Journal of Economics and Sustainable Development www.iiste.org
ISSN 2222-1700 (Paper) ISSN 2222-2855 (Online)
Vol.6, No.12, 2015

International Financial Reporting Standards' Adoption and Value Relevance of Accounting Information of Listed Deposit Money Banks in Nigeria

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Abstract
Nigeria recently recognized the need to participate in opportunities offered by globalization and accordingly, adopted the International Financial Reporting Standards **(**IFRS). This paper examines post-IFRS adoption value relevance of accounting information using two models. First, a price model which used proxies such as market price per share, book value of equity per share, earnings per share and cash flow per share. Second, a return-model which used proxies such as annual return, earning per share, change in earning per share, were used. The results show that the explanatory power R^2 for the price model specification is 84% for the total sample and that all coefficients are statistically significant. A comparison of coefficients indicates that the EPS of 3.47 has a higher explanatory power than any other variables. The results also demonstrate that explanatory power of accounting numbers increased from pre-adoption (60%) to post-adoption (78%). Similarly, Explanatory power (R^2) for the return model specification is 13.4% for the total sample and just coefficient of EPS level is statistically significant. The explanatory power for the return model increased from pre-adoption (15.6%) to post-adoption (16.4%). According to both sub-samples just a coefficient of EPS level is statistically significant. So, the result of the return model also indicates adoption of IFRS improved relevance of accounting numbers in the deposit money banking sector. In view of these results, there is need for further study to explore the reasons for the superiority of EPS over BVEPS.
Keywords: Value Relevance, Accounting Information, Deposit Money Banks, Nigeria.

1. Introduction

The value of accounting information is determined by how well it meets the needs of users. Hence, most accounting studies are done to assess the usefulness of information provided by the accounting process. Value of accounting information is affected by a number of factors. Accounting standards are the most important factors (Verriest, 2007). High quality accounting standards and their appropriate enforcement are seen as providing consistent, comparable, relevant and reliable financial information.

A considerable number of accounting literature has examines different aspects of accounting quality. Though, there is no one generally accepted definition of accounting quality, different dimensions of this construct have been shared. Most of the recent studies commonly develop measures of quality using value relevance approach. Value relevance approach can be employed to assess usefulness of accounting information for stakeholders. Beaver (2012) indicates that the theoretical groundwork of value relevance studies is a combination of valuation theory and accounting theory that allows the researcher to predict how accounting variables and other information relating to market value will behave. Therefore, value relevance approach is an instrument to estimate value relevance of accounting information, which is important to the well-being of the economy (Beuselinck, 2013).

In recent times, a number of Nigerian companies have raised capital from international capital markets; others have established significant presence in other jurisdictions. Also, a good number of Nigerian entities hold the securities of non-Nigerian issuers. Thus, for a better understanding and appreciation of the risks and, consequently, making decisions about the flow of global economic capital, it makes sense that financial statements prepared in Nigeria use global financial reporting standards.

Reforms in Nigeria, like other emerging markets, extended to accounting as a consequence of development in financial markets and economic growth (Jahun, 2012). For example, the Financial Reporting Council of Nigeria Act requires all companies to prepare their financial statements in accordance with the International Financial Reporting Standards. Moreover, since 2009 all deposit money banks listed on the Nigerian Stock Exchange (NSE) adopted IFRS to publish financial statements (Deloitte, 2010).

Despite all efforts by the Central Bank of Nigeria to develop a sound Financial System Strategy (FSS), a crucial gap in the literature remains. There is limited empirical research to identify the effect of accounting standards reforms on value relevance of accounting information in Nigeria. Consequently, this study aims to investigate the impact of IFRS adoption on value relevance of accounting information in Nigeria. In particular, it measures whether the value of accounting information in Nigeria has improved or whether it has not yet become relevant with the adoption of IFRS.

The following research question emanates directly from the objective of the study: to what extent does the adoption of IFRS affects value relevance of accounting information of Nigerian deposit money banks? Given this background, the paper posits the following hypothesis: After IFRS adoption, deposit money banks in Nigeria exhibit higher value relevance of accounting information. The remainder of this paper is organized as follows. The next section describes literature review which discusses related prior research. The third section discusses the data and methodology, including a description of the models, data collection and selection of the sample. The fourth section sets out the findings of the research. The final session is conclusions and recommendations.

