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INTERNATIONAL FINANCIAL REPORTING STANDARDS (IFRS) ADOPTION AND THE VALUE RELEVANCE OF ACCOUNTING INFORMATION IN SELECTED AFRICAN COUNTRIES¹

Review paper

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Abstract

*The focus of the study was on examining International Financial Reporting Standard (IFRS) Adoption and The Value Relevance of Accounting Information in Selected Africa Countries: A Comparative Analysis of Nigeria and South Africa. The focus on cross country analysis in the subject of IFRS adoption and value relevance is growing quite slowly. However. Cross country empirical studies for countries in Africa continent is largely non-existent or at best difficult to find. This study address this gap by adopting a cross-country approach using Nigeria and South Africa. The study employed a longitudinal research design. The population and the sample of the study comprised the top companies in each country by way of market capitalization for the countries in the study, namely: Nigeria and South Africa as at December, 2019. The convenience sampling technique was used in the study to select listed firms across the two countries. Secondary data sourced from corporate annual reports of the sampled quoted firms got from the Nigerian Exchange Group (NGX) and Johannesburg Stock Exchange (JSE) were used for the study. The study made use of panel data regression and the results revealed that for South-Africa, Earnings Per Share (EPS) and $EPS*IFRS$ were both positive respectively, and also statistically significant. Book Value Per Share (BVPS) and $BVPS*IFRS$ were both positive respectively, and also statistically significant. Dividends Per Share (DPS) and $DPS*IFRS$ were both positive respectively, and were also statistically significant. Intangible Assets (INTA) was not value relevant in the pre-IFRS period given the absence of the statistical significance of the variable, but show some evidence of weak incremental relevance from IFRS adoption as the interaction between $INTA*IFRS$ was significant. Cash Flow Per Share (CFPS) was positive and significant; and furthermore, the interaction of $CFPS*IFRS$ was also positive and statistically significant.*

¹ This paper emerged from the Ph.D. thesis of the lead author, Dr. Ohonba Osamwonyi, supervised by the co-author, Dr. Mary Josiah.

*For Nigeria, EPS and EPS*IFRS are both positive respectively, with EPS statistically significant. BVPS and BVPS*IFRS are both positive respectively, with only BVPS statistically significant. Furthermore, DPS and DPS*IFRS are both positive respectively, and statistically significant. INTA and INTA*IFRS are both insignificant respectively. Finally, CFPS is positive, though not significant; but the interaction of CFPS*IFRS is positive and significant. It therefore implies that, EPS*IFRS, BVPS*IFRS, DPS*IFRS, INTA*IFRS, CFPS*IFRS shows whether EPS, BVPS, DPS, INTA, CFPS reflects a stronger statistical significance in explaining share price when interacted with IFRS adoption (post) than without it (pre) in the two selected Countries(Nigeria and South Africa) . The study concluded that, there is the need for capital markets in developing countries to become more efficient and for companies and accounting regulatory institutions to ensure timely and quality disclosures of accounting information. It recommended that stock exchanges in developing markets should put a framework in place that measure the rate of compliance of each listed firm's annual report with IFRS demands to enable the sanctioning of firms that recorded below the expected compliance level. The study also recommended amongst others, that financial reporting councils and accounting standards setting bodies globally should support the effort to ensure improved compliance with IFRS as a matter of policy.*

Keywords: *IFRS, Earnings Per Share, Book Value Per Share, Dividends Per Share, Cash flow ratio, Intangible Assets*

1. INTRODUCTION

The rapid developments in the last forty years, have engendered heralded developments about the relationship between capital markets and financial statements. The stream of researches investigating the relationship was termed “value relevance” of accounting information. Dahmash, Durand and Watson (2009) posited that value relevance measures the joint response of earnings or some other measures of the accounting and market returns to information arrival; therefore, value relevance is the ability of accounting measures to capture and reflect information that affects firm value. Thus, value relevance represents the association between the information in the accounts and the information reflected by the market. International Financial Reporting Standards (IFRS) aims to provide financial statements that enhances the information available to the shareholders. These changes may alter the valuation properties of accounting data reported in the financial statements.

The implementation of the fair value of accounting leads to firm values that are closer to the “intrinsic” values. Under the IFRS regime, the firm value reflected in the financial statements appears to be lower than or equal to the “intrinsic firm value” (Barth, 2006). This implies that the accounting data reported using IFRS will be more value-relevant. Nilsson (2003) noted that the key focus of value relevance research deal with the usefulness of financial statement information in explaining equity market values. Value relevance studies use various valuation models to structure their tests, and typically use equity market value as the valuation benchmark to assess how well particular accounting amounts reflect the information used by investors. Valuation models based on accounting information show that equity value is related to accounting earnings (Ball & Brown, 1968; Suadiye, 2012). Theoretically, the expectation is that IFRS with its emphasis on more disclosures and fair value basis should result in more relevant accounting information.

