

Effect of Value Relevance of Accounting Information on IFRS Adoption of Deposit Money Banks in Nigeria

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ABSTRACT

The study assessed the value relevance of accounting information on deposit money banks in Nigeria during IFRS financial periods. *Ex Post Facto* design and time series data were used for the purpose of this research. This study made use of ten selected deposit money banks quoted on the Nigerian Stock Exchange. The study covered eight years annual reports and accounts of these deposit money banks. The data collected for the study were tested using Regression analysis and Chow test statistical and revealed that book value per share and earnings per share are value relevant in determining share price of deposit money banks in Nigeria after the adoption of IFRS. The study therefore recommended among others that since earnings have not been demonstrated to be value relevant in determining market price, banks should undertake investments that generate more earnings.

Keywords: Accounting Information, IFRS Adoption, book value per share and earnings per share.

INTRODUCTION

Years back, accounting information has focused increasingly on evaluating the relevance of accounting information. It believed ancient method of financial statements had lost their usefulness with the transition from industrialized economy to modernized economy.

In Nigeria, the banking sector is one of the strong pillars of economic development. It enhances transfer of funds between the surplus and the deficit economic units, thereby promoting investments and

economic growth. Adding that the more increase in investment in the sector the more performance of the economy improved (Adebimpe & Ekwere, 2015). The ability of the financial statement to guide investors effectively and satisfactorily on their investment decisions will depends on the usefulness of the information contains in the financial statements (Adebimpe & Ekwere, 2015). The quality of accounting information like share price and other performance indices are essential for any meaningful investment in Nigerian bank. Investors usually rely on management for reliable information in financial statements, for assessing risk and value of a firm before investing their capital.

Many studies have also been carried out on value relevance of accounting information: some of these researchers were carried out before the adoption of IFRS in Nigeria. Studies have been carried out after the IFRS adoption in Nigeria. In addition, most of the studies carried out after the adoption of IFRS Found that value relevance has significant positive effect on accounting information following the adoption of IFRS in Nigeria while other studies reported negative impact following the IFRS adoption in the country. The lack of consensus on the theories and the empirical literature calls for more empirical studies to determine whether IFRS adoption in Nigeria actually affected the relevance of accounting information. Therefore, this study assesses the value relevance of accounting information in Nigerian deposit money banks during IFRS financial periods

using, market price, book value per share and earning per share.

The study assesses the value relevance of accounting information in Nigerian deposit money banks during IFRS financial periods. The specific objectives are:

1. *To ascertain if earnings per share is value relevant in determining share price of deposit money banks in Nigeria after the adoption of IFRS.*
2. *To determine the value relevant of book value of equity in determining share price of deposit money banks in Nigeria after the adoption of IFRS.*

REVIEW OF RELATED LITERATURE

IFRS Adoption in Nigeria

The story of the tower of Babel signified that anything can be achieved when there is uniformity in language. In this same vein, the evolution of accounting (seen as the language of business) strives towards “a uniform language” which is the adoption of International Financial Reporting Standards in many countries of the world. Accounting standards are not only seen as important regulatory devices but also act as a unifying template connecting the interest of the users of financial statement.

It will not be totally wrong to conclude that the adoption of IFRS and the enactment of the Financial Reporting Council Act, 2011 were triggered by the nation’s sense of belonging since IFRS has already been embraced by over 122 countries. This sense of belonging and not feeling left out can be seen as positive when the growth and development of the nation is at stake. According to Asein (2011), it was expedient and in the best interest of the nation to raise and benchmark the quality of its financial reporting on current global best practices by adopting IFRS in order to achieve its goal of becoming one of the twenty largest economies of the world by year 2020 (vision 20:2020 goals). It can be deduced from Obazee (2011), that the move towards adopting the IFRS was majorly

triggered by the nation’s objective to realize the full gains of cross border listing.

Value Relevance

Value relevance is the ability of the accounting variables contained in the financial statement to explain the market price of shares. Value relevance of accounting information is defined as the ability of accounting numbers contained in the financial statements to explain the stock market measures (Beisland, 2009). In other words, value relevance is the ability of information contained in the financial statements to capture the value of firm. Value relevance can be estimated by the relationship between financial statements information and share price (returns).

