

Effect of International Financial Reporting Standards Adoption on Management Accounting System of Deposit Money Banks in Nigeria

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Abstract

In an ever-evolving business environment, organisational structures and functions have been observed to be influenced by institutional pronouncements such as the International Financial Reporting Standards (IFRSs). These standards came to existence as a result of the Norwalk Agreement of 2002 between the Financial Accounting Standards Board (FASB), based in the United States of America and the International Accounting Standards Board (IASB) based in the United Kingdom. The aim of these standards is to promote transparency and enhance quality of financial reporting. Drawing from the position of institutional theory, pronouncements of institutions such as the IASB do have effect on organisational structures. This is because organisations will often go all the way to abide by such pronouncements in order to enjoy the approval of such institutions as well as the support of other stakeholders. Though these standards were initially prescribed to enhance quality of information available to external users, studies have shown that a degree of convergence now exists between financial and management accounting information. This provides a premise for ascertaining whether or not existing management accounting systems need to change to be able to produce information compatible with information requirements under the adoption of IFRS. Consequently, the aim of this study is to ascertain the effect of adopting international financial reporting standards (IFRSs) on management accounting systems by deposit money banks (DMBs) in Nigeria. This study relied extensively on primary data, which were gathered from questionnaires administered on persons designated as finance officers in the sampled DMBs. A satisfactory response rate of 66.7% was recorded. Both descriptive and inferential statistical tools were employed to analyse data gathered. Results of descriptive analysis suggest that management accounting system prior to adoption of IFRS was different from management accounting system after the adoption of IFRS. At a 95% CI, the result of regression analysis shows that the adoption of IFRS did significantly affect management accounting system(MAS) ($\beta=2.18$, $F= 0.27$, $p= 0.000$). By inference there will be cost implications for switching from traditional MAS to revolutionary MAS.

Keywords: international financial reporting standards, management accounting system, deposit money banks

Introduction

In its entirety, management involves all the processes undertaken to ensure that organisational objectives are achieved. Notable scholars have identified planning, coordinating, controlling and performance evaluation as the key components of management. For these components to function effectively, information is considered an indispensable resource. By implication, there must be a system within the organisation which generates information needed for planning, controlling and performance evaluation. The information required can be obtained through a management accounting system. Management accounting system is an information generating system which seeks to provide information needed by managers for achieving organisational objectives. This information-generating system like a typical open system tends to be influenced by the environment in which it is operating.

In recent times, business organisations have been grappling with developments in the business environment. Apart from forces of globalization and increased competition, the current wave internationally is the adoption of International Financial Reporting Standards (IFRS). These standards seek to encourage accountability and transparency as well as boost stakeholder confidence. Apart from the need to promote transparency and accountability, IFRS is observed to result in a common language of accounting (Ocansey & Enahoro 2014). In addition, these standards have brought about a convergence between financial accounting and management accounting systems such that managers now use financial accounting information used for external communication (Angelkort & Weisenberger, 2011) in making decisions. Dimitru (2013) asserts that IFRS, apart from promoting the integration of financial accounting and management accounting, has remodelled the basis of management accounting decisions. According to Procházka (2011), adopting IFRS has necessitated a convergence of management accounting and financial accounting in order to reduce cost. As a component of the institutional environment, the International Accounting Standards Board (IASB), since it came into existence in 2002, has had to review existing International Accounting Standards (IAS) and issue new IFRSs (Yahaya, Yusuf, & Dania 2015).

Organisations cannot ignore what goes on in the business environment because in the views of institutional theorists (Irvine, 2008), organisations that ignore recommendations from institutional-environment actors run the risk of being regarded as negligent. This will cause stakeholders to disassociate from such organisations. This may explain why deposit money banks in Nigeria, like typical business entities around the globe, want to be seen to be compliant with internationally accepted best practices by adopting IFRS.

