

Impact of International Financial Reporting Standards Adoption on Financial Reporting of Agricultural Firms in Nigeria

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Abstract

Since the adoption of IFRS in Nigeria, most of the empirical studies have been geared towards the impact of IFRS adoption on financial reporting with little effort towards the impact of IFRS adoption on financial reporting of Agricultural Firms in Nigeria by comparing the two periods. The study examined the impact of IFRS adoption on financial reporting of Agricultural Firms in Nigeria. The coverage of the study is the period of sixteen years with eight years which was disaggregated into two periods: pre covering eight years and covering eight years. The study also covered all the five listed agricultural companies. The theoretical strength of the study was drawn in Efficient Market Hypothesis and the technique employed to analyze the data OLS regression model. The study established that book value and cash flow are relatively useful in explaining share prices in pre adoption period while in post adoption period only earnings has explanatory power to share prices. The study recommended that book value and cash flow are relatively useful in explaining share prices in pre adoption period while in post adoption period only earnings has explanatory power to share prices.

Keywords: IFRS, Financial Reporting, Agriculture, Adoption

INTRODUCTION

Impact of IFRS adoption on financial reporting of agricultural firms in Nigeria has been an area of research since late sixties following the efforts of researchers to empirically evaluate accounting income numbers. The impact of IFRS adoption on Financial Reporting of Agricultural, is seen as an ability of information generated through accounting system to capture the value of shares and serves as pointer of statistical association between values of shares in the markets and accounting numbers (Herbohn & Herbohn, 2006). In addition to that, accounting is believed to be an information system through which information is generated which enables relevant economic units to take well informed decisions. For accounting information to serve as input for well informed decision, it should be generated within a reliable financial reporting framework; that is to say using standards that represent the realities of economic activities of entities under consideration. Within the framework of accounting, information is seen as any fact, financial or otherwise, generated from a record keeping system of an entity through available sources like financial statements, verbal statement or any special reports which investors depend on in order to take their decisions (Abubakar, 2011). Since the investment decisions taken by investors are based on accounting information made readily available, the information should be of high quality. To investors, accounting information is only of high quality if it is value relevant helping them to maximize returns on their investments and minimize risks. With globalization of business world, it is believed that in order to enhance the reliability and comparability of accounting information, there is the need for harmonization of standards that guide the preparation of financial statements by all countries in the world. And this can only be achieved if all countries in the world prepare their financial statements using the same accounting standards (Rodosthenous, 2017).

In response to this, Federal Executive Council of Nigeria in its meeting on 28th July, 2010 approved the 1st January, 2012 as a day for implementation of International Standards for the purpose of reporting. The approval mandated listed entities in Nigeria to account for their financial activities in tandem with the International Financial Standards using, as a guide, roadmaps for adoption designed and implemented by Financial Reporting Council Nigeria. One standard that came new to Nigeria is International Accounting Standard on agriculture (IAS 41); a standard that had hitherto been nonexistent in our reporting framework. As a result of the absence of the standard, accounting for agriculture was based on historical cost methods. The absence of standard that would govern the financial reporting of agricultural firms in Nigeria had affected the accounting information quality provided by firms because agricultural firms have some peculiar characteristics that our local standards could not cater for. For example, in agriculture, there are assets that cannot be adequately

