

**INTERNATIONAL FINANCIAL REPORTING STANDARDS (IFRS) ADOPTION
AND VALUE RELEVANCE OF FINANCIAL INFORMATION OF
LISTED DEPOSIT MONEY BANKS IN NIGERIA**

BY

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M.Sc./ADMIN/6004/2010-2011

**Being a Thesis submitted to the School of Post-graduate Studies, Ahmadu Bello
University, Zaria in partial fulfillment of the requirements for the award of Master of
Science (M. Sc.) Degree in Accounting and Finance**

March, 2015

Declaration

I hereby declare that this Thesis titled “ IFRS Adoption and Value Relevance of Financial Information in Nigerian Banking Industry ” is a product of my research effort, carried out under the supervision of Professor A. M. Bashir (Chairman, Supervisory Committee) and Mr.Chandrasekharan C.V(Member). Acknowledgements were duly made in the references in respect of all sources from which information were generated. In addition, this research work has not been presented anywhere for the award of any kind of educational certificate.

Akpaka, N.A

Certification

This thesis titled “IFRS Adoption and Value Relevance of Financial Information in the Nigerian Banking Industry” by Nkechinyere Cynthia Akpaka meets the requirements governing the award of Master of Science (M.Sc.) Degree in Accounting and Finance of Ahmadu Bello University, Zaria and is approved for its contribution to knowledge and literary presentation.

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Dedication

This research is dedicated to my dearest mother Lt. Mrs Lucy ObiageliAkpaka, who insisted on this programme not minding my hesitance and resistance. She took responsibility financially, morally and never ceased to encourage me through time. Though she left before the completion of her dream, I honour her with this work as shecontinues to rest in the Lord.
(Adieu Sweet Mother)

Acknowledgements

My most profound thanks go to God Almighty who made it possible for me to go through this work. Provision of wisdom, strength, courage and grace to carry on through time, all came from my Loving Heavenly Father, his son Jesus Christ and the Holy Spirit.

I appreciate strongly my major supervisor, Professor A. M. Bashir of Usmanu Danfodiyo University, Sokoto, who has given his quality time to bring this work out. His gentle approach, sound criticisms, observations, suggestions are highly appreciated. Also, I wish to express my gratitude to my minor supervisor, Mr Chandrasekharan C.V who supervised the work giving time to every issue, editorials, structures, and every aspect of the work, his wonderful corrections are duly appreciated

This work is a make-up of great efforts and contributions of all the lecturers of the Department of Accounting, Ahmadu Bello University, Zaria. They did not hold back their observations and ideas which helped to bring this work out in this way. Special gratitude goes to Dr. Shehu Usman Hassan, Dr. Salisu Abubakar and Mal. Jibril Yero.

I sincerely appreciate Barr. S.K. Musa, who had been like a father to me and sold the idea of M.Sc. to my mother, your insightful words, encouragement, support are duly acknowledged and I pray that God who knows how best to reward a man will bless him.

To my Mother, though she is no more but her most wonderful contribution cannot fade away. She bought the idea from Barr. S.K. Musa, she pursued it with all she had got not minding any challenge around, it's quite unfortunate that she is not around to witness the completion but I owe this achievement to her. She was the reason I had to carry on after her demise and I am glad that even in her absence one of her dreams have come true.

I wish to appreciate my family whom I had to inconvenience in different ways in order to achieve this course and they have tolerated me throughout this time. God bless Mrs Agatha Anakwenze, Mr Peter Akpaka, Chinelo Akpaka, Abigail Akpaka, Jude Akpaka, and Kelly Briggs. Special thanks to Mrs Kate Briggs (OUR MOTHER) always a mother and a friend to me, same to a dear Sister and friend Mrs Nkiruka Iheonye, she has been a source of inspiration.

To all my friends, colleagues and classmates who have been instrumental to this course may God bless them all, as my special appreciation goes to Pastor Adams, Mr & Mrs Samuel

Ashagwu, Mr.& Mrs Pius Auta, Rev. & Mrs Reuben Abubakar Ahmed, Mr Monday Emmanuel, Mal. Modibbo, MrDangana,Mrs Cynthia Chigboo,Blessing Omale, OyizaSalawu, TessyMadumere, Victoria Odoemena, Br. Philemon Nwani, Br. EbukaUdoye, Br. Martins Uzoigwe, Br. Paul-MichealUmahi, Sis. Susan Okafor, Joshua Nache, Mal. BasiruSani. May God grant their heart desires in Jesus Name (Amen).

Abstract

Globalisation, capital market crash and the Enron's case led the accounting profession to insist on the need for a single set of high quality reporting standards. International Financial Reporting Standards (IFRS) were first adopted in 2005 by EU countries while Nigeria agreed to adopt in 2012. The question is: How does IFRS adoption improve the value relevance of accounting information? Several studies have explored the value relevance of IFRS adoption; however, they are based on foreign countries while Nigerian researches do not contain empirical evidence as they are mostly theoretical. This study therefore seeks to investigate the impact of IFRS adoption on value relevance of financial information of listed Deposit Money Banks (DMBs) in Nigeria.. The study used correlation research design and data on Earnings per Share (EPS), Change in Earnings per Share (CEPS), Book Value per Share (BVPS) and share price (SP) were sourced from published annual reports of listed banks and cashcraft asset management. Moreover, Edwards Bells and Olhson (1995) model was adopted to conduct a pre (2006-2009) and post (2010-2013) IFRS analyses on seven (7) listed banks. Using the Generalized Least Square (GLS) the study documented that: Pre-IFRS financial information is value relevant; post IFRS financial information has very weak value relevance and post IFRS financial information has no relative value relevance over pre- IFRS financial information. The study therefore, recommends a need for strong enforcement effort, rigorous IFRS training and good corporate governance.

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CHAPTER ONE

INTRODUCTION

1.1 Background to the study

The primary function of accounting is the provision of information necessary for evaluation of past business decision, which consists of current operating profit and realizable cost saving (Edward & Bell, 1961). Financial information is the output of accounting process and should be duly communicated to users to enhance decision making. As such, Bello (2009), opined that corporate organisations use accounting to communicate to all stakeholders about their operating performance and position at a particular time period. However, the role of accounting cannot be over emphasized as Psaroulis (2011) stated that Accounting is a very important aspect in any business operation which involves the measurement and provision of accurate financial information to managers, investors, tax authorities, and other stakeholders to help them make decisions about how they should allocate the resources of a company, organization, or public agency.

Investors are not in a position to directly assess the performance of the company in which they intend to invest as they usually depend on financial statements prepared by the management of the company. Karunarathne & Rajapakse (2011) opined that rational investors use financial reports and disclosures to assess the risk and the value of the firm. Based on this Fisher and Jordan (2005), purported that an overwhelming weight is placed by analyst and investors on information contained in the financial statements of firms because of its vouchsafed as its forms and contents are controlled under variety of rules, regulations and statutes.

There are set of rules and regulations that guide the practice of accounting and reporting in different countries leading Ikpefan & Akande (2012) to state that accounting is business language while financial reporting is for communicating and they are both regulated

by Generally Accepted Accounting Practices (GAAP) which are usually country based. The Nigerian GAAP like other countries has a unique characteristic that has been a subject of argument which is the historical cost accounting. In this regard, Kirkulak and Balsari (2009); Cohen (1982); Kirkman (1974) argued about the irrelevance of historical cost accounting in decision making especially, in the time of unstable price or inflation as it misrepresents firms real position. On another hand, financial reporting inconsistencies has persisted due to varying reporting standards and requirements in different countries and as such posed great challenges to international investors (Pologeorgis, 2013).

In view of the above, the International Accounting Standards Board (IASB) sought a workable solution to alleviate the existing complexity, conflict and confusion created by inconsistency and the lack of streamlined accounting standards in financial reporting (Pologeorgis, 2013). Prior to 2005, all countries were at liberty to choose reporting system that suits them and most countries reported based on historical cost. But with the event of capital market crash and Enrons case which were argued on the basis of irrelevant information produced from historical cost accounting, the need for one quality standard of accounting across the globe then gained ground.

The International Financial Reporting Standards (IFRS) was developed in 2001, launched for adoption in 2005 and the EU countries had voluntarily adopted at that time. According to Ikpefan and Akande (2012), accounting framework has been shaped by IFRS to provide for recognition, measurement, presentation and disclosure requirement relating to transactions and events that are reflected in the financial statements. While Pologeorgis (2013) clearly stated that IFRS as opposed to rule based GAAP, is principle based in that it begins with the objectives of good reporting and then provides guidance on how the specific objective relates to a given situation. IFRS is regarded as a set of high quality accounting standard as compared to national GAAP (Dimos, 2011). Furthermore, Gyasi (2010) noted

that the adoption of IFRS would enhance the quality and credibility of accounting information as its impacts is on internationalisation of economic trade, foreign investment and globalisation of business ventures.

The adoption of IFRS definitely affects many aspects of accounting. In view of this, Delloite (2013) reported that the inception of IFRS has led to the use of a variety of definitions for elements of financial statements like assets, liabilities, equity, income and expenses. It has also resulted in the use of different criteria for the recognition and measurement of items in the financial statements. In addition, Galaen & Stenheim (2010) recognised that the shift to IFRS represents substantial change in recognition and measurement of accounting numbers and it is reasonable to believe that adoption of IFRS will affect the quality of accounting numbers.

Consequently, fair value measurement has been noticed to be one of the most prominent changes in IFRS as Agostino, Drago & Silipo (2009) Put forth that one critical element is that IFRS rely heavily on fair value accounting as opposed to concept of historical cost. Moreover, Christensen and Niklovaev (2009) stated that adoption of fair value will allow for wider use of fair value for non-financial assets. However, it has been criticized as Dimos (2011) noted that the use of fair value in financial reporting is not unanimously accepted based on the argument of unreliable numbers, especially when assets and liabilities are unique and their measurement is based on subjective assumption. Argument in favour of fair value opined by Christensen and Niklolaev (2009) is that commitment to fair value accounting does not favour returns on asset and makes holding of unproductive assets more expensive and when fair value estimates are reliable it improves performance measurement.

According to Khanagha (2011), the value and quality of accounting information are determined by how well it meets the needs of users and that value relevance study is the evaluation of the relationship between accounting information and capital market values.