The government of Nigeria recommended the adoption of IFRSs in 2012 (Madawaki, 2012), however, banks in the country had taken the initiative to adopt

relevant IFRSs before this time (Yahaya et al., 2015). In order to receive the approval of stakeholders and institutional actors such as IASB, deposit money banks (DMBs) in Nigeria have adopted relevant IFRSs. By implication, the adoption of these standards will influence organisational structures (DiMaggio & Powell, 1983) such as accounting systems (Jermakowicz, 2004). According to Sunarni (2013), developments in the business environment have resulted in changes in management accounting systems. Developments such as the adoption of IFRS have been observed by Dani and Beuren (2014) to bring about convergence between financial accounting function and management accounting function. This development necessitates a change in how management accounting and financial accounting functions are perceived. The traditional perspective suggests that financial accounting is concerned with generating information for external use, while management accounting is concerned with providing information for internal use. Though evidence abounds in literature about the importance of adopting IFRS to banks (Baskerville, 2011, Essien-Akpan, 2011), there is a paucity of empirical evidence concerning how the adoption of IFRS influences internal organisational settings such as the management accounting system.

The aim of this study is to ascertain the extent to which the adoption of IFRSs influences management accounting function among deposit money banks in Nigeria. In addition, this study contributes to the body of knowledge that suggests the evolution of the management accounting function frequently undergoes series of modifications for it to remain relevant and meet the information needs of users.

History of Commercial Banking in Nigeria

According to Orjakor (1999), banking activities can be traced to the colonial era in Nigeria. This important organ of any economy involves keeping custody of money on behalf of depositors as well as providing finance to borrowers. In a historical evolution study, Oluduro (2015) in three phases observed that history of banking in Nigeria dates back to 1892 when the African Banking Corporation (ABC) commenced the activities of banking in Lagos. The ABC was a South African-based bank which came to Nigeria and took over business from the Elder Dempster Merchants, which hitherto had been carrying on quasi-banking business before then. Closely on the heels of this, is the British Bank of West Africa (BBWA), which started as a trust fund in 1893 by Sir Alfred Jones. It commenced banking activities fully in Lagos in 1894 and established a branch in Calabar in 1900. A prominent feature of this first phase was the absence of regulation.

Closely following the first phase, was the second phase which existed between 1952 and 1985 Oluduro (2015). Oluduro observed that there was more regulation during the second phase as well the establishment of merchant banks and

development banks. In that period, there were series of business combinations among banks. Business combinations in the form of merger and acquisition brought about some level of growth as well as an increase in the number of commercial banks operating in Nigeria at that time. However, a major problem during this phase was bad management which eroded the confidence of depositors as well as trust of members of the public in the banking sector of Nigeria.

The third phase of this history can be observed in terms of the period from 1986 to date. During this period, there was a geometric increase in the number of commercial banks in Nigeria. This was made possible by the deregulation of the economy. Despite the increased number of banks, inadequate regulation, information asymmetry and bad management practices brought about distress to the banking sector. These developments have resulted in a reduction of the number of commercial banks, now renamed deposit money banks in Nigeria. In order to restore public confidence, numerous pronouncements came up. A notable pronouncement is the country's adoption of the IFRSs, which is aimed at reducing information asymmetry by encouraging disclosure.

Evolution of IFRS

The first move towards accounting standards convergence was the proposal to create the Accountants International Study Group (AISG) by the professional accountancy bodies in Canada, the United Kingdom (UK) and the United States in 1966. This was formed in order to develop comparative studies of accounting and auditing practices in the three nations. The AISG was eventually created in 1967. It published 20 studies until it was disbanded in 1977. Sir Henry Benson put forward the proposal for the setting up of the International Accounting Standard Committee (IASC) at the 40th World Congress of Accountants in Sydney in 1972. After discussions and signature of approval by the three AISG countries and representatives of the professional accountancy bodies in Australia, France, Germany, Japan, Mexico and the Netherlands, the IASC was established in 1973. Sir Henry Benson was the first elected Chairman while Paul Rosenfield was the first secretary of the IASC. By the beginning of the 21st, century in only one of the nine original IASC countries (i.e., Germany) did even a relatively small number of listed companies used international accounting standards to report to domestic Investors.