2. Literature Review

It is important to note that market reaction studies by their nature are short-term studies. Long-term studies require longer windows to allow enough time for the policy to have an effect. The sampling assumptions of long-term studies are also different. With regard to the appropriateness of the event study method itself, Binder (1998) argues that the method may not be useful for examining important event dates. Examining the structural breaks in time series data by applying regime switching regression models or volatility and impulse tests allows the researcher to determine critical event dates, evidently when they are unknown to the researcher. The challenge for value relevance studies that make analysts the object of study, is first to fill the epistemological void.

The value relevance of accounting information has been studied in many perspectives. Miller and Modigliani's (1966) study was one of the first studies investigating relations among accounting figures and other financial parameters. They investigate equity values that involved cost of capital in electric utility industry. The seminal article by Ball and Brown (1968) presented the relation between stock returns and earnings. As Ohlson (1991) indicates without exaggeration, it can be said that the Ball and Brown (1968) study has had an enormous influence on modern empirical accounting research. Their analysis has led to an informational perspective on accounting data. Ball and Brown relate accounting income to stock prices. Besides Ball and Brown (1968), several researchers have examine the relation between stock prices or returns and accounting information.

Ohlson model (1995) relates market value of a firm to accounting data (earnings, book value, and dividend). The model has been tested by many studies for many countries. Ali and Hwang (2000) used accounting information of manufacturing firms in 16 countries for 1986-1995 and reported that the value relevance of financial reports is lower for countries where the financial systems are bank-oriented rather than market-oriented. Similar results were received for the countries where the private sector is not a part in the standard setting process and where tax rules have a greater impact on financial accounting measurements.

Karampinis and Hevas (2009) in a study titled, The Effect of the Mandatory Application of IFRS on the Value Relevance of Accounting Data: Some Evidence from Greece, test the effect of the mandatory adoption of IFRS upon the value relevance of earnings and book values using data from the Athens Stock Exchange that covered a period of two years before and two years after the mandatory adoption of IFRS. The study reports that the adoption of IFRS positively affected the value relevance of consolidated net income and book value although it had no effect on their unconsolidated counterparts and that consolidated accounting numbers are by far more value relevant than unconsolidated ones in both periods and unexpectedly this superiority is more pronounced after IFRS adoption. The study also reports that disaggregating net income increases the explanatory power of the earnings – book value capitalization model. Finally the study reports that although the overall explanatory power of the model increases, the incremental explanatory power of both net income and financial income decreases. These last findings question the expected benefits of specific IFRS rules concerning the measurement of these income components. The study concludes that mandating IFRS may prove beneficial.
Kousendis, *et al*. (2010) in a study titled, Value Relevance of Accounting Information in the Pre- and Post-IFRS Accounting Periods, examine the value relevance of accounting information in the pre- and post-periods of IFRS implementation using the models of Easton and Harris (1991) and Feltham and Ohlson (1995) for a sample of Greek companies. The results of the study indicate that the effects of the IFRS reduced the incremental information content of book values of equity for stock prices. However, earnings incremental information content increased for the post-IFRS period. The results are explained by the introduction of the fair value principle under the IFRS that brought major changes in book value but not in earnings.

Clarkson, Douglas-Hanna, Richardson and Thompson (2011) in a study titled, The Impact of IFRS Adoption on the Value Relevance of Book Value and Earnings, investigate the impact of IFRS adoption in Europe and Australia on the relevance of book value and earnings for equity valuation. Using a sample of 3,488 firms that initially adopted IFRS in 2005, the study compares the figures originally reported for the 2004 fiscal year to the IFRS figures that were provided in 2005 as the 2004 IFRS comparative figures. As part of the inquiry, the study introduces a cross product term, equal to the product of EPS and BVPS into the traditional linear pricing models. The estimated coefficient on the cross product term is statistically significant and negative, as theory suggests in the presence of important nonlinearities. There is increased non-linearity in the data subsequent to IFRS adoption; with the increase being most pronounced for firms in common law countries.

With non-linear effect controlled for, there is no observed change in price relevance for firms in either code law or common law countries, contradicting the result from the linear pricing models. The results also suggest that the distribution of measurement errors becomes more similar across code law and common law countries after the adoption of IFRS, removing one difference between these groups. The study concludes that IFRS enhances comparability; an inference that would not be possible had the study confines the analysis only to linear pricing models.