Value relevance of accounting information has to do with when accounting information can rightly predict the changes in share price that is value relevant information enable investors to make informed decision. The degree of value relevance is a function of the development of accounting regulation, control mechanisms, business cycle, internationalization and economic development and industry structure (Hellstrom, 2005). This accounting must follow development trends and recognise changes that could affect its relevance for decision making especially with the switch over to IFRS which is said to be of high quality.

In this regards, Ojo (2008) observed that the benefits of high quality standards which should be derived from the adoption of IFRS such as relevance, reliability and understandability will certainly ensure that users of financial information benefit from better decision making as well as restoring the confidence of investors in the aftermath of economic, capital market and financial crises, which have damaged the credibility of audits and financial reporting. Furthermore, IFRS are expected to improve the comparability of financial statements, strengthen corporate transparency and enhance the quality of financial reporting (Herbert, Tsegba, Ohaneles & Anyahara, 2013) .

In studying value relevance of accounting information the earnings of a firm and the book value of equity are the basic accounting numbers that are used in literature to represent accounting information. In confirmation, Talebnia, Valipour & Askari (2011) opined that earnings and book value per share are measures that different individuals, investors and financial analysts use to evaluate the performance of the enterprise. While earnings provide a measure of how the firm's resources are currently used, book value provides a measure of the value of the firm's resources independent of how the resources are currently used. Earnings can be said to represent income statement while book values represent the balance sheet. IFRS brought about changes in definition, measurement, recognition of income, intangibles and the use of fair value. Consequently, IFRS affects the accounting figure of earnings and

book value of firm. Therefore, there is a great need to investigate if those accounting information are properly reflected in the consequent stock price.

Furthermore, Chalmers, Clinch & Godfrey (2010) are of the opinion that value relevance of book value and earnings is a natural place to look for impact of IFRS adoption on accounting information given the paramount role equity valuation plays in the IFRS conceptual framework. In line with this Aksoy (2008) opined that the relationship between stock price and the accounting variables of companies have been an interesting issue for researchers as well as managers, investors and other stakeholders of firms for several decades and the interests have focused on accounting earnings and its relationship with stock price or returns. This in turn confirms the argument of Beaver (1989) that no other figure in the financial statement receives more attention by the investment community than Earnings per Share (EPS). Therefore, the primary objective of value relevance research is to investigate whether the financial statements released by firms provide high-quality and valuable accounting information that enables users and investors to make informed decisions (Alfaraih & Alanezi, 2011).

The Nigerian banking industry is the most regulated sector in Nigeria economy. It is highly organised as corporate governance is seriously taken into consideration. The particular effect of IFRS on the banking sector is the motivation for carrying out this research in the banking sector. With IFRS financial instruments classification, impairment, recognition, hedge accounting, definition of debt versus equity have changed for banks and they all give a signal of change in the degree of value relevance of financial information presented by banks in Nigeria.

This research therefore, seeks to examine the impact of IFRS adoption on the value relevance of accounting information. This involves making clear the impact of IFRS on earnings, change in earnings and book values of banks in Nigeria and how that impact

promotes value relevance of information provided by listed Deposit Money Banks (DMBs) in Nigeria.

1.2 Statement of the problem

Value relevance of accounting information has been a subject of academic debate in the past decades and even presently. It is of great interest to standard setters, investors and researcher since it empirically proves the reflection of accounting information in share prices of firms.

Although, studies on value relevance of GAAP financial information have been embarked on but the results have been inconsistent until the hit of capital market crash and the Enron's case. The capital market crash, economic meltdown and the Enron's case revealed that firms that were proved to be profit making became insolvent and as such pose a big question as to whether reporting under GAAP is value relevant.

Arising from the economic crises, accounting profession arose to the need of providing value relevant information by introducing a single set accounting standard for global use called IFRS. Empirical works on value relevance and IFRS adoption from foreign countries have produced mixed results that is there is no consensus empirically as to whether accounting information from IFRS adoption are value relevant.

Moreover, it has been realised that empirical works in Nigeria on IFRS adoption and value relevance are not in existence to the best of my knowledge. This is largely owing to the fact that IFRS was adopted in 2012 in Nigeria. Isenmila and Adeyemo (2013) studied the impact of mandatory adoption on institutions using questionnaires while Okafor and Ogiedu (2011) sought to understand the effect, challenges and potential benefits of IFRS adoption by issuing questionnaire and conducting interviews. Conclusively, studies in Nigeria had

focused on theories and forecast of expected impact of IFRS adoption on value relevance of accounting information.

Moreover, the major change that accompanied IFRS is the use of fair value measurement as against historical cost measurement. IFRS 13 defined fair value as the price that would be received to sell an asset in an orderly transaction between market participants at the transaction date. Some scholars have argued that it is more realistic as it gives a fair view of firm book value unlike historical cost.

Furthermore, with particular concern to the banking industry, IFRS has influenced definition, recognition and measurement of intangible assets. This change has direct effect on the earning and book value of firm since intangibles that were capitalised under GAAP are now being expensed in IFRS e.g. research and development cost internal to the firm. Also, intangibles are not capitalised under IFRS unless it has a direct flowing financial benefit. This development gives rise to a need to examine if earnings and book value has improved value relevance.

The interest of standard setters who are interested in the best reporting standard; mixed results in value relevance research; IFRS as a recent phenomenon; argument against fair value; basic changes in measurement, recognition, classification and definition of assets and liabilities; sparse research in Nigeria on IFRS and lack of consensus are the basic issues igniting this study.

However, the introduction of IFRS no doubt has good intention as regards the quality of published accounting information but the questions are: In light of the foregoing, this study raises and intends to provide answers to the following questions:

- i. Would IFRS adoption make reported earnings more value relevant?
- ii. Would IFRS adoption enhance value relevance of reported book value?

- iii. With the adoption of IFRS can users be confident that the published financial information would enhance informed decision?

1.3 Objectives of the study

The objectives of this research are to:

- i. Examine the value relevance of Pre IFRS financial information (earnings, change in earnings and book values) in DMBs in Nigeria.
- ii. Investigate the incremental value relevance of IFRS adoption on financial information (earnings, change in earnings and book values) on DMBs in Nigeria.
- iii. Determine the relative value of the post IFRS financial information over the pre IFRS financial information in DMBs in Nigeria.

1.4 Hypotheses of the study

Based on the above objectives, the following hypotheses are formulated in null form;

H01: Pre IFRS financial Information has no significant value relevance in the Nigerian DMBs.

H02: Post IFRS financial information has no significant value relevance in the Nigerian DMBs.

H03: There is no significant difference between the value relevance of accounting information of the pre and post IFRS adoption in the DMBs in Nigeria.

1.5 Scope of the study

This research work examines the value relevance of accounting information using pre and post IFRS based financial information that is, the ability of accounting information to predict share price before and after adoption of IFRS in Nigeria. The domain of the study is the listed DMBs from 2006 to 2013 and performance variables such as earnings per share (EPS), change in EPS (DEPS) and book value per share (BVPS) as well as value variable were employed. Data for this study were collected from the annual reports of listed Nigerian DMBs banks, as from 2006 to 2013.

1.6 Significance of the study

This study contributes to knowledge as IFRS is very recent especially to Nigeria, by increasing awareness about IFRS its concept and challenges and its impact on accounting information. The study will also be significant to managers of firms in Nigeria as it is very imperative to know how the newly introduced IFRS affect earnings, change in earnings and book value of share capital and the anticipated report takes manager into the future reaction of investors and shareholders.

The academia would find this study interesting as it would aid comparisms of the effect of IFRS with that of developed countries that had adopted IFRS before now. It will also provoke empirical researches on IFRS in Nigeria either to confirm or refute the research.

Investors and analyst would find the result of this research to be of great interest to them as their curiosity on how their investment would be affected with adoption of IFRS would be answered and based on it they could also know if IFRS accounting information enhances informed investment decision.

The findings of this research should be important to those involved in standard setting and monitoring as well as accounting conceptual framework since standard setters are more likely to be interested in studies that suggests that investors could use an accounting number or potential accounting numbers. According to Barth et al (2000), one reason value relevance studies are of interest to the FASB is that such studies can provide insight into relevance and reliability of financial statement amounts, the two primary criteria the FASB uses for choosing among accounting alternatives. Under Statement of Financial Accounting Concepts (SFAC) No. 5, an accounting amount is relevant if it is capable of making a difference to financial statement users' decisions; an accounting amount is reliable if it represents what it purports to represent and as such an accounting amount will be value relevant, that is, have a significant relation with share prices, only if the amount reflects information relevant to investors in valuing the firm and is reliable enough to be reflected in share prices.

Finally, the study is timely as it contributes to sparse empirical literature on the impact of IFRS adoption and also to equip readers in the field of accounting on the prospects and challenges of IFRS adoption. More so, considering globalized economy and cross country investment and trades, this research may provide directions for accounting and finance professionals on the differences, effects and benefit of IFRS and how to manage major changes.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter deals with the conceptual and theoretical framework of the study. It reviews the concept of value relevance, concept of relevance and reliability, IFRS history, benefits and challenges. This chapter also reviews empirical literature of value relevance of accounting information under GAAP of various countries as well as IFRS adoption. The chapter also presents and discusses the theoretical framework of the study.

2.2. The Concept Value Relevance

The use of accounting information for equity valuation is a field of research which has seen a lot of activities. In the recent past this field made seminal contribution with the publication of Ball and Brown (1968) on capital market efficiency. A number of accounting variables have been used to explain equity value and equity return. Earning is an important variable affecting the market value of equity share (Bhatt and Sumangala, 2012). The construct “value relevance” over the years has been defined by researchers and scholar judging from their experiences. The construct also has been approached from different perspectives and had duly been classified.

Veith and Werner (2010) define Value relevance as a proxy for the information content of financial accounting data and is usually measured as the association between some accounting numbers and market measure(s). Defining value relevance as a proxy for information content is not clear as other scholars see information content as different construct with its own meaning.

Thingarnarda and Damkierb (2008) assert that value relevance is the difference between return on the long position and return on the short position, that is, the market

adjusted return that can be earned on long position and the return on market adjusted position that can be lost on short position. In his opinion, Beuselinck (2005), define value relevance from accounting quality perspective by noting that value relevance approach is an instrument to estimate quality of accounting information which is a prime importance to the well-functioning of an economy. While Beisland (2009) and Francis and Schipper (1999) concisely defines value relevance as the ability of financial information to capture and summarise firm value and also as a statistical association between financial statement information and stock market values.