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accounted for on historical cost basis like biological assets; living plants or animals managed by agricultural sector. Accounting for such assets was based on historical cost prior to adoption of IAS 41. However, with adoption of IAS 41, the accounting for agriculture had radically changed as assets owned by agricultural firms (biological assets, agricultural produce) now are to be measured at fair in the first recognition while deducting cost to sell and the same applies at subsequent reporting dates and this points to a marked difference from the old valuation method that had been used in the past. Despite the fact that agriculture plays a very vital role in the global economy, accounting for got little efforts from researchers before the adoption of international accounting standard on agriculture (Herbohn & Herbohn, 2006). And it is worthy of mention that agriculture has been considered as mainstay of Nigeria's economy because it is one of the largest contributors to our Gross Domestic Product (GDP). Until early 2016 when Nigeria fell into economic recession caused by sharp decline in price of oil in the global market and when it was generally believed by experts that the only solution for Nigeria is economic diversification, there had been little attention to agricultural sector because there was seamless oil production in the country and the prices in the global market were stable. But following the efforts by federal government to diversify the economy beyond total dependence on oil, market capitalization of agricultural sector on the Nigerian Stock Exchange stood at N103.017 billion as at September 2019 (Leadership, 2019). The current status of agriculture in Nigerian Stock Exchange signifies that the sector has attracted the attention of the investors and there is the need to conduct a study to find out whether the content of accounting information in the sector has a high quality so as to help investors take well informed decisions.

Most of the researches on Impact of Financial Reporting on Agriculture have been concentrated on other sectors of Nigerian economy with no efforts towards agricultures. For example, the studies of Olarinka (2017) focused on consumer goods, Sullubawa (2015) focused on industrial goods, Olabede (2016) was on non-financial firms. Bagudo et al.(2016) focused on financial industries and lastly Muhibudeen (2015) focused on cement. Moreover, some studies have focused on Impact of Financial Reporting on Agriculture only with little or no efforts to study the relativity of value relevance by examining the value relevance before the adoption of the standard and after the adoption so as to provide a framework for comparison. Another area of concern in value relevance studies is the period coverage as most of the literatures reviewed stopped at 2015. For example, Olarinka (2017) stopped at 2015. Sullubawa (2015), Olabede (2016) and Bagudo et el (2016) all stopped at 2014. The study of Muhibudeen (2015) stopped at 2011. This study intends to widen the scope of literature by extending the period to 2019. This study intends to contribute to the pool of existing literature by studying relative value relevance of IAS 41 on the accounting information of agricultural firms by taking eight year before the adoption of the standard and eight year after the adoption. The study will be beneficial to all stakeholders especially regulators like Financial Reporting Council of Nigeria who will use the results as a basis for determining whether the adoption of IAS 41 has been value relevant or not. The result will also be useful to both existing and potential investors as it will help them in determining which proxy of accounting number is value relevant and which one is not Under this heading, some relevant and related empirical studies are reviewed as seen below;

LITERATURE REVIEW

Conceptual Framework

Earnings and Share Prices

Rodosthenous (2017) during the early period of financial crisis experienced by Greece between 2010 and 2012 studied how value relevant accounting information is. The study used Ohlson model (1995) with a sample of 150 firms among the listed firms among the listed firms in Greece. The study found that earnings is positively and statistically linked to share prices in period of crisis. The empirical study studied many firms cutting across many sectors of Greece economy; due to heterogeneous nature of the firm the findings cannot be applicable to a particular sector like agriculture. Uwuigbe et al. (2016) also conducted his study with a view to investigating the value relevance of accounting information among the listed banks in Nigeria between 2010 and 2014. The study maintained OLS technique of analysis and a sample of 15 banks. The study found earnings per share to have a positive but significant relationship with share prices. The next study was conducted by Sullubawa (2015) with an objective of investigating how value relevant of accounting information is among listed companies in Nigeria. Additionally, the study also studied the impact of IFRS on the value relevance of accounting information of Nigerian listed companies. Samples of 68 companies listed NSE were used and the study

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covered 6 years (2009-2014), with 2009 and 2011 as pre-period between and 2012-2014 as post period. The study used pooled Ordinary Least Square model to analyse the data gathered from Thompson Reuters data stream

