



## Comparative Sensitivity of Capital Market Information to Malaysian and Nigerian Banks Accounting Information under GAAPs and IFRS

Onalo Ugbede<sup>1</sup> --- Mohd Lizam<sup>2</sup> --- Ahmad Kaseri<sup>3</sup>

<sup>1,2,3</sup>Faculty of Technology Management, Universiti Tun Hussein Onn Malaysia

### Abstract

Recognizing the controversies that trail findings of prior studies on changes in accounting standards including IFRS adoption and the sensitivity of capital market information to accounting data, otherwise known as value relevance of accounting measures and the potency of comparative analyses in harmonizing such controversies, this study evaluate comparatively the responsiveness of Malaysia and Nigeria capital market information to their respective banks accounting information under GAAPs and IFRS. Thus, the data period is further divided into pre-adoption period (2008-2010) and post-adoption period (2011-2013). The population of this study consist of listed Malaysian and Nigeria banks. Basically, price and return value relevance models were employed for this investigation. E-views was used to analyse collected data. Empirical findings established that irrespective of reporting regimes, capital market information was more reactive to Malaysian banks accounting data compared to Nigerian banks equivalents. In other words, regardless of reporting periods, value relevance of Malaysian banks accounting measures was higher than the value relevance of Nigerian banks accounting information. Essentially, results demonstrated that IFRS adoption enhances the value relevance of both Malaysian and Nigerian banks accounting information. With findings evidencing the superiority of IFRS over GAAPs in enhancing value relevance of accounting information for both Malaysian and Nigerian banks, this study recommends the global adoption of IFRS by banks.

**Keywords:** Capital market information, Accounting information, Accounting standards, IFRS, GAAPs, Value relevance.

### Contribution of Study

This study is one of very few studies which have investigated comparatively the sensitivity of capital market information to banks accounting information under GAAPs and IFRS with particular focus on Malaysian and Nigerian Banks.

## 1. Introduction

Value relevance of accounting information is of great apprehension to users of financial statements (investors, lenders, creditors, customers/debtors, employees, analysts, government, and general public), regulatory and supervisory agents, and standard setters. However, accounting standards is fundamental in the value relevance of financial statements. According to [Yang et al. \(2005\)](#) the primary objective of accounting standard setting is to enhance the usefulness of accounting data to equity investors. [Kirsten and Gregory \(1999\)](#) equally established that standard-setters believe that enhancing relevance is desirable. Precisely, the objectives of the IFRS Foundation basically is to develop, in the public interest, a single set of high quality, understandable, enforceable and globally accepted financial reporting standards based upon clearly articulated principles. These standards should require high quality, transparent and comparable information in financial statements and other financial reporting to help investors, other participants in the world's capital markets and other users of financial information make economic decisions.

Thus, value relevance studies have been used to a large extent to evaluate accounting standards and to investigate the economic consequences of new accounting standards. Particularly, since 1 January, 2005 when the adoption of IFRS was made mandatory for European firms, studies on the impact of its adoption on value relevance of accounting information have been documented. However, most of present studies on IFRS adoption and value relevance of accounting information provide evidences from manufacturing/sales-based firms in European and other developed capital markets ([Bartov et al., 2005](#); [Aharony et al., 2010](#); [Francois and Gary, 2011](#); [Suadiye, 2012](#)). Essentially,

present studies on value relevance in the setting of IFRS adoption or changes in accounting standards are characterised with mixed but inconsistent findings.

Whereas, a group of studies established that IFRS adoption enhances value relevance of accounting information of firms (Bartov *et al.*, 2005; Kwong, 2010; Suadiye, 2012; Ahmet, 2014) others demonstrated that IFRS adoption reduces value relevance (Callao *et al.*, 2007; Kadri *et al.*, 2009; Klimczak, 2011). In view of the controversies that trail the potency of IFRS in enhancing value relevance of accounting information and in agreement with Azarian (2011) further conclusions in harmonizing controversies may be achieved fundamentally via comparative research. Value relevance of accounting information is commonly assessed based on the investigation of the association between accounting information reported in published annual reports of corporate firms and capital market data (Mishari and Faisal, 2011).

It is against this background that this study distinctively evaluates comparatively, the sensitivity of capital market information to Malaysian and Nigerian banks accounting information under GAAPs and IFRS. Apart from the introductory section, the rest of this paper is divided into three sections. Section II presents the study methodology while Section III discusses empirical results of the study. Finally, Section IV concludes and provides possible recommendation.

