effect between IFRS and earnings per share,  $CF$  is cash flow from operations per share,  $IFRS*CF$  is the interaction effect between IFRS and cash flow from operations per share, and  $\varepsilon$  is the residual error.

#### Decision Rule

$B_2$  presents coefficients of book value, earnings and cash flow for the pre- and post-IFRS periods (That is the interaction effect between IFRS and the independent variables). If the coefficient is positive (negative), which means the variable's value relevance increases (decreases) in the post-IFRS period, then the null hypothesis will be rejected, but if the coefficient is zero, then the null hypothesis will be accepted.

#### Data Presentation and Analysis

For the pre-IFRS period, the market share price ranged from 3.78 to 425.50 (see Table 1), with a mean of 62.96 and a standard deviation of 95.14. The book value per share ranged from (2.74) to 31.00, with a mean of 9.26 and a standard deviation of 9.11. Moreover, the earnings per share ranged from (2.44) to 21.21, with a mean of 3.67 and a standard deviation of 5.06, while the cash flow from operation per share ranged from (1.91) to 26.04, with a mean of 5.33 and a standard deviation of 6.54. However, for the post-IFRS period, the market share price ranged from 3.66 to 1,050 (see Table 2), with a mean of 128.15 and a standard deviation of 243.16. Book value per share ranged from 1.64 to 51.21, with a mean of 15.88 and a standard deviation of 15.14. Also, the earnings per share ranged from (1.17) to 29.95, with a mean of 4.59 and a standard deviation of 7.74, while the cash flow from operations per share ranged from (1.56) to 50.31, with a mean of 8.87 and a standard deviation of 12.54. Subsequently, the mean of the whole variables showed an increase from the pre-IFRS adoption period to the post-IFRS adoption period. This may indicate that the values are influenced by different economic circumstances during the period.



Table 1

*Descriptive Statistics of Pre-IFRS Data*

Variable	<i>N</i>	Minimum	Maximum	Mean	Std. deviation
Market share price	48	3.78	425.50	62.9592	95.14338
Book value per share	48	-2.74	31.00	9.2637	9.10878
Earnings per share	48	-2.44	21.21	3.6665	5.06262
Cash flow from operations per share	48	-1.91	26.04	5.3331	6.53761
Valid <i>N</i> (listwise)	48				

Table 2

*Descriptive Statistics of Post-IFRS Data*

Variable	<i>N</i>	Minimum	Maximum	Mean	Std. deviation
Market share price	48	3.66	1,050.00	128.1473	243.16352
Book value per share	48	1.64	51.21	15.8800	15.14131
Earnings per share	48	-1.17	29.95	4.5948	7.74171
Cash flow from operations per share	48	-1.56	50.31	8.8696	12.54043
Valid <i>N</i> (listwise)	48				

Note. Source: Statistical computation extract from SPSS Version 22.

Testing of Hypothesis 1:  $H_0$  – There is no significant difference between the value relevance of book value before and after adoption of IFRS.

Table 3

*Model 1 Summary*

Model	<i>R</i>	<i>R</i> square	Adjusted <i>R</i> square	Std. error of the estimate
1	0.740 <sup>a</sup>	0.547	0.533	127.52923

Notes. <sup>a</sup>: Predictors: (Constant), interaction effect between IFRS and BV, IFRS, book value per share. Source: Statistical computation extract from SPSS Version 22.

Table 3 above showed the value of *R* square, which measured the proportion of the variation in the dependent variable explained by the model. *R* square is the most common measure of how well a regression model fits the data. Thus, as it is shown above, the value of the *R* square is 0.547, which means that 55% of the variation in the market share price are explained by the independent variables. Therefore, the model moderately fits. Moreover, Table 4 reported significant *F* statistics.

Table 4

*Coefficients<sup>a</sup> of Model 1 ( $MSP = \alpha_0 + \beta_0 IFRS + \beta_1 BV + \beta_2 IFRS * BV + \varepsilon$ )*

Model	Unstandardized coefficients		Standardized coefficients	<i>T</i>	Sig.
	<i>B</i>	Std. error	Beta		
(Constant)	-3.749	26.396		-0.142	0.887
1 IFRS	-55.842	37.632	-0.150	-1.484	0.141
Book value per share	7.201	2.042	0.497	3.526	0.001
Interaction effect between IFRS and BV	4.621	2.383	0.330	1.939	0.056

Notes. <sup>a</sup>: Dependent variable: market share price. Source: Statistical computation extract from SPSS Version 22.