Tsalavoutas, Andre and Evans (2011) in a study titled, Transition to IFRS and Value Relevance in a Small but Developed Market: A Look at Greek Evidence, examine the value relevance of accounting fundamentals before and after the mandatory transition to IFRS in Greece. The study finds no significant change in the value relevance of book value of equity and earnings between the 2004 pre IFRS and 2005 post IFRS periods. The study also finds no change in the relative value relevance of accounting information (R^2) between the two periods. The study concludes that the accounting framework is not in itself sufficient for changing market participants' perception about value relevance of accounting information. However, market participants view the extra information provided by reconciliations between Greek GAAP and IFRS for 2004 figures as incrementally value relevant, mainly for smaller firms.

Oyerinde (2011) examines the value relevance of accounting information in the Nigerian stock market with a view to determining whether accounting information has the ability to capture data that affect share prices of firms listed on the NSE. It also examines the difference in perception of institutional and individual investors about the value relevance of various items of financial statements in equity valuation. The study uses both secondary and primary data to investigate the value relevance of accounting numbers. The secondary data were obtained from the Nigerian Stock Exchange Fact book, Annual Financial reports of companies quoted on the NSE and the Nigerian Stock Market Annual. Primary data were obtained through survey questionnaires administered on the respondents. The study uses Ordinary Least Square (OLS), Random Effects Model (REM), Fixed Effects Model (FEM) and Independent - Samples t-test. The study concludes that there is a significant relationship between accounting information and share prices of companies listed on the NSE.

The study also concludes that dividend per share is the most widely used accounting information for investment decisions in Nigeria, followed by earnings per share and book value of equity per share. The study also concludes that the accounting information of manufacturing companies is more informative in the NSE. The study also finds a significant negative relationship exists between negative earnings and share prices of companies listed on NSE. It equally observes that there is no significant difference between the perception of institutional and individual investors about the value relevance of accounting information. Oyerinde's study though quite commendable is not without criticisms. The study focuses on the period 2002 – 2008 before the collapse of the Nigerian Stock Exchange and adoption of IFRS by DMBs in Nigeria. The period covered (7 years) falls short of generally accepted period (ten years) of case study. The study also focuses on only long term association between accounting information and firms' market values. The investigation could have been more informative by creating a short window around the time accounting information is released.

Agostino, Drago and Silipo (2011) in a study titled, The Value Relevance of IFRS in the European Banking Industry, investigate the market valuation of accounting information in the European banking industry before and after the adoption of IFRS. The study applies panel methods to a multiplicative interaction model in which the partial effects of earnings and book value on share prices are conditional on the adoption of IFRS. Evidence shows that the IFRS introduction enhanced the information content of both earnings and book value for more transparent banks. By contrast, less transparent entities did not experience significant increase in the value relevance of book value.

Chalmers, Clinch and Godfrey (2011) in a study entitled, Changes in Value Relevance of Accounting Information upon IFRS Adoption: Evidence from Australia, investigate whether the adoption of IFRS increases

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. However, this impact was concentrated in the subsamples of industrial firms, both large and small and firms reporting AGAAP-IFRS accounting reconciliation upon IFRS adoption. Consistent with an increase in the value relevance of earnings, earnings also become more persistent around IFRS adoption. The study suggests that even for a country categorized by strong investor protection and high quality financial reporting and enforcement, IFRS adoption affects the associations between accounting information and market value.
Bogstrand and Larsson (2012) in a study titled, Have IFRS Contributed to an Increased Value Relevance? Scandinavian Evidence, examine the value relevance of Scandinavian earnings information and book values over the past decade in order to shed some light on whether the extensive global adoption of IAS/IFRS has contributed to an increased accounting quality in terms of economic decision usefulness to equity investors. The study addresses this research question using a sample of 4,310 firm-year observations for 4310 exchange listed companies at NASDAQ OMX Nordic and Oslo Stock Exchange between 2001 and 2010. The degree of value relevance in the firm sample is operationalised through two price regressions and one return regression and empirically tested via the statistical association between capitalized values of equity or annual changes in capitalized values of equity and the study's three explanatory accounting variables: book values, accrual-based earnings and cash-flow based earnings. Taken as a whole, the results show significant empirical signs of increased value relevance in Scandinavian earnings information and book values, allowing the authors to draw significant as well as contributing conclusions on the information content of financial statement information disclosed in the Scandinavian region. It should be noted that this study adds empirical substance to practical debates over the function of financial reporting as well as resourceful material to both Scandinavian investors and to the ongoing international discussion on the harmonization of financial reporting standards.