Furthermore, the study documented that accounting information of listed companies in Nigeria is value relevant by using the Ohlson model. Earnings was found to be positively and significantly related to market value of equity. So also, the study found value relevance of earnings to have increased in the post-adoption period. However, the study is somewhat deficient because the data used for analysis is gotten from an online data source not hand collected by the researcher from the firms' financial statements or regulatory bodies. Therefore, the reliability of the data is of doubtful authenticity Alfraih and Alanezi (2015) also conducted a study aimed at critically analysing the association between International Financial Reporting Standards (IFRS) mandatory disclosures compliance and the value relevance of accounting information. This association was examined within the context of listed companies in Kuwait, the value relevance of financial statement information, specifically earnings was empirically examined using Ohlson's (1995) model that captures the compliance level with IFRS among the listed firms. The study took a sample of 119 listed firms and used OLS technique of analysis; the results of the study show that there is statistically significant association between the compliance level with IFRS and the value relevance of earnings to investors in Kuwait Exchange. However, cross sectional data was used, but this study will improve on that by using panel data

Book Value and Share Prices

Rodosthenous (2017) examined value relevance of accounting information in the early years of financial crisis in Greece between 2010 and 2012. The study employed Ohlson model (1995) and a sample of 150 firms among the listed firms in Greece. The study documented that book value has positive statistical relationship with share prices in the period of crisis. The empirical study studied many listed firms cutting across many sectors and because of the diverse nature of the companies the findings cannot be applicable to a particular sector like agriculture. Uwuigbe et al. (2016) also conducted a study with the aim of investigating how value relevant affects accounting information among the listed banks is between 2010 and 2014. The study maintained OLS technique of analysis and a sample of 15 banks and the study found book value to be statistically but negatively related to sharp prices. In addition, Solomon, Memba and Muturi (2016) studied value relevance of accounting information in the listed firms on the floor of Nigerian stock exchange between 2004 and 2014. The study used a sample of 58 firms, after analysing data using OLS tool of analysis, it was documented that there is positive but insignificant relationship between book value and share price. However, the study used only one independent variable.

Alfraih and Alanezi (2015) also conducted a study aimed at exploring the association between the compliance with International Financial Reporting Standards (IFRS) mandatory disclosures and the value relevance of accounting information. This association is examined in the context of listed companies in Kuwait, the value relevance of financial statement information, specifically earnings was examined empirically using Ohlson's (1995) valuation model that captures the level of compliance with IFRS among the listed firms. The study used a sample of 119 listed firms and OLS technique of analysis; the results show that there is a significant relationship between the compliance with IFRS and the value relevance of book value to Kuwait Stock Exchange investors. However, their study used cross sectional data. The next study was conducted by Sullubawa (2015) with an objective of investigating the value relevance of accounting information among listed companies in Nigeria. Additionally, the study also studied the impact of IFRS on the value relevance of accounting information in Nigerian. Samples of 68 companies on the floor of NSE were used and the study covered a period of 6 years (2009-2014). Pre-IFRS period between 2009 and 2011 and post-IFRS period from 2012-2014 was studied. The study used pooled OLS to analyse the data extracted from Thompson Reuters online data stream. Furthermore, the study found that accounting information of listed companies in Nigeria is value relevant using the Ohlson model. It was found that there is positive but significant relationship between book value and share price. So also, it was established that how value relevant book value is had gone up after IFRS. However, the researcher did not collect the data himself making it vulnerable to data Collection unreliability.

Cash from Operation and Share Prices

Omokhudu and Ibadin (2015) examined value relevance between the year 1994 and 2013. The study used OLS technique of analysis and a sample size of 47 firms out of the listed firms in the Nigeria stock market