The adoption of IFRS by developing economies was polemic because, on one hand, IFRS were considered as developed standards which required a high level of economic development in order to be implemented successfully. On the other hand, developing countries were characterized by low human development indices, the predominance of the public sector and a relatively underdeveloped accounting profession. The first school of thought believes in the effectiveness of IFRS adoption by developing countries (Wallace, 1990; Larson, 1993; Joshi & Ramadhan, 2002). Some researchers and international organizations consider that IFRS are flexible enough to respond to the needs of developing countries (Carmona & Trombetta, 2008). By contrast, the other school of thought believes that IFRS are not suitable to developing countries because the standards are very complicated and are influenced by the Anglo-American culture (Hove, 1986; Perera, 1986). Despite

divergent perspectives, a growing number of developing countries, globally and in Africa, have moved to adopt IFRS. The focus of this study therefore, was on examining IFRS adoption and the value relevance of accounting information in Selected Africa Countries: a comparative analysis of Nigeria and South Africa. This study adopted a cross-country approach and by doing so, provided a baseline for comparing the implication of IFRS adoption on developing economies' value relevance by providing empirical evidence from Africa.

1.1. Research problem

The effect of IFRS adoption on accounting figures and numbers in general tends to be ambiguous. As a matter of fact, there is yet no compelling evidence regarding the persistence of significant differences in accounting number and their value relevance following IFRS adoption. As Papadatos and Bellas (2011) found out, there is inconsistency in existing empirical findings, and the relationship between the implementation of IFRS and accounting information may not be in the same direction for every country or firm. For example, for Germany, Hung and Subramanyam (2007) reported that book value (net income) was accorded a significantly larger valuation coefficient under IFRS than under German Generally Accepted Accounting Principles (GGAAP). In addition, Finland, Schadewitz and Vieru (2007) found that only the earnings reconciliations were positively value relevant after IFRS adoption. In Nigeria, Adaramola and Oyerinde (2014) and Oyerinde (2011) found that, the value relevance of accounting information did not follow a particular trend in the period under study. The considerable diversity in empirical findings regarding the effect of IFRS adoption on value relevance accounting numbers indicates that there is the need for more empirical evidence. This study addressed this gap by adopting a cross-country approach using Nigeria and South Africa.

1.2. Research Hypotheses

The following research hypotheses have been formulated in the null form:

- H₀₁: IFRS adoption has no significant effect on the Value Relevance of Earnings in South Africa and Nigeria.
- H₀₂: IFRS adoption has no significant impact on the Value Relevance of Book Value in South Africa and Nigeria.
- H₀₃: IFRS adoption has no significant effect on the Value Relevance of Dividends in South Africa and Nigeria.
- H₀₄: IFRS adoption has no significant impact on the Value Relevance of Cash Flow in South Africa and Nigeria.
- H₀₅: IFRS adoption has no significant effect on the Value Relevance of Intangible Assets in South Africa and Nigeria.

2. LITERATURE REVIEW

2.1. Empirical review

Zavodny and Prochazka (2022) compares the value relevance of information contained in financial statements, namely earnings, operating cash flows and book value of equity in the V4 countries (the Czech Republic, Hungary, Poland and Slovakia) using a dataset of 604 firm-year observations for the period 2005-2017. The findings identify higher value relevance of accounting in the Czech and Hungary capital markets than in Poland. The financial statements of the Slovak listed firms were found not to present value relevant information. The most relevant metric on the Prague and Budapest stock exchanges are earnings. In Czech Republic and Poland, they found that investors value between – period changes more than absolute amounts for the period. Also, Czech and Hungarian markets exhibit considerable improvements in value relevance of accounting information approximately five years after adopting the IFRS.

Banerjee, Dhar and Dutta (2021) examines how relevant the accounting information was for the value of the firm period to 2016, when India had the indigenous Accounting Standards, and after 2016 when India adopted new accounting standards known as IND-AS, which were the convergence standards mostly in line with IFRS. As an extension to this, the authors performed another round of analysis to observe whether the enhanced value relevance is symmetrically distributed among big and small firms. They used the price regression model of (Barth et al. 2008) on 1770 firm-years data of Indian firms and applied panel data analysis. The results found 66% adjusted R² under OLS method for the period prior to 2016 and 78% for the post-change period. Further to this, big and small firms, in the new regime have shown 84% and 89% adjusted R². From the results, the authors found substantial improvement in value relevance of accounting information in the IND-AS period. They also found that, the enhanced relevance of accounting information in the IND-AS period, value relevance is uniformly distributed across firms irrespective of firm-size.

Dang, Akwe and Garba (2020) examined the effect of mandatory international financial reporting standards (IFRS) adoption on the credit relevance quality of financial reporting of deposit money banks (DMBs) in Nigeria. This study used difference-in-differences (D-in-D) design for its modeling. Panel data regression analysis based on the D-in-D model was used in analysing the data collected from secondary sources. The findings of the study, based on the D-in-D approach, revealed a significant and positive effect of mandatory IFRS adoption on the credit relevance quality of financial reporting of DMBs in Nigeria; besides, there was also a significant difference in the credit relevance quality of financial reporting of mandatory adopting banks in the post-mandatory IFRS adoption period compared to the pre-mandatory IFRS adoption period.