## 2. Methodology

### 2.1. Population of the Study

The population of this study consist of all Malaysian (8) and Nigerian banks (20).

### 2.2. Data Source, Period and Instrument of Analyses

Panel data from banks audited financial statements and capital market performance reports for periods 2008-2013 were used for this study. Eviews special regression and forecasting capabilities were employed to perform panel data analyses.

### 2.3. Regression Model

This study, consistent with Easton and Harris (1991); Ohlson (1995) and Hung and Subramanyam (2007) evaluated the sensitivity of Malaysian and Nigerian banks financial statement information to capital market data under different accounting standards using price, return and incremental value relevance models respectively.

## 3. Comparative Effects of IFRS on the Sensitivity of Capital Market Information to Malaysian and Nigerian Banks Accounting Information (Value Relevance)

For both Malaysian and Nigerian banks different reporting regimes, this study has investigated the sensitivity of capital market data to accounting information (value relevance) by performing price, return and incremental analyses. More specifically, return analyses were further divided into univariate and multivariate regression analyses. Based on both price and return models, regardless of reporting age, Malaysian banks accounting information were more reflective of capital market realities when compared with Nigerian banks accounting information.

### 3.1. Price Model – Malaysian and Nigerian Banks Comparative Findings

More specifically, findings from price model analyses suggest that for the different reporting ages, sensitivity of capital market information to accounting data, particularly, earnings per share (EPS) was higher for Malaysian banks compared to Nigerian banks. Details of comparative responsiveness of capital market information to Malaysian and Nigerian banks accounting data based on the price model for the different accounting periods are provided in Table 1.

**Table-1.** Sensitivity of Capital Market Information to Malaysian and Nigerian Banks Accounting Information Based on Price Model

	Malaysian Banks	Nigerian Banks	Sensitivity Differential
Pre Adoption Era	RM100 EPS → RM10.49 P	N100 EPS → N0.96 P	9.53 = 993%
Post Adoption Era	RM100 EPS → RM14.72 P	N100 EPS → N0.36 P	14.36 = 3989%
Pre Adoption Era	RM100 BVPS → RM-0.6 P	N100 BVPS → N-0.67 P	0.07 = 10.4%
Post Adoption Era	RM100 BVPS → RM-0.012 P	N100 BVPS → N0.31 P	-0.322 = 104%

According to Table 1, during the pre-adoption period, Malaysian banks RM100 earnings per share (EPS) increase price per share (P) as high as RM10.49. For Nigerian banks pre adoption era N100 EPS only generate N0.96, a reflection of about 993 percent difference in the responsiveness of capital market realities to Malaysian and Nigerian banks

separate accounting information. Similarly, after the adoption of MFRS/IFRS, while Malaysian banks RM100 EPS generated RM14.72 capital market data, P; Nigerian banks N100 EPS could cause P to rise just by N0.36, a mirror image of about 3989 percent difference in the sensitivity of P, capital market data to Malaysian and Nigerian banks respective accounting data.

Capital market information, P, was also more responsive to Malaysian banks accounting data, book value per share (BVPS) during the pre-adoption era compared to the Nigerian banks BVPS. For the domestic GAAP reporting age, while RM100 BVPS of Malaysian banks impact P by RM-0.6, Nigerian banks N100 BVPS impact P by N-0.67, a reflection of about 10.4 percent difference in the impact of Malaysian and Nigerian banks respective BVPS on P. However, after the adoption of MFRS/IFRS, whereas, Malaysian banks RM100 BVPS reduces P by RM-0.012, Nigerian banks N100 BVPS increases P by N0.31, a mirror image of about 104 percent in the difference in the responsiveness of capital market data, P, to Malaysian and Nigerian banks respective BVPS post adoption.

### 3.2. Return Model – Malaysian and Nigerian Banks Comparative Findings

Another capital market data, annual stock return (AR) was also more sensitive to Malaysian banks accounting data, earnings (PBTE) and earnings change ( $\Delta$ PBTE) than Nigerian banks equivalent regardless of reporting regimes. Responsiveness of capital market data, AR, to Malaysian and Nigerian accounting information-PBTE and  $\Delta$ PBTE- for the pre and post adoption eras using return model is given in Table 2.