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and found cash flow among other independent variables to be statistically and significantly associated with market value. However, the study didn't conduct post estimation test. Additionally, Camodeca, Almici and Brivio (2014) studied value relevance of accounting information among the listed firms on the Milan and London stock exchange markets, a sample of 100 firms were drawn from the two markets between 2011 and 2013 and OLS technique of analysis was used, it was found that accounting information is more value relevant in the Italian stock exchange than in the UK as showed by the R^2 . Individual results showed that cash was value relevant in London more than in Italy. Adaramola and Oyerinde (2014) examined value relevance of accounting information of listed companies in Nigeria with focus on trend analysis. Data was sourced from the Nigerian Stock Exchange Fact Book and a sample of Sixty-six (66) quoted companies was maintained between 1990 and 2009, using OLS technique of analysis, the study found cash flowing from operating activities to be value relevant among the quoted companies in Nigeria. However, the study revealed further that the value relevance of accounting information does not follow any trend in particular within the period under study. While the value relevance was weak in the eras of political crisis occasioned by military dictatorship 1992 to 1998 and global economic crisis 2005 to 2009, it was high in the other periods. However, the period covered by the study is not current prices.

Theoretical underpinning

Efficient Market Hypotheses (EMH)

The theory that underpins this study is efficient market hypotheses (EMH) theory propounded by Eugene Fama (1960) and this is because other others like signaling theory do not signify how information released by firms is absorbed by the market and used in determining the values of the securities. EMH presupposes that in an efficient market there is a huge number of profit maximisers trying to envisage market values for the purpose of future decision. The theory has three distinct levels. Strong form where all information is believed to have been captured, semi strong form where only publicly available information is reflected in the share prices and weak form where only the past information is reflected. In the context of the study, semi-strong-form of efficient market hypothesis best suits the

Nigerian capital market and therefore the study deems it appropriate to underpin it.

METHODOLOGY

The research design is correlational; the choice of the design was informed by the research paradigm which is the positivism approach. The data used was panel. Therefore, panel regression was used for the analysis with the aid of STATA version 13 (STATA13). The study covers a period of eight years (2004-2019), the choice of this period has been influenced by the availability of data of the firms, adoption of IAS 41 and significant attention paid to the sector by the government. The study considered all agricultural firms listed in Nigeria as at 31st December, 2019. The study takes all listed agricultural firms as at aforementioned date because it is concerned with both pre and post adoption era IAS 41. The firms are: Ellah Lakes Plc, FTN cocoa processors Plc, Livestock Feeds Plc, Okomu Oil Palm Plc, Presco Plc. The model for this study relies upon a modified version of Ohlson model (1995) which has its root from the work of Edward and Ball. It states that, share price is a function of earnings and book value. Beyond that, this study extends the model to incorporating cash flow from operation as follows:

$$SHP_{it}^{SAS} = \beta_0 + \beta_1 EPS_{it}^{SAS} + \beta_2 BPS_{it}^{SAS} + \beta_3 CF_{it}^{SAS} + \epsilon_{it} \dots \dots \dots 1$$

$$SHP_{it}^{IFRS} = \beta_0 + \beta_1 EPS_{it}^{IFRS} + \beta_2 BPS_{it}^{IFRS} + \beta_3 CF_{it}^{IFRS} + \epsilon_{it} \dots \dots \dots 2$$

Where;

SHP_{it} = share price of firm i in year t

EPS_{it} = earnings per share of firm i in

year t BPS_{it} = book value per share of firm i in year t . CF = cash flow from operation of firm i in year t .

β_0 = constant or intercept

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$\beta_1 - \beta_3$ = coefficients of explanatory variables SAS=financial reported prepared under SAS

IFRS=financial reports prepared under IFRS ϵ = error term. The result will be interpreted by comparing the result of SAS regression Equation 4 with IFRS regression Equation 5. If the information content of IFRS accounting numbers are relatively higher than that of Nigerian SAS accounting numbers, it is expected that the adjusted R-squared for IFRS regression (Equation 5) will be greater than that of SAS regression (Bagudo, 2016)

Measurements

Market share price: this is the market price per share as obtained from the Nigerian stock exchange Website four months after the release of annual reports.

Earnings: this is computed as the profit after tax all over the weighted average of shares.

Book value: measured as net value of equity all over the outstanding number of shares at the end of the accounting period.

Cash flow: This is obtained through dividing the total cash from operation by the outstanding number of shares at the end of the accounting period.