Kyeremeh, Owusu, Amanfo and Owusu (2020) sought to examine how the adoption of IFRS affected the value relevance of financial reporting in the capital market in Ghana. The study revealed that the adoption of IFRS largely supported accounting quality. The findings also suggested that investors in the capital markets were more confident and assured of quality financial information for investment decision making in the capital market as a result of the increase in the value relevance of financial reporting after the IFRS adoption.

Isaboke and Chen (2019) sought to evaluate the relationship between the value relevance of financial information and conditional conservatism of non-financial companies listed in China. Using panel data comprising 28,723 firm years, the authors determined the value relevance of financial information before and after mandatory International Financial Reporting Standards (IFRS) adoption while incorporating the relationship into conditional conservatism. The authors further examined how the relationship varied between state and non-state owned companies. The findings revealed that conditional conservatism was positively (negatively) related to value relevance prior to (post) mandatory IFRS adoption.

Ki, Leem and Yuk (2019) investigated whether the value relevance of accounting information changed after IFRS adoption in South Korea. Related prior studies had found mixed empirical evidence depending on research methodologies or research periods. Moreover, the effect of IFRS adoption on value relevance could be different between Korean stock markets (KSE and KOSDAQ) because they had different characteristics. Also, the main financial statements reported by Korean firms had changed from individual financial statements to consolidated financial statements after IFRS adoption. Thus, the study analyzed the effect of IFRS adoption on the value relevance of individual and consolidated accounting numbers expanding research periods (5years before and after IFRS adoption) and comparing changes in the explanatory powers of Ohlson(1995) model on each listing market. The empirical results indicated that the value relevance of Korean listed firms generally decreased after IFRS adoption. However, the value relevance of KSE listed firms decreased while the value relevance of KOSDAQ listed firms increased after IFRS adoption. In addition, it was found that the effects of IFRS adoption on value relevance of individual and consolidated financial information were different depending on listed markets.

Odoemelam, Okafor and Ofoegbu (2019) examined the effect of IFRS adoption on the earnings value relevance of quoted Nigerian firms. They used a sample of 101 firms (1212 firm year

observations) that were quoted in or before 2006, and had adopted IFRS from 2006 to 2017. As the principal objective of the inquiry, the authors introduced a cross-product term equal to the product of earnings per share (EPS) and IFRS dummy variable into the basic Ohlson model. The paper used the fixed effect model as the appropriate estimator for the analysis of the data. The estimated coefficient of the cross-product term was statistically significant and positive. The results suggested that the adoption of IFRS in Nigeria led to higher earnings value relevance. IFRS, as principles-based, allowed managers to use their discretion in the specific treatment of financial items. In doing so, they could bias earnings. Furthermore, the results revealed that the estimated coefficient of the cross product of book value and IFRS dummy variable were statistically insignificant and negative. Surprisingly, the simultaneous addition of earnings, the book value of equity and firm-specific variables in a modified basic Ohlson model showed an enhanced earning incremental value relevance while other variables were insignificant, except the interaction of earnings and audit firm size.

Ohonba (2019) empirically examined the effect of IFRS on the value relevance of accounting information. The study employed a longitudinal panel research design. The population of the study covered all quoted banks listed on the Nigerian Stock Exchange. As at the study period, there were only 15 quoted banks on the Nigerian Stock Exchange, and they also formed the sample for the study. Secondary data were used for the study. The data were sourced from corporate annual reports of the sampled banks for 2010-2017 financial years. The researcher utilized only corporate annual reports because they were readily available and accessible. The Ordinary least square regression (OLS) was used for the data analysis. The study’s findings revealed that while IFRS adoption had a statistically significant influence on earnings per share and dividend per share value relevance, it had no statistically significant influence on book value per share value relevance.

3. METHODOLOGY

The study employed a longitudinal research design. The population and the sample of the study comprised the top 20 companies in each country by way of market capitalization for the countries in the study, namely: Nigeria and South Africa as at December 2019. The Convenience Sampling technique was used in selecting the sampled Companies. Secondary data were used for this study. The data were sourced from corporate annual reports of the sampled quoted firms from the *Nigerian Exchange Group (NGX) and Johannesburg Stock Exchange (JSE)*.

The study made use of panel data regression as the technique for estimating the econometric models specified in this work. To determine the preferred estimation technique between the FE and RE, the Hausman specification test was employed. The pooled OLS, random effects (RE) and fixed effects (FE) were estimated. To determine which model was better, an F-test for the FE model, the Breusch-Pagan Lagrange Multiplier (LM) test for RE and the Hausman test for both fixed and random models were conducted. Based on the results of those tests, the suitable models for this research were chosen.