From Table 4, the estimated regression Model 1 for Hypothesis 1 is reflected as follows:

$$MSP = -3.749 - 55.842IFRS + 7.201BV + 4.621IFRS * BV + \varepsilon$$

The coefficient of the interaction between IFRS and BV is 4.621. Therefore, the value relevance of book value per share in determining share price has increased significantly in the post-IFRS period. Based on the decision rule stated earlier, it becomes reasonable to reject the null hypothesis ( $H_0$ ) and accept the alternate hypothesis which states that there is a significant difference between the value relevance of book value in determining share price before and after adoption of IFRS.

Testing of Hypothesis 2:  $H_0$  – There is no significant difference between the value relevance of earnings before and after adoption of IFRS.

Table 5

*Model 2 Summary*

Model	R	R square	Adjusted R square	Std. error of the estimate
1	0.964 <sup>a</sup>	0.930	0.928	50.20202

Notes. <sup>a</sup>: Predictors: (Constant), interaction effect between IFRS and EPS, IFRS, earnings per share. Source: Statistical computation extract from SPSS Version 22.

Table 5 above showed the value of R square, which measured the proportion of the variation in the dependent variable explained by the model. Thus, as it is shown above, the value of the R square is 0.930, which means that 93% of the variation in the market share price are explained by the independent variables. Therefore, the model moderately fits. Moreover, Table 6 reported significant F statistics.

Table 6

*Coefficients<sup>a</sup> of Model 2 ( $MSP = \alpha_0 + \beta_0 IFRS + \beta_1 EPS + \beta_2 IFRS * EPS + \varepsilon$ )*

Model	Unstandardized coefficients		Standardized coefficients	T	Sig.
	B	Std. error	Beta		
(Constant)	-3.023	8.979		-0.337	0.737
1 Earnings per share	17.996	1.446	0.629	12.442	0.000
IFRS	-7.953	12.330	-0.021	-0.645	0.521
Interaction effect between IFRS and EPS	12.282	1.728	0.389	7.107	0.000

Notes. <sup>a</sup>: Dependent variable: Market share price. Source: Statistical computation extract from SPSS Version 22.

From Table 6, the estimated regression Model 2 for Hypothesis 2 is reflected as follows:

$$MSP = -3.023 - 7.953IFRS + 17.996EPS + 12.282IFRS * EPS + \varepsilon$$

The coefficient of the interaction between IFRS and EPS is 12.282. Therefore, the value relevance of book value per share in determining share price has increased significantly in the post-IFRS period. Based on the decision rule stated earlier, it becomes reasonable to reject the null hypothesis ( $H_0$ ) and accept the alternate hypothesis which states that there is a significant difference between the value relevance of earnings per share in determining share price before and after adoption of IFRS.

Testing of Hypothesis 3:  $H_0$  – There is no significant difference between the value relevance of cash flow in determining share price before and after adoption of IFRS.

Table 7

*Model 3 Summary*

Model	R	R square	Adjusted R square	Std. error of the estimate
1	0.855 <sup>a</sup>	0.732	0.723	98.23144

Notes. <sup>a</sup>: Predictors: (Constant), interaction effect between IFRS and CF, IFRS, cash flow from operations per share. Source: Statistical computation extract from SPSS Version 22.

Table 7 above showed the value of  $R$  square, which measured the proportion of the variation in the dependent variable explained by the model. Thus, as it is shown above, the value of the  $R$  square is 0.732, which means that 73% of the variation in the market share price are explained by the independent variables. Therefore, the model moderately fits. Moreover, Table 8 reports significant  $F$  statistics.

Table 8

*Coefficients<sup>a</sup> of Model 3 ( $MSP = \alpha_0 + \beta_0 IFRS + \beta_1 CF + \beta_2 IFRS * CF + \varepsilon$ )*

Model	Unstandardized coefficients		Standardized coefficients	$T$	Sig.
	B	Std. error	Beta		
(Constant)	-4.413	18.375		-0.240	0.811
1					
Cash flow from operations per share	12.633	2.192	0.684	5.764	0.000
IFRS	-13.201	25.326	-0.036	-0.521	0.603
Interaction effect between IFRS and CF	3.801	2.472	0.201	1.538	0.128

Notes. <sup>a</sup>: Dependent variable: Market share price. Source: Statistical computation extract from SPSS Version 22.