Value relevance approach can be used to assess usefulness of accounting information for stockholder. Sing and Meng (2005) further observe that value relevance jointly involves both relevance for investor's decision-making and reliability of measurement. However, to assess value relevance, it is essential to determine how accounting information records is reflected in stock prices. In confirmation, Barth et al (2000), Keener (2011) and Khanagha (2011) define value relevance as the association between accounting amounts and security market values. Barth et al (2000) further state that value relevance suggests testing whether accounting amounts explain the cross sectional variation in share prices. For the most part, the valuation models that form the basis for tests in the valuation literature are developed in terms of the level of firm value.

Viewing the aim of value relevance, Dahmash and Qabajeh (2012) opined that the objective of value relevance research is to relate annual financial statement figures to a measure of firm value and to assess the relation of such information to the determination of value. This statement gives an insight to the fact that the relationship between accounting figures and stock price would determine if analyst and investor can depend on accounting figures in order reliable investment decision or a fair forecast into the capital market.

The above definitions of value relevance put together suggest that an accounting item is deemed value relevant if it explains variation in share price, that is, value relevance revolves around the security market value which determines the value of a firm. Once an accounting number has a significant positive relationship with share price then it is considered value relevant. In other words, they can be relied on to make informed decision without fear of being misled.

2.2.1. Attributes of Value Relevance.

A research conducted by Barth et al (2000) clarifies several attributes of value relevance research that sometimes are misconstrued and they are stated thus:

a. Value relevance studies are designed to assess how well a particular accounting amounts reflect information that is used by investors in valuing the firm's equity value.

b. Value relevance research provides significant insights into questions of interest to standard setters and other non-academic constituents. Using well accepted valuation models, value relevance research attempts to operationalize key dimensions of the FASB's Conceptual Framework to assess the relevance and reliability of accounting amounts.

c. Value relevance research can accommodate conservatism. In fact, absence of value relevance research would make it difficult to establish the fact that accounting practice is conservative.

d. A primary focus of the FASB and other world standard setters is equity investment. Although financial statements have a variety of applications beyond equity investment, the possible contracting uses of financial statements in no way diminish the importance of value relevance research.

e. Empirical implementations of extant valuation models can be used to address questions of value relevance.

f. Econometric techniques can be and are applied to mitigate the effects of common econometric issues arising in value relevance studies.

g. The extent and pervasiveness of the value relevance literature in the leading academic accounting journals, as well as the adaptations of several of the studies in professional publications, including those of the FASB, are testimony to its impact on academic research and accounting practice.

2.2.2. Approaches to Value Relevance

This entails the different view of value relevance from various existing researches in value relevance. Nilsson (2003) classifies approaches to value relevance as thus:

a. Fundamental analyses: This involves determining a firm's intrinsic value without reference to price at which the firm's equity trades on the stock. According to this approach, accounting information cause stock price to change by capturing values towards which market price drift away from.

b. Prediction view: This focuses on the relevant variables to be used in valuation and how to predict them. According to the definition of value relevance, financial statement information is regarded as value relevant if it helps in forecasting underlying value attributes derived from valuation theory.

c. Information view: This states that accounting information is relevant if it is used by investors when setting standards. They focus on studies into market reactions to accounting disclosures over short time intervals.

d. Measurement view: Under this construct, the value relevance of financial information is measured by its ability to capture or summarise information regardless of the source that affects equity value.

2.2.3. Classification of Value Relevance Studies

Lambert (1996) and Holthausen and Watts (2000) classified the value relevance studies into three categories as follows:

a. Relative association studies: This compares the association between stock market values and alternative bottom-line measures. For example, a study might examine whether the association of an earnings number, calculated under a proposed standard, is more highly associated with stock market values or returns (over long windows) than earnings calculated under existing Generally Accepted Accounting Practices. These studies usually test for differences in the R^2 of regressions using different bottom line accounting numbers of which the greater R^2 is more value relevant.

b. Incremental association studies: This investigates whether the accounting number of interest is helpful in explaining value or returns (over long windows) given other specified variables. That accounting number is typically deemed to be value relevant if its estimated regression coefficient is significantly different from zero. Some incremental association studies make additional assumptions about the relation between accounting numbers and inputs to a market valuation model in order to predict coefficient values and or to assess differences in the error with which different accounting numbers measure a valuation input variation

c. Marginal information content studies investigate whether a particular accounting number adds to the information set available to investors. They typically use event studies (short window return studies) to determine if the release of an accounting number (conditional on other information released) is associated with value changes. Price reactions are considered evidence of value relevance. This classification however coincides with the information approach to value relevance in Nilsson (2003) whereby value relevance is determined by the reaction to release of information that should affect price.

2.3. Concept of Relevance and Reliability

The general belief that accounting information should be reliable and at the same time relevant for decision making has held faith over time but in the presence of inflation the concepts of relevance and reliability have put researchers and accountants into great confusion as to which should be stronger in order to enhance best decision based on financial reporting.

Consequently, Obaidat (2007) stated the primary objective of financial reporting is to provide useful information to interested parties. This information should have qualitative characteristics to be useful for decision making. Based on this, Sing and Meng (2005) categorically referred to relevance and reliability as the primary qualities of accounting information which enhances the usefulness of financial report. He further states that they make the accounting information useful for decision making and the complete absence of any of the two from a piece of information renders it useless. Despite the long-standing debate on fair value versus historical cost, there is no convincing theoretical argument that allows one to determine, even after appropriate tests, to settle on one method over the other. We believe the impasse is due to the confusion around key concepts of the relevance-reliability relation as well as the limited guidance provided by the FASB (Cho, 2006).

2.3.1. Attribute of Reliability

Reliability as one of the qualitative characteristics of accounting information is defined as a quality that assures that accounting information faithfully represents the firm's position without error or bias. In other words, reliability is the quality that assures that information is reasonably free from error and bias with faithful representation, verifiability

and neutrality (Cho, 2006). In the same way, Icaiz (2001) views reliable information as corresponding to underlying transactions as well as being verifiable and neutral.

On another hand, Sharayri and Momani (2011), classified the element of reliable information as thus; accounting information should be true, neutral, honest and true representation of the information. Reliability of information is necessary for those who have enough time and experience with respect to evaluating the trueness of the information content. For the accounting information to be reliable, it should enjoy the following properties:

a. Faithfull representation: This means that accounting descriptions and numbers are related to their sources or to the events they represent or the events these numbers represent. Representational faithfulness refers to the correspondence or agreement between the accounting numbers and the resources or events those accounting numbers purport to represent (Cho, 2006).

b. Neutrality: It means avoiding choosing information in a way that results in preferring certain party of those concerned with accounting information at the expense of the others. While Cho (2006), opines that neutrality means that financial information must be free from bias intended to influence a decision or outcome.

c. Verifiability: This is a quality that may be demonstrated by securing a high degree of consensus among independent measurers using the same measurement methods. The quality of verification contributes to the usefulness of accounting information because the purpose of verification is to provide a significant degree of assurance that accounting measures represent what they purport to represent. Verification is more successful in minimising measurer bias than measurement bias and thus contributing in varying degrees towards assuring that particular measure represents faithfully the economic thing they purport to represent (SFAC 2 in Houthassen and Watts, 2000).

However, Johnson (2005) describes what reliability is “not” by stating that accountants presently use a wide array of accrual and deferral methods (which include allocation and amortization methods) in preparing financial statements. Those methods are essentially mathematical constructs and applying those methods results in outputs of dollar amounts that are quite precise. However, its precision reflects the precision of mathematics rather than the precision of the depiction. Despite the fact that those outputs are precise, they may not faithfully represent the economic thing or event that is being depicted in the financial statements. That is, the outputs might depict the wrong assets or liabilities or wrongly measure those assets and liabilities.

“Accountants who continue to seek more precision are to be admired and encouraged. However, those who seek absolute precision might be instructed by considering what has been learned in the so-called “exact” sciences. Einstein...drew a sharp and clear distinction between the certainty of calculation and the uncertainty of representations of phenomena: “As far as the laws of mathematics refer to reality, they are not certain; and as far as they are certain, they do not refer to reality.” The same is true for accounting: as far as the mathematical methods used in accounting refer to reality, they are not certain; as far as they are certain, they do not refer to reality” (Sterling, 1985).

2.3.2. Attributes of Relevance

Relevance is known as the ability of the accounting information to change the decision of the information user and influence him. In other words, it is the ability of the information to create a difference in the decision making (Sharayri and Momani, 2011). Another view of relevance by Cho (2006), inferred from the framework is the closeness between the fundamental and accounting representation. According to the Concepts Statements, accounting information is relevant if it is capable of making a difference in a decision by helping users to form predictions about the outcomes of past, present, and future events or to confirm or correct prior expectations (Sing and Meng, 2005).

To be relevant to investors, creditors, and others for investment, credit, and similar decisions, accounting information must be capable of making a difference in a decision. Relevant information is described as confirming or correcting prior expectations, or assisting in forming future expectations (Icanz, 2001). Relevance is thought to be a user-specific characteristic. That is, it is a person's perception that gives information a level of relevance which is specific to both need and to the current decision under consideration (Stamp, 1982).

Obaidat (2007) contributed to relevance studies by enumerating the basic characteristic that qualifies information to be relevant. Relevant information must contain the following qualities:

a. Predictive value: It is the ability to help accounting information users predict the impacts of past, present and future events. Predictive value of earnings refers to the ability of current earnings to predict future earnings and future cash flows. Earnings predictability is important for relevance because it can influence decisions by forming expectations about future earnings that are correlated with future cash flows.

b. Feedback value: It is the ability to help accounting information users correct and confirm past predictions. Barua (1996) used a separate measure for feedback value, which considers it as the ability of current earnings to change predictions about future earnings.

c. Deadlines: It is the availability of information to decision makers at the right time. Barua (1996) notes it as timeliness which implies providing information in the financial statements in a timely manner and also recognizing all pertinent information (e.g., revenues, expenditures, changes in the value of assets) to enable the users of current financial statements to form an expectation about the future cash flows of the business.