**Table-2.** Sensitivity of Capital Market Information to Malaysian and Nigerian Banks Accounting Information Based on Return Model

	Malaysian Banks	Nigerian Banks	Sensitivity Differential
Pre Adoption Era	RM100 PBTE → RM4.34 AR	N100 PBTE → N1.6 AR	2.74 = 171.3%
Post Adoption Era	RM100 PBTE → RM10.9 AR	N100 PBTE → N-0.014 AR	10.914 = 77957.1%
Pre Adoption Era	RM100 $\Delta$ PBTE → RM-2.9 AR	N100 $\Delta$ PBTE → N-0.43 AR	-2.47 = 574%
Post Adoption Era	RM100 $\Delta$ PBTE → RM 1.35 AR	N100 $\Delta$ PBTE → N0.44 AR	0.91 = 207%

According to Table 2, while RM100 Malaysian bank accounting data, PBTE, give rise to as much as RM4.34 capital market data, AR, for the pre adoption reporting era, N100 Nigerian bank PBTE increases AR by N1.6, representing about 171.3 percent in the difference between the sensitivity of AR to Malaysian and Nigerian banks respective PBTE. After the adoption of MFRS/IFRS, while capital market data, AR, responded positively to Malaysian banks PBTE, its response was negative for Nigerian banks PBTE. Post MFRS/IFRS adoption, Malaysian banks RM100 PBTE give rise to RM10.9 AR but for Nigerian banks, N100 PBTE adversely reduced AR by N-0.014, a reflection of about 77957.1 percent in the differences in AR reaction to Malaysian and Nigerian banks respective PBTE. In the case of AR sensitivity to Malaysian and Nigerian banks respective earnings change ( $\Delta$ PBTE), whereas, Malaysian banks RM100  $\Delta$ PBTE adversely reduced AR by RM-2.9 during the pre-adoption era, Nigerian banks N100  $\Delta$ PBTE reduce AR by N-0.43, a representation of about 574 percent differences in the impact of Malaysian and Nigerian banks respective  $\Delta$ PBTE on AR. Yet, after the adoption of MFRS/IFRS, AR became more reactive to Malaysian Banks  $\Delta$ PBTE than Nigerian banks  $\Delta$ PBTE. Precisely, while Malaysian banks RM100  $\Delta$ PBTE give rise to RM1.35 AR, Nigerian banks N100  $\Delta$ PBTE give rise to N0.44 AR, a reflection of about 207 percent in the difference in responsiveness of capital market data, AR, to Malaysian and Nigerian banks respective  $\Delta$ PBTE.

Largely, based on findings from price and return models, the effects of IFRS on value relevance of accounting numbers were higher for Malaysian banks compared to Nigerian banks. In other words, findings from price and return models established that capital market information were more sensitive to Malaysian banks accounting information than Nigerian banks equivalent regardless of reporting periods. The reason perhaps, may be that Nigerian banks engage more in the practice of earnings management than Malaysian banks. Beyond the findings of this study, [Elegbe \(2013\)](#) established that Nigerian banks do not only manipulate financial report but also manipulate their stock prices through liaison with one another. In another facet, results confirm the assertion of [SCM \(2011\)](#) that Malaysia rapid growing capital market is associated with comprehensive regulatory framework; whereas, Nigerian capital market is efficiently weak ([Oke and Azeez, 2012](#)).

### 3.3. Incremental Model – Malaysian and Nigerian Banks Comparative Findings

Measures of value relevance of accounting information of Malaysian and Nigerian banks using incremental value relevance model in the context of changes from Malaysia and Nigeria respective domestic GAAP to IFRS is basically dependent on the Malaysian

and Nigerian banks respective coefficient on BVCHA and NPCHA. Table 3 present comparatively incremental value relevance findings for Malaysian and Nigerian banks.

**Table-3.** Incremental Value Relevance Malaysian and Nigerian banks Comparative Findings

	<b>BVCHA Coefficient</b>	<b>NPCHA Coefficient</b>	<b>Degree of Significance</b>
Malaysian Banks	-5.574203	-2.148586	Non-Significant for Malaysian Banks
Nigerian Banks	3.728587*	0.041541	Significant at 10% for Nigerian Banks

According to Table 3, whereas the adoption of MFRS by Malaysian banks did not have any significant negative effect on balance sheet (BVCHA) and income statements (NPCHA), IFRS adoption by Nigerian banks have significant positive effect on value relevance of accounting information, particularly, balance sheet data.