A business enterprise specifically a company is a conscious, deliberate and purposeful creation for satisfying the domain of aspiration of the society at large.

Value relevance refers to the capacity of information to influence the decision making process of users. The users should be in a position to make predictions about the future with the available information. Information in order to be relevant should be made available to the user before it loses its capacity to influence decisions and therefore it should be apt and well-timed.

Furthermore, considering the financial variables it can be further classified into Earnings, book value, dividends and cash flows, Accruals and relevance of financial statements. There is also another category which deals with the declining relevance of financial and accounting variables. Though value relevance literature is mature yet it has been criticized because, it relies on the assumption that the accounting standard is preferred if it has a significant association with the market value.

Empirical Studies

Babalola (2012) ascertained the value relevance of accounting information in Nigerian corporate firms. The study used

regression analysis to test the data and the study shows that earnings is more value relevant than book values by extension that, the information contained in the income statements, as ably proxy by the earnings, dictates more the corporate values of firms in Nigeria than the information contained in the balance sheet, as ably proxy by the book values. Adebimpe and Ekwere (2015) determined the extent compulsory IFRS adoption has improved the value relevance of financial information of commercial banks in Nigeria. Oshodin and Mgbame (2014) conducted a comparative study on the value relevance of information contains in accounting statement of Nigerian banking and Petroleum sectors. Multiple regressions analysis was used to test the formulated hypotheses. The findings shows that EPS information is the most considered by investors when deciding the share price and that the financial information in the oil and gas is more value relevant compare to the financial information disclosed by companies in the banking sector. Keong (2010) examined whether the inclusion of the linear information dynamics besides the accounting variables will increase the explanatory power of the model. The findings showed that the residual income model and the Ohlson model in particular, forms a useful framework for exploring empirical relationships between share prices and accounting information. The findings also suggested that the model should be further tested using the composite measures, that is return on equity and dividend per equity, rather than focus on equity, earnings and dividends, as separate measures, to confirm whether using ROE an dividend per equity as the explanatory variables could improve the model. Adaramola and Oyerinde (2014) ascertained the value relevance of accounting information of quoted companies in Nigeria using a trend analysis. The study employed Ordinary Least Square (OLS) regression and the result reveals that accounting information on quoted companies in Nigeria is value relevant. However, the study reveals further

that the value relevance of accounting information does not follow a particular trend within the period under study. While the value relevance was weak in the periods of political crisis caused by military dictatorship (1992-1998) and global economic crisis (2005-2009), it was high in the other periods. Ezejiofor (2018) studied the value relevance of financial information in Nigerian manufacturing companies under IFRS. The study collected data for the study from annual reports accounts of the companies using regression analysis and chow test were employed. Findings indicate that earnings, book value per share and cash flow have improved following the adoption of IFRS. Omokhudu and Ibadin (2015) studied accounting information and firm value from an emerging market context. Regression analysis was used and the study found that and found that earnings, cash flow and dividends were statistically significantly with firm value while book value was related but not statistically significant.

A review of empirical studies conducted in foreign countries and Nigeria show mixed results. A number of these studies consequently conducted before the adoptions of IFRS in Nigeria. However, the prior studies reports were inconsistent and characterized with one or two common statistical tool; this gives room to methodological gap. This study therefore employs a difference statistical tool in order to confirm this uncertainty from the prior reports.

METHODOLOGY

Ex Post facto research design was used in this study, which is the aspect of statistic that involves the various techniques of describing data were collected for the purpose of this study. This design will also enable the researcher to describe and analyze the data obtained for the study. The researcher used purposive sampling techniques to select ten commercial banks. These banks were selected on the basis of availability of data to extract all the

variables needed for the study. The sampled banks are in appendix.

Model Speculation

The study modified Ohlson (1995) Model:

$$SP_{it} = a_0 + \mu_i + \beta_1 BVPS_{it} + \sum_{it} \dots \dots \dots (i)$$

$$SP_{it} = a_0 + \mu_i + \beta_2 EPS_{it} + \sum_{it} \dots \dots \dots (ii)$$

Where:

The independent variable: share price (SP) and

The dependent variables:

BVPS = Book value of per share

EPS = Earnings per share

a₀ = slope of the model

β₁, β₂, , = coefficient of parameters.

i for the financial year ending at year t.