Qystein and Frode (2012) evaluate the relevance of financial reporting over a 40-year period. The results show that the value-relevance of Norwegian GAAP was non-declining throughout (1965–2004). Dung (2013) tests the value-relevance of financial statement information on the Vietnamese stock market. The results show that the value relevance of accounting was statistically meaningful, though somewhat weaker than in other developed and emerging markets.

Kargin (2013) in a study entitled, the Impact of IFRS of the Value Relevance of Accounting Information: Evidence from Turkish Firms, investigates the value relevance of accounting information in pre- and post-financial periods of IFRS application for Turkish listed firms from 1998 to 2011. The study finds 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 or stock prices. The results show that value relevance of accounting information has improved in the post-IFRS period (2005-2011) considering book values while improvements have not been observed in value relevance of earnings.

Joshi and Basteki (2013) examine the adoption of IAS for Bahrain and suggest that organizations in Bahrain should continue to apply IAS, but that the application of these standards needs to be regulated. Joshi and Ramadhan (2012) examine the accounting practices and the degree of adoption of IAS by small and closely held companies in Bahrain. The research finds that 86% (31) of the 36 companies which responded to the questionnaire applied IAS and they considered IAS to be very relevant for them.

Aljifri and Khasharmeh (2014) investigate empirically the suitability of IAS to the United Arab Emirates (UAE). The study used a variety of parametric and nonparametric approaches to examine the underlying factors that could affect the level of adoption of IAS and to evaluate the suitability of such adoption to the UAE. The study finds that there is a general consensus among the user groups (auditors, brokers, finance managers, and financial analysts) on the suitability of adoption of IAS in the UAE. Filip (2014) investigates the impact of the mandatory IFRS adoption on the value relevance of accounting in Romania and findings suggest that the implementation of IFRS increased the value relevance of earnings.

Saidu and Dauda (2014) in a study entitled, an Assessment of Compliance with IFRS Framework at First Time Adoption by the Quoted Banks in Nigeria, assess the extent to which the Nigerian banking industry complied with requirements of IFRS. The study uses ex-post facto and survey research design and sourced data from structured questionnaire and audited financial statements of the sampled banks. A multivariate regression and chi square test were used in measuring the effect of the factors responsible for such compliance and identified probable difficulties in the process. The study concludes that Nigerian banking industry complied (semi-strongly) with the requirements of IFRS framework but the exercise is still faced with some challenges which include lack of in-depth IFRS knowledge from the preparers of the financial reports. The study found amenability, globalization, and response to users' needs as factors significantly influencing the compliance level of Nigerian banks with IFRS framework.

Devalle, Magarini and Onali (2014) in a study titled, assessing the Value Relevance of Accounting Data after IFRS Introduction in Europe, examine whether value relevance has improved after the compulsory adoption of IFRS using a sample of 3,721 companies listed on five European stock exchanges: Frankfurt, Madrid, Paris, London and Milan, the study find little evidence of an improvement in value relevance. However, earnings are found to influence share price to a greater extent than prior to IFRS adoption, while the influence of the book value of equity is found to have decreased.

Mousa and Desoky (2014) in a study entitled, The Value Relevance of IFRS: The Case of the GCC Countries, examine whether the adoption of IFRS has increased the value relevance of accounting information in one of the Gulf Cooperation Council (GCC) countries, Bahrain. The study uses a sample of 40 listed companies in Bahrain Bourse as one of the emerging markets with a total of 280 year-firm observations. The study employs the Ordinary Least Square (OLS) regression analysis. Two models of OLS regression (returns and price models) were employed. For the stock return model, findings of the study show a slight difference in the value relevance of accounting information after the adoption of IFRS by listed companies in Bahrain Bourse. However, in the price earning model, the findings show some improvement in the value relevance after the adoption of IFRS.