The primary goal of IASC formation was to develop a single set of high-quality international accounting standards (IASs) to replace national standards. Between 1973 and 2001, the IASC issued 41 standards or IASs before it was replaced by the International Accounting Standards Board (IASB). All listed companies in France, Germany, the Netherlands, the UK and other 21 countries were mandated by the European Commission to adopt IASs or the International Financial Reporting Standards (IFRS) from 2005. The Australian government and standard setter had put up an adoption policy of IAS by 2005. The US roadmap for adoption is 2014-2016.

A Memorandum of Understanding (MOU) was agreed between the United States Financial Accounting Standard Board (FASB) and the International Accounting Standard Board (IASB) towards the convergence of US GAAP and the IFRS in 2002. In the Norwalk Agreement, both the FASB and IASB pledged their joint commitment towards the development of high-quality, compatible accounting standards for both domestic and cross-border financial reporting.

The World Bank, the International Monetary Fund (IMF), the G8, the G7 Finance Ministers and Central Bank Governors, the International Organization of Securities Commissions (IOSCO), the Basel Committee on Banking Supervision, the United Nations (UN) and the Organization for Economic Co-operation and Development (OECD) have publicly recommended the adoption of a single set of global accounting standards or the IAS. The US SEC Concept released in 2000 on the International Accounting Standards also encouraged the convergence towards a high-quality global financial reporting framework internationally that will enhance the vitality of investment markets. On the national level, many government and tax authorities want global accounting standards in order to properly regulate and tax businesses that operate within their countries. In Nigeria, besides the readiness of the federal and state governments, the Nigerian Accounting Standards Board (NASB) (now the Financial Reporting Council (FRC)), Nigerian Stock Exchange (NSE) and Central Bank of Nigeria (CBN) were among the leading proponents of IFRS adoption in 2012.

Nature of IFRS among DMBs in Nigeria

The banking industry in Nigeria is highly regulated because of its key role in wealth redistribution. The adoption of IFRS by deposit money banks in Nigeria was initiated by the Central Bank of Nigeria (CBN) in 2008. However, due to technical challenges, compliance was rescheduled to December 2012 (Owolabi, Onwere & Dada, 2013).

As first-time adopter of IFRS, DMBs in Nigeria were mandated to comply with the provisions of IFRS 1. This standard required adopting organisations to select appropriate accounting policy based on prescribed criteria, which resulted in the recognition and de-recognition of affected assets and liabilities. This brought about reclassification as well as re-measurement of assets and liabilities.

Before the existence of IFRS, financial accounting disclosure of DMBs was governed by statutory and technical pronouncements. Statutory pronouncements were issued by the Central Bank of Nigeria, and the Nigeria Deposit Insurance Corporation. Technical pronouncements were issued by the then Nigeria Accounting Standards Board (now called Financial Reporting Council of Nigeria). With the adoption of IFRS, technical pronouncements which were basic statements of accounting standards (SAS)

have now been set aside. Currently, in Nigeria, evidence from literature shows that DMBs now render their accounts using provisions of IFRS (Saidu & Dauda, 2014). According to CBN consolidated banking supervision annual reports 2009-2014, DMBs in Nigeria have satisfactorily and continually adopted IFRS.

Management Accounting System (MAS)

Management accounting is perceived as an integral component of an information system (Hilton & Platt, 2011). The management accounting system (MAS) is the most important formal source of internal information which is concerned with providing information needed for managing an organisation (Boateng & Bampton, 2010). It is a subset of management control systems which seeks to incorporate organisational mission and vision (Lee, Fin & Cobia, 2013). Though management accounting system and management control systems are used interchangeably (Chenhall, 2003), it connotes a system which uses different mechanisms to control behaviour in order to achieve organisational goals (Ferreira & Otley, 2009). Different authors have used different terms at different times to refer to MAS. For instance, Firmin and Linn (1968) referred to it as managerial accounting system. In the views of Guerreiro, Cornacchione and Soutes (2012), it is management accounting artefacts; while Ashfaq, Younas, Usman and Hanif (2014) view it as management accounting practices. Other authors have perceived it as management accounting and control system (Nita, 2014). Irrespective of its nomenclature, MAS is generally viewed as an information system that uses accounting and non-accounting data to generate information which can influence decision.