μ = Mean of population

β₀ = Constant or intercept.

e_{jt} = Error term.

Chow Specification

a) A single or pooled regression to fit the whole series of data (before and after IFRS adoption)

$$Y_1 = a_i + b_i X_1 + u_i$$

Where Y₁ = Share price (SP)

X₁ = book value per share (BVPS), earnings per share (EPS) and cash flow (CSHFLW)

b) Regression for the period before 2012 adoption of IFRS

$$Y_2 = a_i + b_i X_2 + u_i$$

Where Y₂ = share price (SP)

X₂ = book value per share (BVPS) earnings per share (EPS) and cash flow (CSHFLW)

c) Regression for the periods after the 2012 adoption of IFRS;

$$Y_3 = a_i + b_i X_3 + u_i$$

Where Y₃ = share price (SP)

X₃ = book value per share (BVPS) earnings per share (EPS) and cash flow (CSHFLW)
Chow test statistics is obtained as follows;

$$F = \frac{RSS_1 - (RSS_2 + RSS_3) / k}{RSS_2 + RSS_3 / n - 2k}$$

Where: RSS = Sum of Square residual

k = Total number of variable included

n = Total sample size

Method of Data Analysis

To determine whether IFRS has impacted on value relevance, the study divided the periods into pre-IFRS (2009-2012) and post-IFRS (2013-2016).

Regression analysis and Chow test were employed to determine if there is a significant between the pre-IFRS and post IFRS on value relevance of accounting information. The control variable is market price while the independents variables are book value per share (BVPS), earnings per share (EPS) and cash flow (CSFLW). The data for these variables were collected from ten commercial banks quoted on the Nigerian Stock Exchange (NSE).

The data collected for the study were firstly, the data were analyzed to get there financial ratios thereafter analyzed with descriptive statistics and then be tested with the aid of SPSS version 20.0

Decision Rule:

If the Chow test statistics is greater than the tabulated F-value, then the null hypothesis that is no structural break of change (that is there is no significant change) is rejected and vice versa

DATA PRESENTATION AND ANALYSIS

Data Analysis

Table 1: Descriptive Statistics of share price, earnings per share and book value per share (Pre-IFRS)					
	N	Mean	Std. Deviation	Skewness	
	Statistic	Statistic	Statistic	Statistic	Std. Error
SP	4	5.0163	2.76530	1.696	1.225
EPS	4	3.9800	.99594	-.225	1.225
BVPS	4	60.2597	8.45731	1.029	1.225
Valid N (listwise)	4				

From the descriptive statistics of Pre-IFRS the variables as shown observed that the mean SP is 5.02. The standard deviation stood at 2.77. The mean value for EPS is 3.98 while the standard deviation is 1.00. The mean value for BVPS is 60.26 with maximum and minimum values of 69.56 and 53.02 respectively while the standard deviation is 8.46.

Table 2: Descriptive Statistics of share price, earnings per share and book value per share (Post-IFRS)

	N	Mean	Std. Deviation	Skewness	
	Statistic	Statistic	Statistic	Statistic	Std. Error
SP	4	12.4557	.90039	-1.732	1.225
EPS	4	12.4467	.84878	-1.522	1.225
BVPS	4	78.0200	3.59800	-.008	1.225
Valid N (listwise)	4				

From the descriptive statistics of Post-IFRS, the variables as shown observed that the mean SP is 12.46. The standard deviation stood at 0.90. The mean value for EPS is 12.45 while the standard deviation is 0.85.

Test of Hypotheses

Hypothesis one

H₀: Earning per share is not value relevance in determining share price of deposit money banks in Nigeria after the adoption of IFRS.