The FASB is aware of the strong existence of a view that treats reliability as the dominant quality over relevance. It is understandable that the demand for reliability is especially strong among accounting practitioners, particularly, accounting information

preparers and auditors are likely to consider reliability more important than relevance because they want to ensure that the information is reasonably free from error or bias (Cho, 2006). This reliable information is very useful to equity investor in trying to value their investment worth and in the same respect. Barth et al (2003) develop a theoretical recognition and disclosure model and find that recognition of a highly unreliable accounting amount can result in greater price informativeness.

In favour of relevance, Cocker (2005) observes that there is a move in International Financial Reporting Standards (IFRS) away from historical cost as the basis of accounts towards fair value. This move arguably is a move away from an emphasis on reliability towards relevance. Understanding the relationship between relevance and reliability is not only important in this context but topical. Another view from Koonce (2008) observes evidence for the hypothesized unidirectional nature of the relationship between assessments of relevance and reliability. While properties associated with reliability affect users' assessments of relevance, properties associated with relevance do not influence users' assessments of reliability.

Yet other scholars are of the view that they both have relative importance (Sing and Meng, (2005) and Cocker, 2005). Relevance and reliability should carry the same weight for financial statements measures, such measures better reflect the present financial status of reporting and better facilitates analyses for past performance and future prospect of the company. In this regards the view that reliability should outweigh relevance should not be agreed with. However, Koonce (2005) puts forth that relevance addresses the pertinence of an economic construct (e.g. fair value, historical cost) to a user's decision while reliability addresses how well that economic construct, or phenomenon, is depicted or measured (e.g. fair value based on a market transaction or model inputs). Standard setters conclude that the

decision usefulness of accounting information is a joint function of its relevance and reliability, these two qualities are distinct and independent (FASB 2010).

2.4 International Financial Reporting Standards: Concept and Overview

IFRS are set of guidelines and rules set by the International Accounting Standard Board (IASB) that companies and organisations can follow when compiling financial statements (Psaroulis, 2011). Since financial information is a medium of communicating financial transactions, it became imperative that different countries' accounting standards be harmonized to form a single set of accounting standard, to improve the rate at which investment and credit decisions are taken and aid international comparability of companies' performance both within and outside the reporting countries (Herbert, Tsegba, Ohanele & Anyahara, 2013).

Even though the IFRS has just been recently mandated, it has its root from 1973 when 16 professional bodies from Australia, Canada, France, Germany, Japan, Mexico, Netherlands, UK and USA agreed to form an International Accounting Standard Committee (IASC) in order to bridge the gap between national GAAPs of different countries since multinational companies, globalisation, international trades, parent and subsidiary companies, cross country investment were becoming prominent. As a result the International Accounting Standard (IAS) was developed as a uniform global accounting standard which helps in reducing discrepancies in international accounting principles and reporting standards. For over 2 decades IAS has been in charge of harmonisation of accounting practices because Initial efforts focused on harmonization which entailed reducing differences among the accounting principles used in major capital markets around the world. By the 1990s, the

notion of harmonization was replaced by the concept of convergence; the development of a single set of high quality International Accounting Standards.

In 2001, the IASC was taken over by International Accounting Standard Board (IASB) with an objective to develop global standards and related interpretations that are now collectively known as IFRS. The board adopted the existing IAS and referred to them as IFRS including the new standards. This reorganisation became very necessary since accounting is the language of business, then business enterprises cannot continue to speak in different languages to each other while exchanging financial numbers from their international business.

With advent of globalisation, the world capital market has witnessed rapid expansion, diversification and integration which have brought about a shift away from local reporting standards to global standards. In 2005 EU commission issued a legislation to require the use of IASB standards for all listed firms thereby making IFRS mandatory. In response to this, over a Hundred and Fifteen countries have adopted IFRS of which Nigeria is not an exception.

The IFRS Interpretations Committee is the interpretative body of the IASB. The Interpretations Committee comprises 14 voting members appointed by the trustees and drawn from a variety of countries and professional backgrounds. The mandate of the Interpretations Committee is to review on a timely basis widespread accounting issues that have arisen within the context of current IFRSs and to provide authoritative guidance (IFRICs) on those issues. In developing interpretations, the Interpretations Committee works closely with similar national committees and follows a transparent, thorough and open due process.

2.4.1. International Financial Reporting Standard and Nigerian Setting

In line with developments in other countries and jurisdictions, Nigeria had signalled its willingness to adopt the IFRS in 2012. On 28 July 2010, the Nigerian Federal Executive Council (FEC) approved January 2012 as the effective date for the convergence of accounting standards in Nigeria (SAS or NGAAP) to International Financial Reporting Standards (IFRS). The FEC also directed the Nigerian Accounting Standards Board (NASB) to take further necessary actions to give effect to the decision.

The Financial Reporting Committee (FRC) which was formally Nigerian Accounting Standards Board (NASB) first published in September 2010 a roadmap which outlined specific milestones that would lead to the adoption of IFRS.

- a. In the road map it was indicated that public listed firms and significant public interest companies would commence reporting in IFRS from 1st January 2012, other public interest companies in 2013 and small and medium sized companies in 2014.
- b. The report sought the amendment of relevant laws and regulations that had one provision or the other impacting on financial reporting in Nigeria to ensure uniformity and removal of conflicts and ambiguity. Specifically; Companies and Allied Matters Act (CAMA) 1990, Banks and Other Financial Institutions Act (BOFIA) 1991, Investments and Securities Act (ISA) 2007, etc.
- c. The report recommends the passage and signing into law of the Financial Reporting Council Bill as soon as possible since it has the capacity to bring all financial reporting regulations under one umbrella and thus ensure ease of compliance.
- d. The report recommends for an early countrywide intensive capacity building programme to facilitate and sustain the process of adoption and the establishment of IFRS Centre of Excellence as an institutional platform for capacity building.

- e. The Report recommends the establishment of the proposed Financial Reporting Council for Nigeria to ensure proper enforcement of IFRS (Herbert 2010). This bill has since been signed into a law, and in 2011 the NASB transited into FRC.

2.4.2 Benefits of IFRS adoption

So many benefits have been outlined to accrue from IFRS adoption notwithstanding the challenges associated with it. IFRS which is considered a high standard of accounting is thought to be beneficial. Deloitte (2009) notes that this single set of worldwide accounting standards will simplify accounting procedures by allowing the use of a common reporting language.

According to Leung (2013), two main benefits of instituting a single set of global accounting standards are potential improvements in the quality of reported information as well as convergence benefits, such as greater ease of comparing financial statements of companies across countries and consistency in auditing practices. Herbert et al (2013) equally noted that IFRS are expected to improve the comparability of financial statements, strengthen corporate transparency, and enhance the quality of financial reporting. Psaroulis (2011) in his opinion said IFRS adoption allows organisations and governments to compare the IFRS-supported financial with greater ease.

On a broader note, Ikpehai (2011) relates the benefits of IFRS for multinational as thus: Ease of financial statement comparability among companies, facilitate cross border investments and access to global market, improve reporting quality, improve transparency, investor confidence, reduce accounting complexities, cost efficiency, process and technology optimization.

The outlined benefit Ikpehai (2011) accounting firm is questionable in the sense that IFRS adoption might not be cost efficient across the globe. Countries whose reporting

standards were already close to IFRS could enjoy such benefits but countries who are adopting for the first time would need to invest a lot in staff training, materials and even technology update. Moreover without a consensus on increased quality of accounting information, it cannot be credited to IFRS and finally, the complexities have rather increase considering the rigors of employing fair value accounting.

Delloite (2009) also outlined that IFRS would generally be beneficial in the following way;

- a. Improves quality and consistency of information that management needs;
- b. Enables companies to be understood in a global marketplace, access world capital markets and promote new business;
- c. Allows a company to benchmark itself against its peers throughout the world;
- d. Allows investors and others to compare the company's performance with competitors globally;
- e. Improves the comparability of entities and provide more consistent financial information;
- f. Considers as an opportunity to make some strategic improvements to your finance systems and processes;
- g. Helps companies to have a competitive advantage in negotiations with credit institutions and accordingly cost of borrowings are reduced;
- h. Results in more accurate risk evaluations by lenders and to a lower risk premium; and
- i. Helps companies to take advantage of alternative forms of finance

Furthermore, the roadmap for IFRS adoption in Nigeria contains the following benefits.

Improved comparability of reported financial information by entities, easier access to foreign capital funding and cross-border stock exchange listings, more effective management of

enterprises and efficient processes since IFRS reporting is performance based, more transparent financial information to all stakeholders and optimization of tax planning

However, it is quite interesting, that they all have some benefits which are very common and reoccurring. Improved quality, enhanced comparability, accessible foreign investment and financial reporting transparency are reoccurring benefit well pronounce in literature.

Ojo (2008) however, expressed benefits of IFRS using accounting languages being of the view that that IFRS would: enhance relevance, reliability and understandability of financial information; enhance better decision making; restore the confidence of the investors in the aftermath economic, capital market and financial crises which has damaged the credibility of audit and financial reporting.

2.4.3 Impact of International Financial Reporting Standards

The convergence and subsequent change of accounting and reporting standards at the international level impact a number of constituents.

Pologeorgis (2013) enumerated the following as the specific impact of IFRS to corporate management, investors, stock markets, accounting professionals and accounting standards setters and agencies.

Corporate management will benefit from simpler, streamlined standards, rules and practices that apply to all countries and are followed worldwide. The change will afford corporate management the opportunity to raise capital via lower interest rates while lowering risk and the cost of doing business.

Investors will have to re-educate themselves in reading and understanding accounting reports and financial statements following the new internationally accepted standards. At the same time, the process will provide for more credible information and will be simplified

without the need for conversion to the standards of the country. Further, the new standards will increase the international flow of capital.

Stock markets will see a reduction in the costs that accompany entering foreign exchanges, and all markets adhering to the same rules and standards will further allow markets to compete internationally for global investment opportunities.

The shift and convergence of the current standards to internationally accepted ones will force accounting professionals to learn the new standard, and will lead to consistency in accounting practices.

The development of standards involves a number of boards and entities that make the process longer, more time consuming and frustrating for all parties involved. Once standards have converged, the actual process of developing and implementing new international standards will be simpler and will eliminate the reliance on agencies to develop and ratify a decision on any specific standard.