The model was adapted from the Ohlson (1995) Model which consists of two major indicators from financial reports: book value per share (BVPS) and earnings per share (EPS) to test the value relevance of financial reporting in many studies. The model is thus stated:

$$P_{it} = \beta_0 + \beta_1 BVPS_{it} + \beta_2 EPS_{it} + e_{it} \text{-----} \text{-----}(1)$$

Where P_{it} is the stock price of firm i at time t ,

$BVPS_{it}$ is the book value of equity of firm i at time t , divided by common shares outstanding, EPS_{it} is Income divided by common shares outstanding of firm i at time t .

e_{it} is an error term with mean zero and standard deviation

This study adapted the Ohlson (1995) model by incorporating dividends per share, cash flow, intangible assets and international financial reporting standards into the model; and it was justified because dividends, cash flow, intangible assets and international financial reporting standards provide additional information about a firm’s equity value. The model for this study is thus presented:

$$MPS_{it} = \beta_0 + \beta_1 EPS_{it} + \beta_2 BVPS + \beta_3 DPS + \beta_4 CFPS + \beta_5 INTA + \beta_6 EPS_{it} * IFRS + \beta_7 BVPS * IFRS + \beta_8 DPS * IFRS + \beta_9 CFPS * IFRS + \beta_{10} INTA * IFRS + \beta_{11} IFRS + \epsilon_{it} \quad (2)$$

Where:

MPS = Market Price per share/ Share price

EPS= Earnings Per share

BVPS= Book Value per share

DPS= Dividend per share

CFPS= Cash flow Ratio

INTA= Intangible assets

IFRS= International Financial Reporting Standards

ϵ = error term

i= firm i

t= time

4. PRESENTATION AND ANALYSIS OF DATA

Introduction

This section presents the results from the analysis of the data and also goes further to discuss and interpret the results. The section is integral to providing answers to the research questions and also forms the basis for the testing of the hypothesis.

4.1. Comparison between Nigeria and South Africa

Table 1 Descriptive Statistics

	MPS	DPS	BVPS	INTA	EPS	CFPS
South Africa						
Mean	212.1717	29.99	107.6303	10.146	25.498	118.826
Std. Dev.	13.987	3.334	12.016	3.1159	0.915	22.673
J-B	1874.6	939.38	219369.2	75.469	171.34	199959.
Prob	0.00	0.00	0.00	0.000	0.000	0.000
Nigeria						
Mean	19.637	0.4889	54.19	9.00158	14.6009	61.03
Std. Dev.	2.523	0.3005	0.2827	2.6048	0.833	0.221
J-B	382276.0	1969.5	2166.971	42.808	43.115	393.19
Prob	0.00	0.00	0.000	0.000	0.000	0.000

Source: Researchers Compilation (2021)

The descriptive statistics in Table 1 revealed that for Nigeria, the mean for MV stood at 19.637 with a standard deviation of 2.523. The average DPS stood at 0.4889 with a standard deviation of 0.3005. The average INTA stood at 9.002 with a standard deviation of 2.6. The average BVPS stood at 54.19 with a standard deviation of 0.2827 while the mean for CFPS stood at 61.03 with a standard deviation of 0.221. The average EPS stood at 14.60 with a standard deviation of 0.833.

For South Africa, the mean for MPS stood at 212.17 with a standard deviation of 13.987. The average DPS stood at 29.99 with a standard deviation of 3.334. The average INTA stood at 10.146 with a standard deviation of 3.116. The average BVPS stood at 107.63 with a standard deviation of 12.016 while the mean for CFPS stood at 118.826 with a standard deviation of 22.67. The average EPS stood at 25.498 with a standard deviation of 0.9154.

Table 2 Correlation Statistics

Probability	MPS	EPS	DPS	BVPS	INTA	CFPS
South Africa						
MPS	1.					
EPS	0.216	1				
DPS	0.013	0.0625	1			
BVPS	0.136	0.1255	0.031	1.		
INTA	-0.076	0.085	-0.017	0.2181*	1	
CFPS	0.1283	0.0641	0.038	0.5732*	0.256*	1
Nigeria						
MPS	1.0000					
EPS	0.0541	-0.038	1			
DPS	0.0410	0.0357	0.0884*	1		
BVPS	-0.0073	0.0332	-0.0133	0.090*	1	
INTA	-0.0170	-0.0205	0.1249*	0.4929*	0.1032*	1
CFPS	0.0466	-0.0116	-0.0355	0.0240	0.0141	-0.183*

Source: Researcher’s Compilation (2020)

As observed for South African firms used in the study, MPS had the following correlations with accounting information: EPS ($r=0.216$), DPS($r=0.013$), BVPS ($r=0.136$), INTA ($r=-0.076$), and CFPS ($r=0.1283$). MPS had the following correlations with accounting information of the Nigerian firms: APS ($r=0.054$), DPS($r=0.041$), BVPS ($r=-0.007$), INTA ($r=-0.017$), and CFPS ($r=0.0466$). The study proceeded to examine if the panel regression estimations as a correlation analysis is insufficient to determine functional causality and dependence between variables.

4.2. Panel Regressions

The focus of the study is to examine the impact of firm attributes on financial performance of selected listed firms in Nigeria and South Africa. The study utilizes the Panel regression analysis using Generalized Least Squares (GLS) technique.