RESULT AND DISCUSSION

Table 1: Descriptive Statistics

Variables	Obs	Mean	Minimum	Maximum	Standard Deviation
SHP	40	0.48	0.30	1.45	0.67
BPS	40	5.65	-0.86	18.53	10.77
EPS	40	1.02	-0.12	4.11	1.26
CF	40	0.87	-0.12	3.47	0.87

Source: Descriptive Statistics Results from STATA13 Output

From table 1 above, the average share price for the firm before the adoption of IAS 41 IS 0.48 meaning that the value of shares from 2004 to 2011 averaged 0.48 with the standard deviation of 0.67 showing that the variation from the mean is not a thing of concern. The minimum value of share is 0.3 with the maximum value of 1.48. For book value per share the average is 5.65 with -0.86 and 18.53 as minimum and maximum respectively. Earnings per share has 1.02 as average in the sector with -0.12 and 4.11 as minimum and maximum respectively while cash flow from operations has 0.87 as average with -0.12 and 3.47 as minimum and maximum respectively. The standard deviations for all the proxies of accounting numbers that is book value, earnings and cash flow from operations show that the deviation from the mean is not a thing of concern.

Table 2: Correlation Matrix

	SHP	BPS	EPS	CF
SHP	1.0000			
BPS	0.8212	1.0000		
EPS	0.8919	0.8631	1.0000	
CF	0.6632	0.6154	0.7275	1.0000

Source: STATA13 output

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The correlation matrix table 4.2 above shows there is possible presence of Multicollinearity. This is because the highest relationship among the independent variables is approximately 89%, and this goes above the bench mark of 80% according to (Gujarati, 2004).

Regression Analysis Result

The robust regression result for pre IFRS data is presented in table 3 below.

Table 3: Regression Result

Variables	Coefficient	T-value	P>(Z)
BPS	0.724117	4.19	0.000
EPS	0.0875885	1.09	0.284
CASH	0.1308286	2.16	0.037
Constant	0.136861	-1.83	0.075
RSquared:	0.7616		
f-Statistics:	42.54		
Prob.:	0.0000		

Table 4: Regression Result for post IFRS Data

Variables	Coefficient	t-value	P>(t)
BPS	0.0127138	1.40	0.171
EPS	0.3798928	4.14	0.000
CFS	0.0277575	0.33	0.740
Constant	0.0132829	0.19	0.851
RSquared:	0.7904		
f-Statistics:	50.01		
Prob.:	0.000		

STATA13 OUTPUT

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The two tables above show that the regression results for both pre and post adoption period. It can be seen from the two tables that while in pre adoption period book value, earnings and cash explain share price to the tune of 76% which for post adoption period the explanatory power of the three variables is 79%. It can also be seen that book value per share and cash contain valuable information to explain share prices. The coefficients of book value and cash are 0.728 and 0.131 all significant at 1% and 5% respectively showing that the two variables are useful in explaining share prices. For earnings per share in pre adoption period, the coefficient is not statistically significant showing that earnings per share does not contain information capable of explaining the value of share price. For post adoption period, it can be seen that only earnings has coefficient of 0.372 at 1% level of significance which signifies that it has the ability to explain share price. The other two proxies of accounting in post adoption period that is to say book value and cash all have statistically insignificant coefficients which mean that the adoption of IAS 41 did not grant any explanatory power to them. In other words, they don't contain any valuable information that has a role to play in determination of share prices.

CONCLUSION AND RECOMMENDATION

The study concludes that book value per share and cash flow are relatively useful in explaining share prices in pre adoption period while in post adoption period only earnings per share has the ability to explain share prices. Based on the conclusions drawn above, the study recommends that regulatory bodies should put in place regulatory mechanisms to ensure that strict applications of IAS 42 so that its ability to help proxies of accounting numbers like earnings and book value can be enhanced. Furthermore, the study recommends that efforts should be by both the companies and regulatory bodies to explore other accounting numbers that can help in explaining share prices.

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