On the basis of its application, MAS has been described as either vertical or horizontal (Bergh & Adervall, 2013). While vertical MAS is characterised by efficient resource utilisation and task distribution (Kastberg & Siverbo, 2013), horizontal MAS is concerned with output maximisation through controlled behaviour (Malmi & Brown, 2008). Studies have observed that management accounting practices of organisations belong to one of four phases (IFAC 1998). Each phase was defined based on its focus which was characterised by (i) cost determination and financial control; (ii) information for management planning and control; (iii) waste reduction in business processes; and (iv) value creation through effective resource utilization (Sunarni, 2013; Kamal 2015).

By its nature, MAS can be described as being either traditional or revolutionary (Strumickas & Valanciene, 2010). Traditional MAS is very much concerned with full absorption, product costing and inventory costing. In addition, it is considered to be most widely used by organisations (Burns & Yazdifar, 2001). On the other hand, revolutionary MAS on profitability and productivity of capital which is necessary for creating value for stakeholders in the business (Marchant, 2013). Some methods used under the revolutionary MAS include balanced scorecard (Kaplan & Norton, 2001), just-in-time, activity-based budgeting, and competitor analysis (Shadmehr & Moradi,

2013). Juxtaposing nature of management accounting with evolutionary phases, the traditional MAS has attributes of phase one and two while the revolutionary MAS has attributes of phaseS three and four. For the purposes of this study, MAS is observed in terms of its nature because it synchronises with the evolutionary phases of management accounting.

Conceptual framework and hypotheses

MAS seekS to provide information for use by managers within an organisation, particularly for planning and control functions in order to create value. According to Macintosh (1985), the relevance of management accounting systems has shifted towards integrating the information needs of different organisational players. These players were identified by Mia and Chenhall (1994) as both internal and external users of accounting information. While the internal users comprise of the management team of an organisation, the external users are shareholders and other persons who do not participate in management functions of the organisation. These external users of accounting information are the people whose interest IFRS seek to protect under the scope of corporate governance.

In the opinion of Galaen and Stenheim (2010), the adoption of IFRS results in a change in accounting numbers. Evidence from literature has shown that the adoption of financial reporting standards has germinated into the integration of financial accounting and management accounting functions (Kaplan, 1982, Angelkort & WeiBenberger, 2009). Prabhakar (2009), in his study of Australian companies, observed that the adoption of IFRS had a positive effect on management accounting processes. However, Prochazka (2011) is of the view that the integration of the MAS and the financial accounting system, particularly on data recording level, is independent of IFRS. With regards to the nature of MAS, this study extends existing literature to propose the following hypotheses:

H1: There is a significant difference in perceived influence of IFRS on the nature of MAS among DMBs in Nigeria

H2: The extent of compliance with IFRS is significantly different among DMBs in Nigeria

H3: The adoption of IFRS does significantly influence MAS among DMBs in Nigeria

Methodology

Adopting a cross-sectional survey research design, this study relied extensively on primary data. The primary data were gathered by administering self-assessment questionnaire. The population for this study comprised of twenty-one DMBs in Nigeria.

In these organisations, persons designated as finance officers were considered suitable because of their experience and understanding of MAS as well as information disseminated in annual published financial statements.

In the administration of the research instrument, respondents were neither enticed nor held against their will in completing the questionnaire. Using random sampling technique, a response rate of 66.7% was recorded on the questionnaire administered. This rate was considered satisfactory since it exceeded the minimum recommended by Henri (2006).

Instrument

A self-assessment questionnaire was developed for this study. The instrument used for gathering data is presented in Appendix I. This instrument was developed for this study from concepts in the available literature. The instrument has a Cronbach Alpha value of 0.5 which is considered moderate (Hair, Black, Balin & Anderson, 2010) and acceptable for this study.

The instrument has three items. Item one measured the extent of compliance with IFRS, item two measured perception of respondents about the extent to which IFRS influenced the MAS in their organisations. Finally, item three focused on the nature of MAS. The nature of the MAS was observed in terms of its attributes based on the developmental phases observed in the literature (Burns & Yazdifar, 2001, Strumickas & Valanciene, 2010, Merchant, 2013).