Table 3: Separate regression (before IFRS adoption for EPS)

Dependent Variable: EPS

Method: Ordinary Least Square (OLS)

Sample: 4YEAR

Included Observation: 15

VARIABLE	Coefficient	Std.Error	t-Statistic	Prob
SP	-3324.033	2937.548	-1.132	0.10
EPS	-6.828	7.884	-0.866	0.279
R ²	0.273	Mean dependent Var		246060.588
Adjusted R ²	-0.091	S.D Dependent Var		25793.976
RSS ₁	64064878.204	Durbin-Watson Statistics		0.799
F	0.750			
d.f	2			
N	15			

Source: Regression Data Analysis (2018)

Table 4: Separate regression (After IFRS adoption for EPS)

Dependent Variable: EPS

Method: Ordinary Least Square (OLS)

Sample: 4YEARS

Included Observation: 15

VARIABLE	Coefficient	Std.Error	t-Statistic	Prob
SP	127.583	10.784	11.831	0.688
EPS	.007	.029	0.259	0.101
R ²	0.032	Mean dependent Var		273.6
Adjusted R ²	-0.451	S.D Dependent Var		45.092
RSS ₂	863.391	Durbin-Watson Statistics		1.141
F	0.67			
d.f	2			
N	15			

Source: Regression Data Analysis (2018)

Table 5: Pooled regression (before and after IFRS adoption for EPS)

Dependent Variable: EPS

Method: Ordinary Least Square (OLS)

Sample: 8YEAR

Included Observation: 15

VARIABLE	Coefficient	Std.Error	t-Statistic	Prob
SP	-614.372	1486.609	-0.413	0.004
EPS	4.895	4.715	1.038	0.874
R ²	0.152	Mean dependent Var		259.6
Adjusted R ²	0.011	S.D Dependent Var		37.60
RSS ₃	87669276.107	Durbin-Watson Statistics		0.723
F	1.078			
d.f	6			
N	15			

Source: Regression Data Analysis (2018)

To compute the Chow Test using the formula thus;

$$F_{cal} = \frac{RSS_1 - (RSS_2 + RSS_3) / k}{RSS_2 + RSS_3 / n - 2k}$$

()- t-value, RSS – Residual Sum of Squares, ** - (p<0.05) – significant at $\alpha= 0.05$

The tables above shows that;
Sum of Square residual for periods before and after IFRS adoption =87669276.107
Sum of Square residual for periods before IFRS adoption =64064878.204
Sum of Square residual for periods after IFRS adoption =863.391

Following the *F* distribution with (n-2k) df in the numerator and the denominator respectively, in this study, $k = 2$, since there are only two parameters in each sub-regression and $n = 15 - 4 = 11$

Therefore,

$$F_{cal} = \frac{RSS_1 - (RSS_2 + RSS_3) / k}{RSS_2 + RSS_3 / n - 2k}$$

$$= \frac{87669276.107 - (64064878.204 + 863.391) / 2}{64064878.204 + 863.391 / 15 - 2 \times 2}$$

$$= \frac{87669276.107 - 64065741.6 / 2}{64065741.6 / 11}$$

$$= \frac{11801767.2}{1281314.83}$$

$$= 9.2107$$

$$F_{tab} = F_{\alpha, [k, (n-2k)]} = F_{0.05, [2, 6]} = 5.143$$

From the results Chow Test computed above, at $\alpha=0.05$, $F_{cal}= 9.2107 > F_{tab}= 5.143$ at (2, 6) degree of freedom. We therefore accept the alternative hypothesis (H_1) and conclude that there is a structural change on EPS after adoption of IFRS on 0.05 level of significance. This implies that since adoption of IFRS in the firms at 0.05 level of significance, there is a change in the EPS. Overall, this study has found that earnings per-share is value relevance in determining the share price of deposit money banks in Nigeria after the adoption of IFRS.

Hypothesis Two

H_0 : Book value per share is not value relevance in determining share price of deposit money banks in Nigeria after the adoption of IFRS.

Table 6: Separate regression (before IFRS adoption for BVPS)

Dependent Variable: BVPS
Method: Ordinary Least Square (OLS)
Sample: 4YEAR
Included Observation: 15

VARIABLE	Coefficient	Std.Error	t-Statistic	Prob
SP	-13624.590	13813.632	-0.986	0.01
BVPS	32.571	40.067	0.813	0.49
R ²	.248	Mean dependent Var		245.6
Adjusted R ²	-.127	S.D Dependent Var		25.637
RSS ₁	66212063.052	Durbin-Watson Statistics		1.991
F	0.661			
d.f	2			
N	15			

Source: Regression Data Analysis (2018)

Table 7: Separate regression (After IFRS adoption for BVPS)