Table 3 Earnings Value Relevance Regression Result

Variable	Aprori sign	South-Africa FE-estimates	Nigeria FE-estimates
C		0.00141 (0.0018) {0.4423}	0.0035* (0.0019) {0.0757}
EPS	+	2.4904*** (0.1038) {0.000}	0.0071** (0.0031) {0.0230}
EPS*IFRS	+	2.018** (0.0459) (0.0352)	0.0018*** (0.000) (0.0001)
Model Parameters			
R ²		0.404	0.3472
Adjusted R ²		0.374	0.319
F-statistic		7.399	11.69
Prob(F-stat)		0.000	0.000
Durbin-Watson		1.37	1.22
Model Diagnostics			
χ^2_{Hetero}		0.854	0.977
$\chi^2_{Serial/Corr}$		0.256	0.268
$\chi^2_{Ramsey-Reset}$		0.109	0.094
$\chi^2_{Hausman}$		0.002	0.000

Source: Researcher’s compilation (2021) using Eviews 10. * sig @5%, ** sig @ 10%

Table 3 show the regression results which examined the value relevance of earnings information across the two countries. For South-Africa, ($\chi^2_{Hausman}$) p-value (0.002) indicated the use of fixed effects estimations and consequently, the R^2 stood at 40.4% with adjusted value of 37.4%. The F-stat stood at 7.399 ($p=0.000$) and was significant at 1%, and thus confirmed the goodness of fit of the model. The result showed that both EPS and EPS moderated by IFRS adoption (EPS*IFRS) were positive at 2.4904 and 2.018 respectively, and also significant at 1% ($p=0.00$ and $p=0.000$). Examining closely the performance of the diagnostic tests, the results did not reject the functional form for the model ($\chi^2_{Ramsey-Reset}= 0.109$), the absence of stochastic dependence ($\chi^2_{Serial/Corr} = 0.256$) and heteroscedastic errors ($\chi^2_{Hetero} = 0.854$).

For Nigeria, ($\chi^2_{Hausman}$) p-value (0.00) indicated the use of fixed effects estimations. The R^2 stood at 34.7% with adjusted value at 31.9%. The F-stat stood at 11.69($p=0.000$) and was significant at 1% and thus confirmed the goodness of fit of the model. The result showed that both EPS and EPS moderated by IFRS adoption (EPS*IFRS) were positive: 0.0071 and 0.0018 respectively, with EPS being significant at 5% ($p=0.0230$), and EPS*IFRS at 1% ($p=0.00$). Examining closely the performance of the diagnostic tests, the results confirmed the normality of the residuals ($\chi^2_{Ramse-Reset}= 0.094$), the absence of stochastic dependence ($\chi^2_{Serial/Corr} = 0.268$) and heteroscedastic errors ($\chi^2_{Hetero} = 0.977$).

Table 4 Book value-Value Relevance Regression Result

Variable	Aprori sign	South-Africa FE-estimates	Nigeria FE-estimates
C		-144.02** (6179.44) {0.0203}	0.0382** (0.0128) {0.003}
BVPS	+	0.14111** (0.0662) {0.0347}	0.09754* (0.0459) {0.0352}
BVPS*IFRS	+	0.2147*** (0.0256) {0.000}	0.2202 (0.1815) {0.2256}
Model Parameters			
R^2		0.428	0.511
Adjusted R^2		0.405	0.478
12.901		9.381	19.30
0.000		0.000	0.000
1.93		1.8	1.7
Model Diagnostics			
χ^2_{Hetero}		0.622	0.553
$\chi^2_{Serial/Corr}$		0.390	0.497
$\chi^2_{Ramsey-Reset}$		0.442	0.750
$\chi^2_{Hausman}$		0.032	0.011

Source: Researcher's compilation (2021) using Eviews 10. * sig @5%, ** sig @ 10%

Table 4 shows the regression results from examining the value relevance of book value information across the selected countries. For South-Africa, the R^2 stood at 42.8% with adjusted value at 40.5%. The F-stat stood at 9.381 ($p=0.00$) and was significant at 1% and thus confirmed the goodness of fit of the model. The result showed that both BVPS and BVPS moderated by IFRS adoption (BVPS*IFRS) were positive 0.1411 and 0.2147 respectively, and also significant at 5% for BVPS ($p=0.0347$), but at 1% for BVPS*IFRS ($p=0.000$). The results revealed that for South Africa, BVPS reflected a stronger statistical significance in explaining share price when moderated with IFRS adoption than without it and hence, IFRS adoption resulted in a stronger value relevance of book values in SA. The diagnostic results did not reject the functional form for the model ($\chi^2_{Ramsey}= 0.442$). It denoted the absence of stochastic dependence ($\chi^2_{Serial/Corr} = 0.390$) and confirmed the homoscedastic structure of the errors ($\chi^2_{Hetero} = 0.622$).