Measurement

The variables used in this study were measured using attributes obtained from the literature. The MAS is measured on the basis of its nature. Thus, the MAS is observed to be traditional when it has a focus on cost control and modern when it has a focus on value creation for stakeholders. For the purpose of interpretation, a mean value of $MAS \leq 1$ suggests traditional MAS while a mean value of $MAS > 1$ suggests revolutionary MAS. According to the CBN (2009-2014) report, DMBs in Nigeria have satisfactorily adopted IFRS. For the purpose of this study, adoption of IFRS was observed in terms of three levels of compliance, namely low, moderate and good.

The extent of compliance with IFRS was interpreted on a scale of 0-3 for the determination of the mean value. Thus, mean values were interpreted as follows:

Table 1: scale for interpreting mean values

Value of mean	Interpretation for compliance with IFRS	Interpretation for extent of IFRS influence on MAS
0 - 1.0	Poor	Low
1.1 - 2.0	Moderate	Moderate
2.1 - 3.0	Good	Large

Tools of analysis

Combinations of both descriptive and inferential statistical tools were employed to analyse the data gathered. Statistical Package for Social Sciences (SPSS) 17.0 was used to perform inferential statistical analysis. Inferential statistics were performed to substantiate the hypotheses of this study. Chi-square test and simple regression analysis were used to test the proposed hypotheses 95% CI.

Chi-square was used to test hypotheses one and two, since the data are ordinal in nature. Chi-square was used to ascertain the extent to which what is observed in practice is different from what is expected particularly with regards to compliance with IFRS pronouncements. As such, hypotheses H1 and H2 were tested using this tool. Simple regression was used to test the proposed hypothesis H3.

Results and Discussions

Based on values of mean of the MAS, results of descriptive analysis revealed that the nature of the MAS among DMBs before IFRS was traditional (= 1). Mean of MAS among DMBs after IFRS was revolutionary (= 2). With regards to the extent of compliance with IFRS, (= 2.79), implying that the extent of compliance with IFRS among DMBs in Nigeria is good. Using Chi-square, the test results of hypotheses H1 and H2 are presented in Table 2.

Table 2: Statistical indices for test of H1 and H2

Parameters	H1: Perception of influence		H2: extent of compliance with IFRS		
	Observed	Expected	Observed	\bar{X}	Expected
Moderate opinion f	5	7	3	2.79	7
Good/large opinion f	9	7	11		7
Chi	1.143		4.571		
df	1		1		
P	0.285		0.033		

Test results of H1 suggest that there is no significant difference in how the adoption of IFRS influences the nature of MAS perceived among DMBs in Nigeria ($p > 0.05$). The implication of this is that these respondents as representatives of different DMBs in Nigeria do not share different opinions about the possible effect complying with the adoption of IFRS can have on the MAS of their banks. This may be because the adoption of IFRS was regarded as an issue of best practice such that the DMBs were competing among themselves on who was to be the first to comply. In addition, the urge to secure confidence of depositors and shareholders may have been responsible for the observed level of indifference. Since the adoption of IFRS is a mandatory practice whether or not the adoption of IFRS will result in a change of internal structures was inconsequential.

With regard to the test result of H2, the extent of compliance with IFRS by DMBs in Nigeria is observed to be significantly different at $p < \alpha$. This suggests that though the DMBs are indifferent about the structural changes to MAS that may arise from adopting IFRS; the extent of compliance appears to vary among them. H3 was tested using simple regression equation:

$$Y = \alpha + \beta_1 X_1 + \varepsilon$$

Where,

Y= management accounting system;

a = intercept;

X1= extent of compliance with IFRS

ε = error term

Table 3: Regression results for the test of H3

Variables		Indices				
		R	R2	β	F	p-value
Dependent	MAS	0.145	0.021	2.182	0.257	0.000
Indepen- dent	Compliance with IFRS					

$\alpha = 0.05$
At $\alpha = 0.05$ ($R = .145$; $R^2 = .021$, $F = .257$, $p > \alpha$; $\beta = 2.182$, $p < \alpha$), the extent of adoption of IFRS has significant effect on the nature of the MAS existing in DMBs in Nigeria.