Umoren and Enang (2015) in a recent study titled, IFRS Adoption and Value Relevance of Financial Statements of Nigerian Listed Banks, empirically examine whether the mandatory adoption of IFRS has improved the value relevance of financial information in the financial statements of banks. The study argues that adopting IFRS has been empirically found to improve the quality of accounting in some countries, thereby increasing its usefulness to stakeholders. The study took a sample of 12 listed banks in Nigeria and examines their financial statements for a period of 4 years. Descriptive statistics and least square regression were conducted to analyze 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 NGAAP. 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 adoption period. The study concludes by way of recommendation that the Financial Reporting Council of Nigeria and other accounting standard setters should incorporate more measures to enhance the quality of the financial reporting in order to increase the value relevance of financial statements information. While this study should be commended, the period of 4 years covered is not adequate. In addition, there are 15 listed DMBs at the floor of the NSE, the authors did not give reasons why 3 DMBs were not studied.

3. Data and Methodology

In this study, the multiple regression-variations approach is used to investigate the value relevance of accounting information. A regression-variations approach measures value relevance based on the explanatory power of accounting information as a measure of market value; the ability of earnings to explain annual market-adjusted returns (return model); and the ability of earnings and book values of equity to explain market values of equity (price model).

3.1 Earning Return Model

A large volume of literature has examined the usefulness of earnings information by employing a market return model (Chen, Chen and Su, 2011; Harris, Lang and Peter, 2014). In particular, the return model developed by Easton and Harris (2011) has been immensely popular amongst value-relevance researchers (Ali and Zarowin, 2012; Amir, Harris and Venuti, 2013; Chan and Seow, 2011; Chen. et al., 2011; Harris and Muller, 2011; Harris et al., 2012; Haw and Qi, 2011), because it incorporates both earnings level and earnings changes as independent variables in explaining the dependent variable: annual market return on stock. This study used Easton and Harris (2011) model with adjustments as follows:

$$AR_{it} = \alpha_0 + \alpha_1 \, EPS_{it}/P_{it-1} + \alpha_2 \Delta EPS/P_{it} + e_{it} \quad \ldots\ldots\ldots\ldots\ldots\ldots (1)$$

Where:

AR_{it}: annual return of bank i shares for period t
P_{it-1}: share price at date of accounting announcement for bank i during period t
EPS_{it}: earnings per share for bank i during period t
ΔEPS_{it}: change in earnings per share for bank i from period t-1 to t
e_{it}: error term

3.2 Price Model

Following a number of value relevance studies (Amir et al., 2013; Barth, 2014; Burgstahler and Dichev, 2011; Filip and Raffournier, 2010; Harris and Muller, 2011; Landsman, 2011), a price model is also utilized in this study in addition to the return model. Unlike the return model, the price model investigates the impact of accounting information on the market valuation of, rather than return on equity share. Furthermore, a price model examines the impact of not only earnings but also book value of equity on share performance. Traditionally, earnings and book values are considered to contribute to value relevance (Burgstahler and Dichev, 2011; Ohlson, 2012). Thus the study used the model that shows all of the main financial statement as follows:

$$MPPS_{it} = \alpha_0 + \alpha_1\, BVEPS_{it} + \alpha_2\, EPS_{it} + \alpha_3\, CFPS_{it} + e_{it} \quad \ldots\ldots\ldots\ldots\ldots (2)$$

Where:
$MPPS_{it}$: the market price per share of bank i at time t
$BVEPS_{it}$: book value of bank i equity per share at time t
EPS_{it}: earnings of bank i per share for period ending at time t
$CFPS_{it}$: Cash flow of bank i per share for period ending at time t
e_{it}: error term

3.3 Data and Sample

Deposit money banks qualify from many respects to be a good location for investment in Nigeria. In recent years, the sector has witnessed a number of financial and accounting reforms. Therefore, the study selected this sector because participants in Nigeria deposit money banking sector need to know whether the value relevance of accounting information is increasing or not after the adoption of IFRS. Data were obtained from the Nigerian Stock Exchange and websites of the banks for the pre-adoption period 2004 through 2008 and post-adoption period 2009 through 2013. The number of banks selected was based on listing with the Nigerian Stock Exchange as reported in table 1.