For Nigeria, the R^2 stood at 51.1% with an R^2 adjusted value of 48%. The F-stat stood at 19.30 ($p=0.000$) and was significant at 1%, and thus confirmed the goodness of fit of the model. The result showed that both BVPS and BVPS moderated by IFRS adoption (BVPS*IFRS) were positive, given 0.0975 and 0.2202 respectively, with only BVPS being significant at 5% ($p=0.0352$) which suggested that IFRS adoption could not have added incrementally, and in a significant manner, to the value relevance of BVPS. The diagnostic results did not reject the functional form for the model ($\chi^2_{\text{Ramsey}}=0.750$). It denoted the absence of stochastic dependence ($\chi^2_{\text{Serial/Corr}}=0.497$) and confirmed the homoscedastic structure of the errors ($\chi^2_{\text{Hetero}}=0.553$).

Table 5 Dividends-Value Relevance Regression Result

Variable	Aprori sign	South-Africa FE-estimates	Nigeria FE-estimates
C		0.00396 (0.00145) {0.7858}	0.0209 (0.0944) {0.8251}
DPS	+	0.0826** (0.0253) {0.0016}	0.09754** (0.0459) {0.0352}
DPS*IFRS	+	0.0462** (0.0213) {0.0317}	0.3844** (0.1515) {0.0130}
Model Parameters			
R^2		0.583	0.526
Adjusted R^2		0.552	0.488
F-statistic		9.35	21.314
Prob(F-stat)		0.000	0.000
Durbin-Watson		1.8	1.7
Model Diagnostics			
χ^2_{Hetero}		0.183	0.472
$\chi^2_{\text{Serial/Corr}}$		0.836	0.083
$\chi^2_{\text{Ramsey-Reset}}$		0.573	0.336
χ^2_{Hausman}		0.00	0.00

Source: Researcher's compilation (2021) using Eviews 10. * sig @5%, ** sig @ 10%

Table 5 shows the regression results after examining the value relevance of dividend information across the selected countries. For South-Africa, the R^2 stood at 58.3% with an R^2 adjusted value of 55%. The F-stat stood at 9.35 ($p=0.00$) and was significant at 1%, and thus confirmed the goodness of fit of the model. The result showed that both DPS and DPS moderated by IFRS adoption (DPS*IFRS) were positive, with 0.0826 and 0.0462 respectively, and were also statistically significant at 5% ($p=0.0016$ and $p=0.0317$). The result implied that, again, information on dividends in South Africa maintained value relevance which was further sustained with the adoption of IFRS as shown in the moderated estimate. The diagnostic results did not reject the functional form of the model ($\chi^2_{\text{Ramsey}}=0.573$). It denoted the absence of stochastic dependence ($\chi^2_{\text{Serial/Corr}}=0.836$) and confirmed the homoscedastic structure of the errors ($\chi^2_{\text{Hetero}}=0.183$).

For Nigeria, the R^2 stood at 53% with an R^2 adjusted value of 48.8%. The F-stat stood at 21.314 ($p=0.000$) and was significant at 1%, and thus confirmed the goodness of fit of the model. The result showed that both DPS and DPS moderated by IFRS adoption (DPS*IFRS) were both positive: 0.0975 and 0.3844 respectively, and were also statistically significant at 5% ($p=0.00352$ and $p=0.0130$). The result implied that again, information on dividends in the Nigerian capital market maintained value relevance which was further sustained with the adoption of IFRS as shown in the moderated estimate. The diagnostic results did not reject the functional form for the model ($\chi^2_{\text{Ramsey}}=0.336$). It denoted the absence of stochastic dependence ($\chi^2_{\text{Serial/Corr}}=0.83$) and confirmed the homoscedastic structure of the errors ($\chi^2_{\text{Hetero}}=0.472$).

Table 6 Cashflow-Value Relevance Regression Result

Variable	Aprori sign	South-Africa FE-estimates	Nigeria FE-estimates
C		-0.0009** (0.0012) {0.0432}	0.0055 (0.0122) {0.8015}
CFPS	+	0.0067** (0.0043) {0.0227}	0.0145 (0.0217) {0.5050}
CFPS*IFRS	+	0.0487*** (0.0046) {0.000}	0.0410* (0.0218) {0.0606}
Model Parameters			
R ²		0.526	0.445
Adjusted R ²		0.513	0.398
F-statistic		9.381	19.30
Prob(F-stat)		0.000	0.000
Durbin-Watson		1.8	1.85
Model Diagnostics			
χ^2_{Hetero}		0.298	0.531
$\chi^2_{\text{Serial/Corr}}$		0.612	0.473
$\chi^2_{\text{Ramsey-Reset}}$		0.11	0.628
χ^2_{Hausman}		0.003	0.011