Dependent Variable: BVPS
Method: Ordinary Least Square (OLS)
Sample: 4YEARS
Included Observation: 15

VARIABLE	Coefficient	Std.Error	t-Statistic	Prob
SP	85.381	14.630	5.836	0.302
BVPS	.049	.017	2.980	0.221
R ²	0.816	Mean dependent Var		273.6
Adjusted R ²	0.724	S.D Dependent Var		45.092
RSS ₂	164.048	Durbin-Watson Statistics		2.63
F	8.879			
d.f	2			
N	15			

Source: Regression Data Analysis (2018)

Table 8: Pooled regression (before and after IFRS adoption for BVPS)

Dependent Variable: BVPS

Method: Ordinary Least Square (OLS)

Sample: 8YEAR

Included Observation: 15

VARIABLE	Coefficient	Std.Error	t-Statistic	Prob
SP	-3735.929	2842.859	-1.314	0.000
BVPS	4.217	4.247	0.993	0.815
R ²	0.141	Mean dependent Var		259.6
Adjusted R ²	-0.002	S.D Dependent Var		37.598
RSS ₃	88823204.249	Durbin-Watson Statistics		0.668
F	0.986			
d.f	6			
N	15			

Source: Regression Data Analysis (2018)

To compute the Chow Test using the formula thus;

$$F_{cal} = \frac{RSS_1 - (RSS_2 + RSS_3) / k}{RSS_2 + RSS_3 / n - 2k}$$

()- t-value, RSS – Residual Sum of Squares, ** - (p<0.05) – significant at $\alpha = 0.05$

The tables above shows that;

Sum of Square residual for periods before and after IFRS adoption = 88823204.249

Sum of Square residual for periods before IFRS adoption = 66212063.052

Sum of Square residual for periods after IFRS adoption = 164.048

Following the *F* distribution with (n-2k) df in the numerator and the denominator respectively, in this study, $k = 2$, since there are only two parameters in each sub-regression and $n = n - 2k = 15 - 4 = 11$

Therefore,

$$F_{cal} = \frac{RSS_1 - (RSS_2 + RSS_3) / k}{RSS_2 + RSS_3 / n - 2k}$$

$$= \frac{(88823204.249 - (66212063.052 + 164.048) / 2)}{66212063.052 + 164.048 / 15 - 2 \times 2}$$

$$= \frac{88823204.249 - 66212227.100 / 2}{66212227.100 / 11}$$

$$= \frac{11305488.6}{1324244.54}$$

$$= 8.5373$$

$$F_{tab} = F_{\alpha, [k, (n - 2k)]} = F_{0.05, [2, 6]} = 5.143$$

From the results Chow Test computed above, at $\alpha = 0.05$, $F_{cal} = 8.5373 > F_{tab} = 5.143$ at (2, 6) degree of freedom. We therefore accept the alternative hypothesis (H_1) and conclude that there is no structural change on organizational BVPS after adoption of IFRS method on 0.05 level of significance. This implies that since adoption of IFRS in

the firms at 0.05 level of significance there is a structural change in the BVPS. We therefore conclude that book value per share is value relevance in determining share price of banks in Nigeria after the adoption of IFRS.

CONCLUSION AND RECOMMENDATIONS

This study has investigated the value relevance of accounting information in Nigeria before and after the implementation of IFRS in Nigeria using book value per share, earnings per share and share price. The implication of using these variables is that these variables are strongly associated with firm value and thus value relevant. The result shows that book value of equity determines the value relevance of share price of banks in Nigeria after the adoption of IFRS while earnings per share do not. It is an indication that earnings reported by banks have is relevance to equity investors in determining the value of banks following IFRS adoption.

The study discovered that mean of share price, earnings per share and book value per share indicate an increase from the pre-IFRS to the post-IFRS period. This enhances growing economy and capital market starting before the IFRS periods to after the IFRS periods. This therefore evidence that there is value relevance during Post-IFRS on share price, earnings per share and book value per share.

1. Since earnings have not been demonstrated to be value relevant in determining market price, banks should

undertake investments that generate more earnings.

2. Nigerian banks should emphasis more on business expenses and minimizing cost economically in order to generate superior earnings.

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