Table 1: List of quoted Nigerian deposit money banks

S/N	Bank	Website
1	Access Bank Plc	www.accessbankplc.com
2	Diamond Bank Plc	www.diamondbank.com
3	Ecobank Transnational In	www.ecobank.com
4	First City Monumt Bank Plc	www.firstcitygroup.com
5	Fidelity Bank Plc	www.fidelitybankplc.com
6	First Bank of Nigeria Plc	www.firstbanknigeria.com
7	Guaranty Trust Bank Plc	www.gtbplc.com
8	Skye Bank Plc	www.skyebankng.com
9	Stanbic IBTC Bank Plc	www.stanbicibtcbank.com
10	Sterling Bank Plc	www.sterlingbankng.com
11	Union Bank of Nigeria Plc	www.unionbankng.com
12	United Bank for Africa Plc	www.ubagroup.com
13	Unity Bank Plc	www.unitybankng.com
14	Wema Bank Plc	www.wemabank.com
15	Zenith Inter. Bank Plc	www.zenithbank.com

Source: www.nse.com.ng/Listings-site/listed-securities/listed-companies

4. Research Findings

4.1 Descriptive Statistics

Tables 2 - 4 provide descriptive statistics for all the proxies used in this study.

Table 2: Descriptive statistics of bank-specific variables (period 2004 – 2013)

Total	MPPS	EPS	BVEPS	CFPS	AR	EPS/P	ΔEPS
Mean	5.25	0.39	**2.73**	0.344	0.362	0.078	0.016
Min	8.39	-0.0044	0.00064	-0.17307	-0.5906	0.0550	-2.895
p25	6607.6	0.00288	0.00963	-.001229	0.03582	0.1006	0.0157
p50	25182	0.00537	0.02209	0.000676	0.08791	0.1100	0.0206
p75	12778	0.00836	0.043351	0.003848	0.14933	0.1190	0.0273
Max	47545	0.13205	0.45089	0.16619	1.09076	0.2140	0.5584
Stdev	4.49	0.43	**2.46**	0.93	1.04	0.057	0.063

Source: SPSS Output from Field Data, 2015

Journal of Economics and Sustainable Development
ISSN 2222-1700 (Paper) ISSN 2222-2855 (Online)
Vol.6, No.12, 2015

The results show a high standard deviation in the datasets. The results also show that the standard deviation of BVEPS is higher than that of EPS and CFPS. Thus, BVEPS is more volatile than EPS and CFPS.

Table 3: Descriptive statistics of bank-specific variables (period 2004 – 2008)

Pre- Adoption	MPPS	EPS	BVEPS	CFPS	AR	EPS/P	ΔEPS
Mean	2.26	0.16	**1.38**	0.28	0.11	0.06	0.000
Min	38.60	-.00797	.000005	-.1891	-.3710	0.0756	-.02185
p25	8098	.001023	.00808	-.0006	.09273	0.0990	.01566
p50	36928	.00317	.01986	.00106	.14774	0.1100	.02107
p75	139776	.00502	.04302	.00472	.22394	0.1230	.02713
Max	927673	.09413	.30707	.29078	1.9145	0.1956	.58046
Std Dev	1.42	0.15	**1.11**	0.39	0.18	0.03	0.04

Source: SPSS Output from Field Data, 2015

Table 3 shows BVEPS has a higher standard deviation of 1.11, followed by CFPS of 0.39 and EPS of 0.15. These results show that BVEPS is more volatile than EPS and CFPS. Table 3 also shows that EPS/P is the least volatile during the pre adoption period.

Table 4: Descriptive statistics of bank-specific variables (period 2009 – 2013)

Post- Adoption	MPPS	EPS	BVEPS	CFPS	AR	EPS/P	ΔEPS
Mean	6.25	0.47	**3.19**	0.36	0.34	0.08	0.02
Min	18.60	0.0077	0.0005	0.1810	0.310	0.076	0.0215
p25	1098	0.0013	0.0808	0.006	0.0273	0.090	0.0156
p50	16928	0.0017	0.016	0.0106	0.174	0.100	0.0207
p75	19776	0.002	0.042	0.0042	0.223	0.130	0.0223
Max	127673	0.041	0.307	0.290	1.145	0.156	0.546
Std Dev	4.73	0.47	**2.62**	1.05	0.81	0.06	0.07

Source: SPSS Output from Field Data, 2015

Table 4 shows post adoption descriptive statistics. It shows that BVEPS with standard deviation of 2.62 is more volatile than EPS with standard deviation of 0.47 and CFPS with a standard deviation of 1.05. The change is most important between the periods before and after adoption. Means of all variables increase significantly. When compared the standard deviations of pre and post IFRS adoption show a significant increase from 1.11 to 2.62 which can be interpreted to mean value relevance of accounting information after IFRS adoption.