Source: Researcher's compilation (2021) using Eviews 10. * sig @5%, ** sig @ 10%

Table 6 shows the regression results after examining the value relevance of cash flow accounting information on market value. For South-Africa, the R² stood at 52.6% with an R² adjusted value of 51.3%. The F-stat stood at 9.381 (0.000) and was significant at 1%. It thus confirmed the goodness of fit of the model. The result showed that CFPS was positive (0.0067) and significant at 5% (p=0.0227) which indicated that in the pre-IFRS period, CFPS was value relevant. Furthermore, the interaction of CFPS*IFRS was positive and significant at 5% (0.0487, p=0.000) which implied that IFRS adoption resulted in a significant increase in value relevance of CFPS, although the marginal difference was not large. For Nigeria, the R² stood at 44.5% with an R²adjusted value of 39.8%. The F-stat stood at 19.30 (0.000), and was significant at 1%, thus confirming the goodness of fit of the model. The result showed that CFPS was positive (0.0145), although not significant at 5% (p=0.5050), indicating that in the pre-IFRS period, CFPS failed to reflect value relevance. But the interaction of CFPS*IFRS was positive and significant at 10% (0.0410, p=0.0606) which implied that IFRS adoption resulted in an increase in the value relevance of CFPS which was significant, although at 10%. But again, the marginal difference in the pre and post slope coefficients was not large. The diagnostic results did not reject the functional form for the model ($\chi^2_{\text{Ramsey}} = 0.628$). It denoted the absence of stochastic dependence ($\chi^2_{\text{Serial/Corr}} = 0.473$) and confirmed the homoscedastic structure of the errors ($\chi^2_{\text{Hetero}} = 0.531$).

Table 7 Intangible assets-Value Relevance Regression Result

Variable	Aprori sign	South-Africa FE-estimates	Nigeria FE-estimates
C		0.4880* (0.0764) {0.000}	0.0053 (0.0348) {0.8802}
INTA	+	0.0071 (0.0031) {0.2230}	-0.00222 (0.0183) {0.9034}
BVPS*IFRS	+	0.0035* (0.0019) {0.0757}	0.0009 (0.0059) {0.9884}
Model Parameters			
R ²		0.415	0.551
Adjusted R ²		0.386	0.464
F-statistic		9.38	19.30
Prob(F-stat)		0.000	0.000
Durbin-Watson		1.8	1.7
Model Diagnostics			
χ^2_{Hetero}		0.854	0.977
$\chi^2_{\text{Serial/Corr}}$		0.256	0.268
$\chi^2_{\text{Ramsey-Reset}}$		0.109	0.094
χ^2_{Hausman}		0.032	0.000

Source: Researchers compilation (2021). using Eviews 10. * sig @5%, ** sig @ 10%

Table 7 shows the regression results after examining the value relevance of intangible assets by regressing them on market value. For South-Africa, the R² stood at 41.5% with adjusted value of 38.6%. The F-stat stood at 9.38 (0.000) and was significant at 1%, and thus confirmed the goodness of fit of the model. The result showed that INTA was not value relevant in the pre-IFRS period. Given the absence of the statistical significance of the variable, it did show some evidence of weak incremental relevance resulting from IFRS adoption as the interaction between INTA*IFRS was significant, but at 10% (p=0.076).

For Nigeria, the R² stood at 55.1% with an R²adjusted value of 46.4%. The F-stat stood at 19.30 (0.000) and was significant at 1%, and thus confirmed the goodness of fit of the model. The result showed that INTA and INTA*IFRS were both insignificant at 1 and 5%, although with coefficients of -0.0022 and 0.0009 respectively. The results showed that INTA was not value relevant in the pre-IFRS period, and did not show evidence of incremental relevance resulting from IFRS adoption.

4.3. Discussion of Findings

The regression results after examining the value relevance of earnings information across the two selected countries showed that for South-Africa, EPS and EPS moderated by IFRS adoption (EPS*IFRS) were positive at 2.4904 and 2.018 respectively, and also significant at 1% (p=0.00 and p=0.000). For Nigeria, the result showed that both EPS and EPS, moderated by IFRS adoption (EPS*IFRS), were positive: at 0.0071 and 0.0018 respectively, with EPS being significant at 5% (p=0.0230), and EPS*IFRS also significant at 1% (p=0.00).

Overall, the empirical results across the two selected African countries showed support that earnings information was value relevant in the capital markets of the selected countries. This could be explained by the fact that, investors in most Africa Countries are of the belief that, the aims of business are profit oriented. It is no wonder analysts and CFOs focus on EPS in contradiction to IASB (2010) conceptual framework, which seemed to prefer equity book values (Ngole, 2012).

The regression results after examining the value relevance of book value information across the two selected countries showed that for South-Africa, both BVPS and BVPS moderated by IFRS

adoption (BVPS*IFRS) were positive: 0.1411 and 0.2147 respectively and also significant at 5% for BVPS ($p=0.0347$), but at 1% for BVPS*IFRS ($p=0.000$). The results revealed that for South Africa, BVPS reflected a stronger statistical significance in explaining share price when moderated with IFRS adoption than without it, and hence, IFRS adoption resulted in a stronger value relevance of book values in SA. For Nigeria, the result showed that both BVPS and BVPS moderated by IFRS adoption (BVPS*IFRS) were positive; 0.0975 and 0.2202 respectively with only BVPS being significant at 5% ($p=0.0352$) which suggested that IFRS adoption could not have added incrementally and in a significant manner to the value relevance of BVPS. Therefore, incremental relevance of BVPS accounting information was observed for the two Countries capital markets.