From Table 8, the estimated regression Model 3 for Hypothesis 3 is reflected as follows:

$$MSP = -4.413 - 13.201IFRS + 12.633CF + 3.801IFRS * CF + \varepsilon$$

The coefficient of the interaction between IFRS and CF is 3.801. Therefore, the value relevance of book value per share in determining share price has increased significantly in the post-IFRS period. Based on the decision rule stated earlier, it becomes reasonable to reject the null hypothesis ( $H_0$ ) and accept the alternate hypothesis which states that there is a significant difference between the value relevance of earnings per share in determining share price before and after adoption of IFRS.

### Discussion of Findings

The findings from the analyzed data based on the regression results of share prices and accounting information proxies are as follows:

It was gathered that the value relevance of book value of equity has increased in the post-IFRS period. This means that IFRS has a positive significant effect on the ability of book value to determine share price. This is in consonance with the study of a number of researchers such as Oyerinde (2009), Lee et al. (2013), Kargin (2013), Ayzer and Cema (2013) and Halonen et al. (2013) who are indicating that book value is more value relevant in the post-IFRS period. Furthermore, on the effect of IFRS adoption on earnings, this study discovered that the value relevance of earnings has the highest significant increase in the post-IFRS period. Though this is in agreement with the study of Agostino et al. (2011), Melissa (2013) and Onipe, Joseph, and Safiya (2015), it contradicted the works of researchers like Halonen et al. (2013) which stated that the value relevance of earnings decreased after IFRS adoption in Sweden and Kargin (2013) which also stated that earnings have no incremental value relevance in post-IFRS period in Turkish firms listed in the Istanbul Stock Exchange.

Lastly, it was ascertained that cash flow from operations has incremental value relevance upon the adoption of IFRS, though with the least significant increase when compared to earnings and book value. This conforms to the study of Asselman (2012) who stated that cash flow is value relevant in the Netherlands after IFRS adoption, but contradicts the part that states that it is more value relevant than earnings. Moreover, it contradicts the work of Ayed and Abaoub (2006) which stated that cash flow is not value relevant in Tunisia Stock Exchange.

## Conclusion

This study was set out to empirically analyze the effect of IFRS adoption on the value relevance of accounting information in Nigeria. Since the adoption of IFRS in numerous countries, the academic literature is filled with numerous issues related to its adoption. This study is an attempt to showcase the effect of the adoption from the perspective of a developing country.

Our findings revealed that IFRS adoption had a positive significant effect on the value relevance of earnings, book value of equity and cash flow from operations. The findings are consistent with most of the previous studies that also researched on such effect.

## Recommendations

Based on the research findings, the following recommendations are made to address the research problem:

(1) Since the value relevance of accounting information has increased after the adoption of IFRS, investors should consider the values of earnings, book values of equity and cash flow from operations in the annual reports of firms prepared in accordance with IFRS before making any investment decision. However, more emphasis should be laid on earnings;

(2) Regulators in order to improve the investment scenario should ensure that accounting information communicated to the investing public are adequately prepared in accordance with IFRS to avoid wrong investment decisions by investors, with fatal consequences to the economy;

(3) Firms yet to adopt IFRS in Nigeria should do so because it will make their financial statement comparable, transparent and rich in quality thereby boosting investors' confidence to invest in their company;

(4) Management of listed firms must pay attention to the magnitude of earnings reported in their financial statements. Moreover, since earnings have demonstrated to be more associated with share price, firms should undertake innovation and investments that generate more earnings. Therefore, companies must pay attention to business expenses and find innovative ways of cutting down expenses in order to generate superior earnings.

## Suggestions for Further Studies

Finally, for future research, we suggest the following:

(1) This study examined only consumer firms listed on the Nigerian Stock Exchange. Future research can examine the effect of IFRS adoption on value relevance of accounting information of other sectors listed in the Nigerian Stock Exchange;

(2) The study only examined the effect of IFRS adoption on reported earnings and book values of equity and cash flow from operations. Other accounting figures like dividend, goodwill and intangible assets may be considered in further research;

(3) This study only covered a period of eight years from 2008 to 2015. Future studies can increase the scope and also investigate the effect of IFRS adoption on value relevance of accounting information considering the period of collapse (financial crisis) in the Nigerian stock market.

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