### 3.4. Overall Value Relevance – Malaysian and Nigerian Comparative Findings

Table 4 shows overall summary of value relevance results for both Malaysian and Nigerian banks.

**Table-4.** Summary of Value Relevance Results for Malaysian and Nigerian Banks

S/No	Value Relevance Analyses	Malaysian Banks Findings	Nigerian Banks Findings
1.	Price model	Accounting information were significantly more sensitive and reflective of capital market information during the IFRS reporting age than they were during the FRS reporting era	Accounting information were significantly more value relevant following the adoption of IFRS
2.	Return-PBTE Univariate Model	Current earnings level was significantly more correlated with stock returns upon the adoption of IFRS	Current earnings level was more correlated with stock returns during the SAS reporting age
3.	Return- $\Delta$ PBTE Univariate Model	Earnings changes were significantly more correlated with stock returns after the implementation of IFRS	Earnings changes were more correlated with stock returns after the implementation of IFRS
4.	Return-Multivariate Model	Statistical association between stock prices and book values of equity per share and earnings per share significantly increased following the shift from FRS to IFRS	Statistical association between stock prices and book values of equity per share was significantly higher during the SAS reporting age, whereas, the statistical association between stock prices and earnings per share was meaningfully higher following the shift from SAS to IFRS
5.	Incremental Model	IFRS adoption do not have any significant negative impact on balance sheet and income statement information	IFRS adoption was significantly associated with favourable impact on balance sheet data
6.	Conclusions	Accounting information of Malaysian banks were significantly more value relevant after the adoption of IFRS	Nigerian banks accounting information were valued higher during the IFRS reporting age

Overall, for both Malaysian and Nigerian banks, price model analyses established that IFRS adoption enhanced value relevance of accounting information. Also, for both Malaysian and Nigerian banks, Return- $\Delta$ PBTE univariate analyses demonstrated that earnings changes were more value relevant after the adoption of IFRS. Additionally, incremental value relevance analyses established that IFRS adoption impacted favourably on balance sheet and income statement numbers for Malaysian and Nigerian banks. However, while return-multivariate analyses demonstrated that Malaysian accounting data were valued higher during the MFRS reporting age; for Nigerian banks, only earnings per share was valued higher after the adoption of IFRS. Also, return-PBTE univariate analyses established that while current earnings levels were more value relevant after the adoption of IFRS for Malaysian banks, they were valued higher during the SAS reporting age for Nigerian banks.

## 4. Conclusions and Recommendations

This study investigated comparatively the sensitivity of capital market information to accounting information of Malaysian and Nigerian banks under different accounting standards- GAAPs and IFRS and by extension, this study evaluated whether the effect of IFRS adoption on value relevance is similar for Malaysian and Nigerian banks. Empirical results established that regardless of accounting standards, capital market information were more responsive to Malaysian banks accounting data against Nigerian banks accounting information. Essentially, out of five analyses conducted, each for Malaysian and Nigerian banks, except for return-PBTE univariate analyses for Nigerian banks, overall empirical results were in agreement with the prediction of this study and tended towards the

same direction, establishing that IFRS adoption by Malaysian and Nigerian banks enhanced accounting information. Overall, the effects of IFRS on value relevance are similar for Malaysian and Nigerian banks. Essentially, this conclusion is empirically appropriate and assured given the comprehensive investigation of value relevance of accounting information using nearly all existing measures/models. The use of nearly all models in literature bridges the gap between specific models weaknesses and eliminates available studies bias. The findings of this study are consistent with conclusions from George (2010); Arum (2013) and confirm that the objective of IASB in developing IFRS to enhancing accounting quality is being achieved. Findings establishing that capital market information was more sensitive to Malaysian banks accounting information against Nigerian banks accounting data regardless of reporting regimes are indicative that Malaysian banks financial reporting is more transparent compared to Nigerian banks financial reporting, a concern for corporate governance. Therefore, this study recommends that Nigerian banks embrace best corporate governance practices, particularly, they should borrow a leaf from Malaysia corporate governance code 2007. Also, with findings establishing the superiority of IFRS over GAAPs in enhancing value relevance of banks accounting information, this study recommends that banks globally should adopt IFRS.

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