The regression results after examining the value relevance of dividend information across the two selected countries showed that for South-Africa, both DPS and DPS moderated by IFRS adoption (DPS*IFRS) were positive; 0.0826 and 0.0462 respectively, and were also statistically significant at 5% ($p=0.0016$ and $p=0.0317$). The result implied that again, information on dividends in South Africa in the pre-IFRS period maintained value relevance which was further sustained with the adoption of IFRS as shown in the moderated estimate resulting in the presence of incremental value relevance of DPS in the post IFRS period. For Nigeria, the result showed that both DPS and DPS moderated by IFRS adoption (DPS*IFRS) were positive; 0.0975 and 0.3844 respectively, and also statistically significant at 5% ($p=0.0352$ and $p=0.0130$). The result implied that, again, information on dividends in the Nigerian capital market maintained value relevance which was further sustained with the adoption of IFRS as shown in the moderated estimate.

The result provided conclusive evidence across the two country-specific estimations that information on dividends was value relevant and showed evidence of incremental relevance in the post IFRS period. A range of possible explanations exist to explain why IFRS adoption give rise to value relevant accounting information in the post-convergence period. One possibility is that IFRS adoption with interactions of market forces, laws, regulations, standards and enforcement and other institutional activities give rise to quality standards which improve accounting information. It is also possible that issues raised in prior years by Outa (2011) could have been addressed including improved compliance and enforcement.

The regression results after examining the value relevance of cash flow accounting information on market value showed that for South-Africa, CFPS was positive (0.0067) and significant at 5% ($p=0.0227$) which indicated that in the pre-IFRS period, CFPS was value relevant. Furthermore, the interaction of CFPS*IFRS was positive and significant at 5% (0.0487, $p=0.000$) which implied that IFRS adoption resulted in a significant increase in the value relevance of CFPS, although the marginal difference was not large. For Nigeria, the result showed that CFPS was positive (0.0145), although not significant at 5% ($p=0.5050$). It indicated that in the pre-IFRS period, CFPS failed to reflect value relevance, but the interaction of CFPS*IFRS was positive and significant at 10% (0.0410, $p=0.0606$) which implied that IFRS adoption resulted in an increase in the value relevance of CFPS which was significant, although at 10%. But the marginal difference in the pre and post slope coefficients was not large. The findings arising from the study were consistent with those of Musthafa and Jahfer (2013) which revealed that BVPS, EPS and OCFPS had a positive and statistically significant relationship with market value per share.

The regression results after examining the value relevance of intangible assets by regressing them on market value showed that for South-Africa, INTA was not value relevant in the pre-IFRS period given the absence of a statistical significance of the variable, but it did show some evidence of weak incremental relevance resulting from IFRS adoption as the interaction between INTA*IFRS was significant at 10% ($p=0.076$). For Nigeria, the result showed that both INTA and INTA*IFRS were insignificant at 1% and 5%, though with coefficients of -0.0022 and 0.0009 respectively. The results show that INTA was not value relevant in the pre-IFRS period, and did not show evidence of incremental relevance resulting from IFRS adoption.

The importance of intangible assets for firms and economies as a whole has been extensively recognized (Itami, 1987). Yet, several studies have claimed that accounting rules do not fully recognize the economic value of intangible assets (e.g., Amir & Lev, 1996; Hand & Lev, 2003).

5. CONCLUSION AND RECOMMENDATIONS

Despite diverging perspectives trailing the utility of IFRS adoption in developing countries, a growing number of developing countries globally and in Africa moved to adopt IFRS. The focus of the study was examining IFRS adoption and value relevance of accounting information in selected African countries: a comparative analysis of Nigeria and South Africa. This study adopted a cross-country approach and thus provided a baseline for comparing the implication of IFRS adoption on developing economies' value relevance by providing empirical evidence from Africa.

Therefore, in the light of the research findings, the following recommendations were made:

Firstly, stock exchanges in developing markets like those examined in this study should put a framework in place that measures the rate of compliance of each listed firm's annual reports with IFRS demands such that firms that record below expected compliance levels should be sanctioned accordingly. Through this policy, it is expected that compliance with IFRS will improve among listed firms. The effort will consequently improve reliably relevant accounting information that gets to the market for local and international investors' efficient and optimum economic decisions.

Secondly, the study recommended that financial reporting councils and other accounting standards setting bodies globally should support the effort to ensure improved compliance with IFRS as a matter of policy. This should be done by organizing compulsory regular training and re-training programs for the management and members of staff of all listed firms on the importance of as well as the need to observe all the mandatory disclosure requirements of IFRS. The step is foreseen to enhance the confidence of local and most importantly, foreign investors on accounting information 'consumed' to drive their investment decisions in the stock market. Through this process, the market capitalization is not only envisioned to improve but will also lead to increased foreign direct investment to the economy. This is also expected to be a booster for both emerging and frontier stock markets globally.

Finally, as a matter of policy, this study recommended further that stock markets' regulatory bodies should be stricter about specific periods of time that annual audited financial reports of all listed firms should arrive in the stock market. Defaulting firms should be promptly sanctioned as a deterrent to others. This becomes necessary especially for emerging and frontier stock markets where there is the likelihood of information inefficiency. This will serve as a way of improving on the stock market efficiency.

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