4.2 Regression-Variations Approach

Tables 5 and 6 contain results of the regression-variations approach for the sample data. The first panel states the results of the price model, including models with two and three variables. Tables 5 and 6 show the results of the return and price models. The tables show regression coefficients, as well as the total and incremental explanatory power from price and return regressions. In the first step, focus is on the analysis of the explanatory power of regressions, and in second step the focus is on the coefficients of variables. However, table 6 also displays figures for 10-year pooled regressions (2004-2013), and two pooled regression for two sub-samples periods (i.e., 2004-2008, and 2009-2013).

The first panel of table 5, model with three variables shows that the R^2 for the price model specification is 84% for the total sample and that all coefficients are statistically significant. A comparison of coefficients indicates that the EPS of 3.47 has a higher explanatory power than any other variables. Therefore, according to price model, accounting information in Nigeria deposit money bank sector is value relevant and EPS is more relevant than any other accounting numbers.

Table 5 Result of Regression (Price Model)

$MPPS_{it} = \alpha_0 + \alpha_1\, BVEPS_{it} + \alpha_2\, EPS_{it} + \alpha_3\, CFPS_{it} + e_{it}$

Years	α_0	α_1	α_2	α_3	R^2
2004–2013	0.05	0.72	3.47	0.218	**0.84**
t-st	2.29**	9.2***	7.3***	2.8***	
2004–2008	0.1	0.003	5.68	-0.24	**0.60**
t-st	8.8***	0.038	8.97***	-2.1**	
2009–2013	0.12	0.16	5.98	0.4	**0.78**
t-st	7.6***	4.4***	10.8***	5.5***	

Source: SPSS Output from Field Data, 2015

A comparison of the results for pre-adoption (2004-2008) and post-adoption (2009-2013) demonstrates that explanatory power of accounting numbers increased from 60% to 78%. Consequently, the result indicates that IFRS adoption improved relevance of accounting numbers in Nigerian money deposit bank sector.

Table 6: Result of Regression (Return Model)
$AR_{it} = \alpha_0 + \alpha_1 EPS_{it}/P_{it-1} + \alpha_2 \Delta EPS/P_{it} + e_{it}$

Years	α_0	α_1	α_2	R^2
2004–2013	0.01	1.57	0.45	**0.134**
t-st	0.2	6.33***	1.4	
2004–2008	-0.02	0.82	0.4	**0.156**
t-st	-0.65	6.1***	1.57	
2009–2013	-0.006	2.15	0.48	**0.164**
t-st	-0.09	5.37***	1.03	

Source: SPSS Output from Field Data, 2015
*Notes:****, **, * indicates significance at 0.01, 0.05 and 0.10 levels
T-statistics based on White heteroscedasticity-consistent standard errors.

Table 6 provides the results of the return model. Explanatory power (R^2) for the return model specification is 13.4% for the total sample and just coefficient of EPS level is statistically significant. Results suggest that accounting information in the deposit money banking sector has value relevance. Second and third line of table 6 show that explanatory power for the return model have increased from 15.6% in the period (2004-2008) before adoption, to 16.4% in the period (2009-2013) after adoption. According to both sub-samples just a coefficient of EPS level is statistically significant. So, the result of the return model also indicates adoption of IFRS improved relevance of accounting numbers in the deposit money banking sector.

5. Conclusions and Recommendations

This paper examines the impact of IFRS adoption in Nigeria deposit money bank sector on the value-relevance of accounting information. The value-relevance of accounting information is clearly supported by the current findings from the price and return model. A comparison of the results for the periods before and after adoption, based on regression approach shows an improvement in value relevance of accounting information after IFRS adoption.

The results of Price model also show that all coefficients are statistically significant. A comparison of the result based on the return model shows that accounting information is relevant. Furthermore, the coefficient of EPS was greater than BVEPS. Therefore, an avenue for future research is to explore the reasons for the superiority of EPS over BVEPS.

Findings from this study are relevant to standard setters and regulators for future directions in developing accounting standards. The results are helpful to investors for understanding the Nigerian capital market and the deposit money bank sector in particular and may also provide insights for accounting standard setters and regulators. Investors tend to be more tolerant of overvaluation when the economy and financial markets are doing well, and less accepting during bear market and economic slowdowns. Future research might consider the relationship between this measure and other macroeconomic measures, such as overall growth in the economy or total market performance, which might influence investor behaviour.

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