From another perspective Ikpehai (2011) outlined the effect of IFRS on financial reporting of banks, insurance firm and real estate by concentrating on the basic reporting changes

IFRS and banking: financial instruments classification, measurement, recognition and DE recognition ; financial instrument impairment; hedge accounting; definition of debt versus equity; consolidation and special purpose entities; presentation of financial statement and disclosures of financial instrument; leases; insurance contract; post-employment benefit; IFRS 1- first time adoption.

IFRS and real estate: investment properties; impairment; property, plant and equipment; leases; sale of real estate; sale and lease back; joint ventures; taxes; IFRS 1- first-time adoption; presentation of financial statements.

IFRS and telecoms: revenue recognition; capacity transaction; intangible assets; property, plant and equipment; impairment of non-financial assets; leases; financial instruments; provisions and contingencies; IFRS first time adoption; presentation of financial statement.

The adoption of IFRS will impact all aspects of operations, decision-making and communications that are dependent on reported financial results. Entities will need to consider the impact IFRS on: accounting and reporting systems, Information systems, internal controls, availability and capability of resources, corporate income taxes, Education and training, communication requirements, project management and tax reporting.

Wensveen (2010) concluded that IFRS is not just a finance thing but phenomenon that cut across every aspect of an entity and further explains their impact on board, information technology, business operations, finance, investors and management.

Interestingly, the impact of IFRS has been broadened as it does not only affect the accountants even though it an accounting issue. Weenvens (2010) explains that every sector of a firm has its own role to play if the goal of IFRS must be achieved.

2.4.5 The Challenges of IFRS Adoption and ways out

Despite the numerous benefits of IFRS there are no doubt challenges that affects its true outcome, the challenges are made prominent from misconception about IFRS which are corrected as outlined by Wensveen (2010).

Firstly, IFRS is more complex to adopt because it is a principle-based standard requiring interpretation (“the devil is in the detail”). This point contradicts Delloite (2009) who stated that IFRS is beneficial as it reduces accounting complexities. We support the notion of Wensveen (2010) because; critically examining the content of IFRS, one would understand that it has some complexities especially in measurement and valuation. However,

the findings of Okafor and Ogiedu (2011) confirm that IFRS adoption will add to financial reporting complexities.

Secondly, IFRS is more than an accounting issue and can have a major impact on an entire organisation (not just the finance function).

Thirdly, IFRS typically has a medium-to-high impact on your (financial) results in the majority of cases (and always increases volatility in the results).

Fourthly, IFRS should be fully embedded as the primary financial reporting standard throughout the whole company (including its subsidiaries), not just at the consolidated group level.

Fifthly, IFRS is a Board-level issue and hence the conversion to IFRS should be sponsored by the entire Board.

So many factors tend to limit the workability of IFRS as suggested by countries that has already adopted it. Gyasi (2010) described the following as the challenges of IFRS adoption.

- a. Cost of adoption: one challenge posed on firms in adopting IFRS is the cost of implementation which could result from cost of restructuring accounting system, training of staff, consultancy fees. However, Gyasi 2010 put forth that the cost of setting up a new accounting standard in developing countries has been averted when IFRS is adopted only cost of setting up is shifted to the cost of training local staff to adopt IFRS.
- b. Implementation Difficulty: some have argued that the preparation of IFRS was done based on developed economy thereby posing difficulty of implementation. Some of the standards do not meet the local accounting needs of some countries. IFRS are developed with the developed economies as a yardstick and for that matter it would not fit perfectly the economies of developing countries.

- c. Internal control: internal control measures will have to change in order to ensure compliance before external auditors come to audit the company's book.
- d. External auditors: the services of renowned audit firms would be required in that most local audit firms are also new to these standards and hence cannot be relied upon.
- e. Staff training and adaption: the complexity of IFRS would require rigorous training for account staff of which it will cost organisation a great deal of time and money before staff can acquire and be able to soundly practice IFRS and adapt to it.
- f. Local Regulations: some local regulation demands certain reports that are not in accordance to the IFRS and hence poses a problem to companies complying with these standards.

The adoption of IFRS continues with many countries setting timetable or roadmap for adoption expecting to reap the benefits of IFRS adoption. Nevertheless, there are numerous challenges a country must confront and overcome. A critical assessment of countries where IFRS has been adopted and implemented reveals that countries like Nigeria which has just adopted IFRS or those countries about to adopt or converge their local GAAP with IFRS must be adequately prepared.

As a way of meeting up with inherent challenges of IFRS Odia and Ogiedu (2013) explain a number of issues to be tackled and things to put in place if IFRS adoption must bring the expected benefits. They include careful planning involving the stakeholders and extensive public education, the allocation of resources, a legal and regulatory support system and institutional support with strong management systems; effective communication system for informing users of changes in reporting requirements and also the transition plans and its implications for preparers, users, educators and other stakeholders; available resources must be put in place to sponsor training and to co-opt consultative groups that will always give attention and response to users; suitable standard to meet up with small and medium scale

firms because of complex nature of IFRS; capacity building for stakeholders like auditors, analyst and regulators; presence of strong institutional framework like the FRC; strong awareness campaign by ICAN, CBN, FIRS, SEC. and NSE in order to ensure compliance; and the nation's statistical board should take cognisance of the impact of adoption of IFRS on their works.

2.4.6 Major Changes in Financial Reporting and Stages of Effective adoption

Some items in the financial statement have been altered in IFRS either by a change of its definition or by its classification or its measurement Wensveen (2010) listed the item that has been affected thus: debt & equity investments, consolidation, transfer of financial assets, provisions, business combinations, share-based compensation, pensions, taxation, loans, derivatives, own shares and bonds, capitalisation of software, netting fixed assets, real estate investment, Impairment and foreign currency.

He further suggested stages to an effective adoption of IFRS in light of its flexibility. It was divided into three stages which are assessment, design and implementation:

a. Assessment stage

- i) Perform gap analysis
- ii) Impact assessments
- iii) Identify training needs
- iv) Plan conversion path
- v) Project budget
- vi) Present results to senior management

b. Design Stage

- i) Mobilise finance departments and IT

- ii) Conduct IFRS training
- iii) Build tools (policies, financial statements, reporting packages)
- iv) Convert systems
- v) First trials

c. Implementation Stage

- i) Mobilise business
- ii) Convert budget
- iii) Dry Run
- iv) Opening balance sheet
- v) Comparatives
- vi) Manage business on IFRS basis
- vii) Full cutover to IFRS

2.5 Financial Information: Book Value and Earnings

The financial statement presented in corporate reporting contains information needed by users of financial statement. These users have interest in different accounting number as it affects their decision making. Basically, for investors who are interested in firm value are concerned with earnings, dividend and book value of a firm. Value relevance thus emerges through market participants basing trading decisions on accounting information about the future performance of an entity. However, not all information is used in the decision-making process as only information that is both relevant and reliable will influence market values.

The association between some accounting information and a change in share prices thus only exists if information conveyed by the accounting system is both reliable and relevant to the market. This inter alia allows testing for the incremental usefulness of some

specific accounting information, the information content of accounting information published under specific accounting regimes (Veith and Werner, 2010).

Daines (1929) asserts that earnings of a business are the joint product of all the asset, conditions and services which the business possesses and uses. Bhatt and Sumangla (2012) equally note that earnings are important variable affecting the market value of equity share. Company producing and selling goods and services useful to citizens in a society and earning revenue covering its cost of production adds to its reserve and build up the same. Once a company starts earning attractive sum, the equity share will have more and more demand which will result in increase in market value of the equity (Veith and Werner, 2010). Hence, earning per share is a measure which the stock brokers and investors will watch carefully and consider while deciding the market value of the equity share (Bhatt and Summangla, 2012). In particular, they note that when the ratio of earnings/book value is high, earnings is the more important determinant of equity value. This is because under such a scenario, the firm is likely to continue in its current approach to using resources. When earnings/book value is low, book value becomes the more important determinant of equity value. Under this alternative scenario, the firm is more likely to exercise the option to adapt its resources to a superior alternative use. Earnings per share (EPS) changes have the biggest influence on stock prices over the long run. Stock prices increase when company profits grow, and decrease when company profits decline. But in the short term, the relationship between EPS and stock prices is not always straightforward. EPS is one of many things that can be used as a basis for determining an "intrinsic value" for a stock.

The book value of a company is an assessment of the value of net asset of a company, in other words called net worth of a business. Another definition refers to book value as the accountant's measure of what equity of a firm is worth. Therefore, book value per share is assets less liability divided by the number of shares outstanding. For all shortcomings, a stock

book value per share remains the best easily accessible measure of the asset. Anandarajan, Hasan, Isik and McCarthy (2005) assert that book value adjusted for inflation has a stronger association with equity value. Furthermore, book value appeals more to investors who look at its relationship to stock price by using the price to book ratio. Investors believe in accountants when it comes to estimating of values as market is less reliable. However, book value may not be a good indicator of value for many firms.

Since stock price reflects how much a firm is worth. A company that is a viable growing company would be worth more than its book value for its ability to generate earnings and growth. Burgtahler and Dichev (1997) observed that the extent of association with earnings and book value is dependent on the level of success of a firm because when a firm is successful earnings act more as important determinant of equity value while when firm is unsuccessful book value becomes an important determinant of equity value.

2.6 Empirical Research Relating Value Relevance

Before the adoption of IFRS researches had been on the verge of understanding the impact of financial information on stock price. These literature would be reviewed in order to know the pre IFRS impact across the globe and secondly the recent literature on the IFRS adoption and value relevance of accounting information.

2.6.1 Value Relevance and GAAP Financial Information.

Several studies have sought to empirically establish the relationship between share price and financial information. These researches have been conducted in different countries at different times.

Telebnia et al. (2012) review the effects of free cash flow agency problems on the value relevance of earning per share and the book value per share using stock price of chemical industry and pharmaceutical companies listed in the Tehran Stock Exchange from 2002 to 2011. Regression analyses was used and found reduction in value relevance of earnings per share and book value per share.