The results of this study agree with the position of institutional theorists, DiMaggio and Powell (1983), that organisations will tend to change existing structures in order to enjoy approval and acceptance of stakeholders. In this study, it is observed that among DMBs in Nigeria, there exists a shift from the traditional MAS to the revolutionary MAS. As part of the proposition of institutional theory, a shift from the traditional MAS to the revolutionary MAS following the adoption of IFRS suggests that DMBs in Nigeria want to be recognized as conforming to best practices. The results of the regression analysis provide support for the hypothesis that the adoption of IFRS significantly affects the MAS.

The change in existing structures in DMBs may have been necessitated by the changes required by the adoption of the IFRSs. The need for greater disclosure would have to be incorporated in the internal processes of each DMB. Hence the evolution of MAS in Nigerian DMBs from traditional to revolutionary may have been the lag effect of the adoption of IFRSs. Management accounting information is not framed by accounting standards but by management’s information requirement. It follows that when management information requirement changes, there will be a consequent change in the information provided by the MAS. However, the strength of the influence of the adoption of IFRS on MAS of DBMs is on the low scale (14.5%).

DMBs can proactively ensure that the MAS provide the information desired for compliance with certain aspects of the IFRSs. This may have greater positive consequences for DBMs whose finance managers are able to predict the consequence of demand for IFRS will have on the internal information generating processes and lead to greater compliance with the standards.

Considering the low scale on which IFRS influences the change in MAS (14.5%), there may be other factors that have contributed to this change which this study did not consider. Some of those factors may include the Financial Reporting Council of Nigeria's mandatory requirement for compliance with good corporate governance principles; changes within the banking industry itself brought about by greater regulation due to bank failure in 2009. However, a positive beta value ($\beta = 2.45$) is evident to conclude that adoption of IFRS influenced MAS.

By adopting revolutionary MAS, DMBs are able to overcome limitations of traditional MAS which literature has identified to include short-termism and overt attention on cost reduction. By switching to revolutionary MAS, DMBs are better able to evaluate customer satisfaction with their service delivery. At the same time DMBs are better able to reposition themselves in a market which is currently highly regulated and still satisfy the expectations of stakeholders.

Conclusion and further direction

As managers have been proven to rely on information in the discharge of their duties, the MAS becomes an essential tool. Since pronouncements of institutional operators such as IFRS can influence the MAS of organisations, it becomes imperative for managers to ensure they align their information needs with the mode of operations of a management accounting system.

This study contributes to the existing literature by appraising the relevance of IFRS to MASs, particularly from the perspective of an emerging economy such as Nigeria. Descriptive statistics of responses from sampled DMBs suggest that management accounting system prior to adoption of IFRS was different from management accounting system after the adoption of IFRS. The results of the regression analysis show that the adoption of IFRS significantly affected the MAS.

As observed from the results of the regression analysis, though the adoption of IFRS significantly influences the nature of MAS operating, the β value of 2.182, suggests that there could be other variables which can further influence the observed relationship. It is therefore suggested that future studies may consider the possible role of contingency variables, competition, and outcome of implementation.

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Appendix I

Specimen of research instrument for gathering data on nature of Management Accounting System (MAS) and extent of adoption of International Financial Reporting Standards (IFRS)

1. Extent of compliance with relevant IFRS

PoorModerateGood

2. To what extent has the adoption of relevant IFRS influenced the management accounting system of your organisation?

LowModerateLarge

3a. kindly choose ONE of the focus of MAS in your organisation, and tick **beside the BOX the option which best describes extent of its application Before IFRS**

Focus of MAS in your organisation	Extent of application		
	Low	Moderate	High
1. Coordinate, support decision as well as control behaviour in order to maximise outcome of organizational processes			
OR			
2. break up of your organisation into responsibility centres in order to ensure resources are obtained and used efficiently and effectively			

3b. kindly choose ONE of the focus of MAS in your organisation, and tick **beside the BOX** the option which best describes extent of its application After IFRS

Focus of MAS in your organisation	Extent of application		
	low	Moderate	High
1. Coordinate, support decision as well as control behaviour in order to maximize outcome of organizational processes			
OR			
2. Break up of your organisation into responsibility centres in order to ensure resources are obtained and used efficiently and effectively			

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