Beisland (2010) investigated whether value relevance of accounting information is consistently underestimated. Data collected from Oslo Stock Exchange data base and Norwegian school of economics and business administrations stock market data base from 1992 to 2004, using regression analysis of stock return adjusted for dividend and split on accounting information including sign and disaggregated effect. The result of the study showed that value relevance is more than double if the sign and disaggregated effect is incorporated into the analysis and thereby proves that traditional value relevant regression may seriously understate value relevance of accounting information based on Norway. However, the research was not done across countries and industries or studied under different accounting standard which could have varied the finding.

Kadri, Ibrahim and Abdulaziz(2010) investigated the value relevance of aggregated and disaggregated book value and earnings of high-tech firms listed on Bursa Malaysia for the period from 2003-2008. Using the Ohlson (1995) basic and modified equity valuation models, the study found that the explanatory power of both book value and earnings are fluctuating, as book value is in a decreasing trend whereas earnings is in an increasing trend while results of the modified models show that disaggregated book value and earnings could explain the variation in market value better than aggregated book value and earnings. This confirms Beisland (2010) as it also considered disaggregation but the period of this research could be considered too short to be used to draw a reliable inference.

Gjerde, Knivsfla and Saetem (2011) carried out a research on value relevance of financial reporting in Norway for 40 years (1965-2004) using a wide range of data collected from Oslo Stock Exchange. They collected data on stock price, book value of equity and earnings during the year. The study employed binary correlations, price and return model regression by tested the overall value relevance after controlling for changes in economic value relevance drivers using time regression and event study with time and accounting variables as proxies for accounting quality. The result shows that performance accounting based on matching principles is not necessarily in conflict with highly relevant financial reporting. However, the result differs from the normal trend and could be attributed to Norway Generally Accepted Accounting Principle.

Dung (2009) examined the value relevance of financial statement information on Vietnamese stock market. Data were collected for all non-financial firms listed on the Hochiminh Stock Exchange and VN index from Ezsearch database from 2003 to 2007. Regression analyses based on Ohlson model was used to test for value relevance and since the data collected was panel, ordinary least square, fixed and random effect models were used. The result showed that the relationship is statistically significant but weaker than that of developed and emerging markets and that earnings and book value are reflected in stock price using time lag. This result notwithstanding is derived from a short period analyses and although, Vietnam is also categorized as one of the developing nations like Nigeria, the findings of the study cannot be applied to our case with certainty given differences in level of sophistication in the financial reporting environment between the two nations.

In their study of value relevance of financial statements' information with special reference to the listed companies in Colombo Stock Exchange, Karunaratne and Rajapakse (2009) document a positive relationship between NBV and value relevance. The study sample consists of 100 companies listed for the period of 2004 to 2008 and Ohlson (1995)

Model is used as a tool for analysis. However, the findings of the study cannot be generalized to the Nigerian firms because of the differences in regulatory frameworks and reporting standards and the fact that period of analyses was only 4years affect the stands of the result.

Chang et al (2008) investigated the relationship between stock prices and earning per share (EPS) and also whether stock price responds to EPS under different level of growth rate of operating revenue. Data was collected from 75 firms listed in Taiwan stock exchange from 1997 to 2006 and analysed using co-integration method. The empirical result indicated that the co-integration relationship existed between stock prices and EPS in the long-run and that for firms with a high level of growth rate, EPS has less power in explaining the stock prices; however, for the firm with a low level of growth rate, EPS has a strong impact in stock price.

Keener (2011) examines the relative value relevance of earnings and book value across industries in the U.S.A. over a period of 20 years (1982 to 2011) covering 98,284 firm-year observations. The study uses the Ohlson (1995) model and Collins et al. (1997) model to document that the joint value relevance of earnings and book value has not decreased over the sample period and also the incremental value relevance of earnings has increased while book value stayed constant for the sample period and truly concludes that there is no incremental value relevance of earning and book value. A possible reason that explains this finding is that the number of losses reported by companies has increased over time, and this increase is expected to impact on the value relevance of earnings and book values.

Alfaraih and Alanezi (2011) explore the value relevance of accounting earnings and book value information produced by using firms listed on the Kuwait Stock Exchange (KSE) from 1995-2006. Two valuation models - price and returns were employed and the results of both models show that earnings and book value were jointly and individually, positively and significantly related to stock price and stock returns. Interestingly, the value relevance of

earnings and book value of KSE listed firms were found to be higher than the findings observed in some developed and emerging countries. However Dung (2009) using the same model in Vietnam experience value relevance lower than those of developed and emerging economies. This variation in finding could be as a result of the length of period of analyses or environmental factors.

Collins, Maydew and Weiss (1997) suggest that using book value of equity to evaluate firm with small size, intangible intensities and reporting negative earnings is more appropriate than using earnings in the light of investors' point of view. Further, they document the relative value trade-off between earnings and book value coefficients when earnings are negative. This relationship is found to persist even after size, risk and earnings persistent are taken in to account.

Chen, Goldstein and Jiang (2001) suggest that value relevance shifts to book value for firms with negative earnings. The value relevance is one of dominated factor in the past studies. Previous studies that used earnings and cash flows in terms of their information content found that each Measure provided incremental information when used in the conjunction with other.

Khanagha, Mohamad, Hasan and Sori (2011) examined the value relevance of accounting information in Iran for the period 1996 - 2008, before and after the codification of national accounting standard in 2001, which could describe the effect of codification of the first national accounting standards by the Iranian Association of Certified Public Accountants. The results obtained from a combination of regression and portfolio approaches, show accounting information in Iran is value relevant, and the value relevance of Earnings per Share (EPS) is higher than book value of equity per share (BVPS). Moreover, a comparison of the results for the periods before and after reform, based on both regression and portfolio approaches, shows a decline in value relevance of accounting information after

the reform in accounting standards. It could be interpreted to mean that codification of the first National Accounting Standards did not improve relevancy of accounting numbers in the Tehran Stock Exchange.

Collins, Maydew and Weiss (1996) investigate systematic changes in the value-relevance of earnings and book values over time and the findings appear contrary to claims in literature. They found that the combined value-relevance of earnings and book values has not declined over the past forty years but has rather increased slightly while the incremental value-relevance of earnings has declined of book values have increased. Most of the shift in value-relevance from earnings to book values can be explained by the increasing frequency and magnitude of one-time items, the increasing frequency of negative earnings, and changes in average firm size and intangible intensity across time.

Ai-deehani (2005) empirically examined the determinants of stock prices based on a sample of cross-sectional data of 61 companies listed on the Kuwait Stock Exchange for the period of 1999-2002. The study used traditional and relaxed extreme bound analysis to test the robustness of the determinants of stock prices for the companies listed on the Kuwait Stock Exchange. The result showed that only three out of eleven potentially important variables passed the test. These are previous earnings per share, previous cash flow per share and the price to book value ratio. The final model that included these variables in addition to the earnings per share and the book value per share as the free variables produced a very strong explanatory power. The relaxed extreme bound analysis provided misleading results.

Dahmash and Qabajeh (2012) examined the value relevance of Ohlson (1995) model with Jordanian data of market value of equity, abnormal earnings and non-accounting value relevant information using an unbalanced panel regression analysis for a sample of 365 industrial and commercial public companies listed in the Amman Security Exchange during the period 2003 to 2008. The results showed a high value relevance for the Jordanian

industrial companies listed in Amman Security Exchange in capturing share prices, that book value of equity and abnormal earnings are value relevant for the pooled sample and the two sub-samples, that the coefficient value of the abnormal earnings is higher than the coefficient value of the book value variable, and it was more related to the industrial public companies.

Bhatt and Sumangla (2012) examined the impact of Earnings per share (EPS) on the market value of an equity share in the Indian context. The study is based on data of 50 companies which are the first 50 companies in the list of Indians most valuable companies as at 2010. The study was carried out for the period of 5 years and found that EPS impacts the market value of an equity share in the Indian context.

Lopes (2002) empirical work presents evidence of the value relevance of Brazilian accounting numbers under the Ohlson framework and found that book values are superior to earnings in terms of value relevance. Also, that accounting income does not incorporate economic income in a conservative way (asymmetrically). These results are consistent with the hypothesis that under the very concentrated ownership capital market system of Brazil, accounting earnings are less useful as information asymmetry reducers while book values remain relevant due to legal implications of Brazilian corporate law.

2.6.2. IFRS Adoption and Value Relevance of Accounting Information

These empirical works flow from some countries that had adopted IFRS since 2005 and others that followed after. Others are of countries that had been using IAS for financial reporting.

Isenmila and Adeyemo (2013) examined the effect of Nigeria institutional infrastructure on the mandatory adoption of IFRS which took effect from January 2012. Using questionnaires to seek respondents' view on the subject matter and analysed with

multiple regression techniques and analysis of variance, they found that four out of five institutional infrastructures are ready and strong enough to support the mandatory adoption.

Okafor and Ogiedu (2011) examined the potential effects of the adoption and implementation of IFRS in Nigeria from the perspective of stakeholders. It presents the results from a questionnaire survey of a sample of accounting lecturers, auditors and accountants. The data were analysed using the Chi Square and it was found that IFRS have the potential for yielding greater benefits than current GAAP; improves business performance management and impacts on other business functions apart from financial reporting. The study also found that IFRS adoption will add to financial reporting complexities and increase compliance with accounting standards.

The two researches above are based in Nigeria which is the domain of this study. It was realised that so far empirical literature on IFRS are not in existence from the best of my knowledge perhaps owing to that it was adopted in 2012. Researchers have conducted studies making assumption and forecast into the future as regards the benefit, impact and challenges of IFRS.

Clarkson, Hanna, Richardson & Thompson (2011) investigated the impact of IFRS adoption on value relevance of book value and earnings for equity valuation using 3488 firm that adopted IFRS in 2005 and had restated their 2004 account to IFRS based from 14 Europeans countries comprising of 3 common law and 12 code law countries. Data were sourced from July 2007 worldscape and datastream. Using linear regression, they found significant increase in value relevance for code law countries but no significant value relevance for common law countries after adoption of IFRS. When product term was added to the linear regression model the result revealed that there is no significant value relevance of financial information when either code or common law countries switched to IFRS. However,

the use of future share price, that is, six months after the fiscal year might affect the result of this research since it reflects future information which will add uncorelated measurment error to the dependent varriable.

Dimos (2011) examined European commercial banks on whether the disclosed fair value estimates of loans and advances, held to maturity investments, deposits and other debt and recognition of derivatives at fair value are value relevant, He also investigated whether IFRS adoption led to reduction of EU banks cost of equity and finds that fair value of loans and advances , other debt and recognition of derivatives are value relevant but dependent on financial health, IFRS enforcement and earnings variability. Also, that cost of equity capital of European commercial banks decreased after the adoption of IFRS.

Agostino et al (2009) studied value relevance of book value and earnings for 221 listed banks from 15 EU countries from 2000 to 2006 resulting in 1201 observations. Using regression analyses on a multiplicative interactive model, of which partial effect of earnings and book value are conditional on IFRS adoption. For robustness check, balanced panel and unbalance panel were obtained and stock price for three and six after annual report were used. The study found that book value was insignificant pre IFRS but negatively significant post IFRS. On the other hand, earnings has positive impact on share price of pre and post IFRS. Also, the result shows that earnings had significant impact on share price. The joint marginal effect of earnings and book value are significant in pre IFRS while in post IFRS marginal effect was significantly positive for earning and negative for book value thereby showing that earnings impact has increased with IFRS adoption especially in Germany and Italy.

The EU countries are known to have organised accounting system and so researches based on the EU countries are expected to produce reliable results. As earlier mentioned Dimos (2011) documented increased value relevance after adoption of IFRS however, he employed variables other than the traditional value relevance variables and this could affect

the findings of this research. Agostino et al (2011) all found value relevance but Clarkson et al (2011) in the same domain found accounting information not relevant after IFRS even though they both employed product term in their model but difference in sample size, period of study and the fact that the stock price used for Clarkson et al (2011) is 3 and 6 months after the fiscal year end.

Psaroulis (2011) examined whether the application of IFRS improved the financial reporting quality in Greece, using a sample of 80 Greek listed firms. The metrics used to evaluate financial reporting quality are earnings management, timely loss recognition, and value relevance. The results showed that firms which adopted IFRS experience less earnings management, more timely loss recognition, but, contrary to predictions, less value relevance of accounting amounts.

Stergios, Athanasios and Nikolaos (2005) investigated the effect of adopting IAS on financial statements and value relevance in Greek firms during 2003 to 2004. The samples were split into two considering those firms using Greek GAAP and firms using IAS differently and then compare them for the same set of years. The study found that total assets and book value of equity as well as variability of book value and net income are significantly higher under IAS than Greek GAAP. In addition, book value plays a greater (less) valuation role under IAS than under Greek GAAP while net income plays fewer roles and finally, while the IAS adjustments to book value are generally value relevant, the adjustments to net income are generally value irrelevant.

Tsalavoutas, Andre and Evans (2009) examined 195 Greek listed companies in order to find out the impact of net income and shareholders' equity as a result of transition to IFRS. They collected the data of net income, book value and share prices from ASE. The study, they used fundamental Ohlson model to establish incremental and relative value relevance using panel data of 2004 and 2005. The study captured IFRS by including a dummy and secondly

used R^2 tested by z crammers test to examine relative value relevance and found that no significant change in the value relevance of book value of equity and earnings between the 2004 pre IFRS and 2005 post IFRS periods. Also, no change in the relative value relevance of accounting information between the two periods. However, market participants viewed the extra information provided by reconciliations between Greek GAAP and IFRS for 2004 figures as incrementally value relevant, mainly for smaller firms. Thus, from Greeks report, IFRS financial information has been proved to be less value relevant as compared to Greek GAAP except for Stergios et al (2005) which documented increased value relevance of book value based on IAS.

Qu and Zhang (2010) investigates changes of value-relevance of earnings and book values over the institutional transition in China from 1991 to 2010 and provides evidence about the adaptability of fair Value (FV) in emerging markets and they found that the combined value- relevance of earnings and book values in China has increased along with the improvement of accounting regulations and development of market mechanisms. Meanwhile, the incremental value-relevance of book values has also insignificantly increased, while the incremental value-relevance of earnings has insignificantly decreased. The effects of fair value application among industries differ, the combined value-relevance of earnings and book values in fair value applied firms in mining and farming industries is very weak and insignificant, but strong and significant in non-fair value applied firms.

Lee, Walker and Zeng (2013) conducted a research on Chinese industrial firms listed on Shanghai and Shenzhen Stock Exchange over the period 2003 to 2009 and used pre-post analyses with 2007 as benchmark. It comprises of 10,017 firm year observation which were splitted into treatment and control group based on time of IFRS adoption, that is, firms in treatment group consist of firms reporting based on Chinese GAAP before 2007 and IFRS as from 2007 while the control group consist of firms that has been reporting with IFRS even

before 2007. The result showed that no significant change in value relevance of accounting information for firms in the control group while firms in the treatment group experienced significant change in value relevant which can be attributed to IFRS adoption. The result also showed that IFRS value relevance has stonger effect on manufacturing firms, firms in less developed areas and those not depending on government subsidy. From China's perspective development, government intervention and nature of firm determine its value relevance but Qu and Zhang document that fair value does not enhance value relevant in China. Although fair value is not the only element of change in IFRS and so could limit the result.

Turel (2009) examined the incremental and relative value relvance of earnings and book value of equity under capital market board accounting standards 2001 to 2002 and under IFRS for Turkey listed firms from 2005 to 2006 and compared the two periods. The study finds that the value relevance of accounting information has significantly increased with the adoption of IFRS. Incremental value relevance of earning increased significantly while book remain static.

Kargin (2013) examined the pre and post effect of IFRS adoption on accounting information on Turkish firms listed on Istanbul stock exchange excluding financial sector from 1998 to 2011, using Olhson model 1995 to test value relevance of accounting data for firms with positive earnings and the improvements on value relevance of accounting information in the pre and post IFRS periods. The study documented that financial information are more value relevant also value relevance of book value has increased with IFRS adoption but earnings have no significant incremental value relevance. The results of the pooled data showed that the coefficient estimates of both earnings and book value are positive. However, only book value has significant effect on the market value per share or stock prices. The results of multiple linear regressions of stock prices on book value and earnings for firms

that reported positive earnings are and the coefficient estimates of both book value and earnings per share have positive and significant effects on stock prices of selected ISE firms. Thus IFRS adoption has improved value relevance of accounting information in Turkey for the selected firms and periods.

Chalmers, Clinch and Godfrey (2010) investigated the impact of IFRS on value relevance of accounting information for firms listed on Australian Securities Exchange which yielded to 18,613 firm year observations across 19 years test period. Data were collected from Aspec Huntley's datalink, Australian graduate school of management centre for research in finance. using longitudinal study that covers pre IFRS (1990-2004), Transition (2005) and post IFRS (2006-2008) during 1990 to 2008. Employed price and return model regression with equity book value, reported earnings and share price as the variables and found that combined value relevance of financial information alters a little; however, earning becomes more value relevant while book value does not have value relevant. Earnings remain persistent while book value did not increase.

Bridges (2009) carried out an empirical research on value relevance and voluntary adoption of IFRS in New Zealand between 2005 to 2007 prior to it becoming mandatory for all companies. He specifically documented the relative and incremental value relevance, respectively, of voluntarily adopting New Zealand International Financial Reporting Standards as opposed to domestically produced New Zealand Financial Reporting Standards on the book value of equity and net income for a sample of 34 companies. The results showed that there is no evidence to suggest that the value relevance of the book value of equity and net income calculated under IFRS taken together is greater than the combined value relevance of the book value of equity and net income calculated under New Zealand GAAP. This implies that IFRS does not have relative value relevance. In addition, the book value of equity under IFRS does not have incremental value relevance over and above the book value of equity under the New

Zealand GAAP. Also net income calculated under IFRS does not have incremental value relevance over and above net income of New Zealand GAAP. On a general note, the study finds little evidence that the voluntary adoption of IFRS provides accounting information that is more value relevant to that under New Zealand GAAP.

Khanagha (2011) studied the value relevance of financial information trying to describe the effect of IFRS in two selected countries, that is, UAE and Bahrain. Data were collected from gulf base database, Bloomberg and DataStream. UAE sample is selected from Abu Dhabi stock market for the period of 2001 through 2008 and Bahrain 1996 through 2008. In this study, the regression-variations and the portfolio-returns approaches were used to investigate and to operationalize the value relevance of accounting information. A comparison of the results for the periods before and after adoption based on both regression and portfolio approaches shows an improvement in value relevance of accounting information after the reform in accounting standards in Bahrain stock market, while the results for UAE stock market, shows a decline in value relevance of accounting information after the reform in accounting standards. It could be interpreted to mean that adoption of IFRS in UAE did not improve value relevance of accounting information. A comparison of the results between the two countries based on the price model shows that the accounting information in Bahrain is more relevant than that of the UAE. The results of Price model also show that all coefficients are statistically significant for Bahrain while for UAE only the coefficient of EPS is statistically significant. A comparison of the result based on the return model shows that accounting information in UAE is more value relevant than Bahrain.

Palea (2013) examined whether separate financial statements are useful to capital market investors and whether IFRS are more value relevant than domestic gap using a sample of Italian firms. The study found that separate financial statements are value-relevant regardless of the accounting standard set. However, while results are robust for book value,

they provide mixed evidence on net income. Also, that separate financial statements under IFRS do not provide incremental information content beyond that provided under domestic GAAP and some evidence that domestic GAAP are more value relevant than IFRS. This finding contradicts Agostino et al (2009), who found that Italian accounting information under IFRS were more value relevant.

Alfaraih (2009) using price and return model, examined the effect of IFRS compliance and value relevance of accounting information in emerging market of Kuwait from 1995 to 2005. Alfaraih used a pre-post method and found a significant relationship between stock price and accounting information but there was decrease in value relevance of accounting information in the period. He also found that both price and returns model demonstrate a significant association between IFRS compliance and value relevance of earnings and book value of firm.

Beisland (2009) carried out research on the value relevance of accounting information conducted on Norwegian and Swedish samples. The research finds that accounting earnings are significant predictor of short term firm performance and thus value relevant. Accounting information on the average is equally value relevant in traditional, mostly manufacturing industries and not in non-traditional industries like high-tech industries where higher frequency of transitory earnings in is taken into account. However, accounting information in non-traditional industry has particular information content to stock investors when the economy is doing well. The value relevance of earning increases dramatically if earnings are disaggregated and sign of earnings is taken into account in the empirical analyses and concludes that with the switch over to IFRS there is a positive relationship between stock value and book value of equity while negative relationship exist between stock value and earnings.

GJerde (2008) investigated 145 firms listed on Oslo Stock Exchange that restated their

account from Norwegian GAAP to IFRS in 2004 to test whether the IFRS accounting figures correlate more strongly with stock market values than the corresponding Norwegian GAAP. Using price model regressions in which book value of equity and various decompositions of EPS are independent variables, the result shows that value-relevance of the NGAAP figures is significantly higher than that of the corresponding IFRS figures. Using returns regression model the study shows that the improved value-relevance of the book value turns out to be offset by reduced value-relevance of the earnings. Using price-deflated earnings and change in earnings as explanatory variables, value relevance still favours NGAAP, but for intangible intensive firms, the IFRS value relevance proved higher than NGAAP perhaps due to capitalisation of intangibles. Finally, the result of marginal dependency tests is that IFRS contain additional value relevant information.

In extension of the work of Gjerde (2008), Gal  en and Stenheim (2010) examine value relevance with respect to shift from GAAP to IFRS in Norway from 2001 to 2008. They present the results from the price-book-earnings regressions. The table compares regression coefficients and results from test statistics when moving from the NGAAP-period to the IFRS-period. Three different regressions were run for each period. The first two regressions were conventional price-book-earnings regressions with or without the control variables growth, turnover and size. The third regression made use of the unstandardized residuals from a regression of price on control variables for size and economic fundamentals. Then next, unstandardized residuals are regressed on earnings per share and book value per share. This test design is supposed to provide strong control for the effects driven by size, economic position and performance. As demonstrated by the descriptive statistics and the tests of differences in mean-values and median-values under NGAAP and IFRS, stock return, size measured as natural logarithm of firm market value, growth and operational cash flow are on average significantly different in these two periods. This highlights the importance of

controlling for the effects driven by these factors before addressing any difference in value relevance to the shift of accounting regime. They found that book value is significantly positively associated to stock price both under IFRS and GAAP, net earnings are insignificant through the period of NGAAP and IFRS. The R-squared proved IFRS based accounting information more value relevant for firm valuation than Norwegian GAAP.

Even though Galaen and Stanheim (2010) based their research on Gjerde (2008), their findings are contradictory as the former found that IFRS is more value relevant than NGAAP while the later finding was the reverse except for the intangible intensive firms. However, the difference could be resulting from period of study since the former had a longer period to examine. More so, Beisland (2009) had the same finding with Galaen and Stanheim (2010) that IFRS-book value was more value relevant while IFRS-earnings was less value relevant. As a way of conclusion IFRS has proved value relevant in Norway but the matter unresolved is whether it is more value relevant than NGAAP.

From the general empirical review, it can be observed that the value relevance of financial information with the adoption of IFRS has not given a clear direction. Some of these discrepancies can be attributed to accounting system existing in different nations, level of sophistication, industrial difference, time frame and methodologies employed in the research.

2.7. The Overview and Structure of the Nigerian banking Industry

The banking system in Nigeria has its root from 1982. The bank industry is known for its contribution towards economic growth and development. The banking sector has undergone transformation in terms of product, number, and levels of operation resulting from economic reforms in the Structural Adjustment Programme. At that time commercial banks stood at 29 and later grew to 54.

The financial sector witnessed the boom in 1990 which was characterised by financial

liberalisation, deregulation, and credit allocation. This led to massive influx of banks into the industry even though they concentrated on foreign operations and left the function of intermediation shallowly attended to.

In 1992, there was a major banking crisis crippling the financial sector. The number of banks that were technically insolvent grew from 8 in 1990 to 28 in 1993, 45 in 1994 and 57 in 1995. The distressed banks have no ability to honour their debt obligation and so those with critical cases were dissolved.

Universal banking was introduced in 2001 and the number of banks amounted to 90 but fell to 87 in 2004. However financial distress, systematic crises, regulatory shortcomings, job losses ownership structure remained prominent in the banking industry lead to the thought of market concentration in order to reduce risk.

Consolidation is viewed as reduction in number of banks with consequential increase in size and concentration of consolidated entities. The consolidation exercise was introduced in 2004 and further re-emphasized in 2005. The major event was raising the capital base to 25billion. Banks employed merger, acquisitions, public offerings, foreign equity participation in order to meet that requirement. The consolidation exercise reduced banks from 87 to 25 and later 24.

Globalisation and growth in information and technology continuously have effect on the banking activities in Nigeria. However in the year 2009 it was noticed that banks show signs of failure as their transactions are concentrated on the capital market and the oil sector meanwhile poor risk management and weak corporate governance was obvious in the banking industry. About 5 banks at the time showed serious liquidity strain as they could not meet their obligations and had to be bailed out by central bank of Nigeria. This led to the comprehensive analyses of the 24 banks in Nigeria and classified them into sound banks and distressed banks.

In 2010 universal banking was abolished, Asset management company created, review of

provisional guidelines for loans, corporate governance, change in tenure of Managing directors etc. were obtainable. In 2011 those five troubled banks were recapitalised reducing the banks to 19 as some merge and other were acquired.

The period of banking crises Nigeria coincidentally coincides with the global market crises that led to the folding of banks. this largely connect to the fact that after consolidation the corporate governance was not effectively active leading individuals to use the bank assets for personal gain and the rate of financialisation grew faster than the economy can gainfully absorb.

As it relates to the introduction of IFRS, the banks previously could manipulate their earning and adjust their financial information to suit them not necessarily reflecting the position of the bank and these lead investors and other users of financial information into making uninformed decision. It was realised that profit reporting banks were distressed as they could not meet their obligations. To curb this problem globally the IFRS has been introduced as one set of accounting information all over the world.

Banking industry known for its contribution to economic development are fore runners in the adoption of IFRS in Nigeria and the choice of the banking industry for this research is informed by the fact that the banking sector in Nigeria is the most organised, highly regulated and well-structured sector in the country who have readily adopted the new standard at the time of this research.

2.8. Theoretical Framework

Generally, there are many literatures which focus on relationship of accounting figures and stock valuation. In general the studies regarding this issue can be classified into event studies and regression studies.

Event studies focus on the investors' reaction on events and regression studies which

focus on accounting figure and their explanatory power on the market measure of value as used by (Amir et al., 1993; Barth, 1994; Burgstahler & Dichev, 1997; Filip & Raffournier, 2010; Harris & Muller, 1999; Landsman, 1986).

Regression study is spitted into returns and price model. The price model investigates the impact of accounting information on the market valuation of, rather than return on, equity stock; furthermore, a price model examines the impact of not only earnings but also book value of equity on stock performance. Traditionally, earnings and book values are considered to contribute to value relevance (Burgstahler and Dichev, 1997; Ohlson, 1995). While the return model assumes that earnings have informational linked to future cash flow. In this model stock market returns is regressed on components of earnings or earnings changes components.

There are models that were developed under value relevance studies seeking to link stock price to accounting information and they are explained below:

a. Discounted Cash flow Model (DCF): The value of an asset is calculated based on the present value of future cash flow generated by asset. It uses free cash flow or weighted average cost of capital.

b. Dividend Discount Model (DDM): This is a stock valuation tool that is used to determine stock price as the present value of future expected dividend discounted back at a certain rate. Nassaka and Rottenburg (2011) asserts that the essence of the DDM is the fact that its uses dividend as a proxy for cash flows and using dividend to estimate firm value is widely criticized in literature because dividend are often determined by management, thereby subject to manipulation and therefore not as reliable as other proxies for cash flow.

c. Residual Income Model (RIM): This theoretical model links stock price with book value, earning in excess of normal capital charge (abnormal earnings), and other information.

It implies that the value of firm is equal to its book value of equity and the present value of anticipated abnormal earnings. Ohlson 1991 argued that the value of firm should not be based on dividend but on fundamental variables which does not depend on dividend and thereby concludes that earning is a good replacement for dividend since earnings could be used to estimate firm's value.

The residual income valuation (RIV) has made some contribution to accounting valuation as one can use RIV to identify residual earnings as a measure of a firm's value creation. By taking the present value of the expected residual earnings, the difference between markets to book values comes into focus. RIV also captures settings with dividend policy irrelevancy effectively because under reasonable conditions, residual earnings do not depend on dividends. This independence property usefully shows a close connection between accounting constructs and dividend policy irrelevancy of Miller and Modgillani (Ohlson, 2005).

According to Nassaka and Rottenburg (2011) RIM is valuable as it's based on book value and abnormal earnings, it's easy to apply to firms that does have dividend pay-out and its more accurate compared to others as it explains stock returns the more. However, it is sensitive to accounting manipulation, includes dividend indirectly and could produce unreal result since predicting future earning is difficult. RIM is model that relies on 2 value-attributes runs at obvious cross-purposes with how investors in the real world look at the future. Practical investment analysis emphasizes expected earnings as a core value attribute; expected book values or residual earnings have no such role (or at least rarely so). These aspects make it troublesome to assign RIV the elevated status of being the accounting-based valuation formula.

d. Ohlson Model (1995): This model was developed as modification of the RIM. The Ohlson model expressed the market value of a firm as a linear function of its book value, the

abnormal earnings together with other Information dynamics variable (Vazquez, Valdes and Valdes, 2007). Klimczak (1999) asserts that the real contribution of Ohlson model is developing a valuation relation which rest on the assumption that abnormal earnings are type one autoregressive and their expected value is influenced by other information.

Houthessan and Watts (2000) added that in Ohlson model future abnormal earning is replaced in RIM by current earnings as such could express market value as a linear function of current earning, dividend and book value by making assumption about earning behaviour and their relation to information in stock prices.

The Ohlson model was described under the following assumptions:

- i. The Present Value Relation: This assumption implies that the market value of the firm's equity is equals to the present value of its expected future dividends discounted at the risk-free interest rate, and this assumption was based on the original classic dividend discount model.
- ii. The Clean Surplus Relation: This assumption implies that all changes in the book value of equity are reported either as accounting earnings or dividends.
- iii. Linear Information Dynamics: This assumption is the most controversial assumption which imposed a time-series structure on the abnormal earnings (that is, the relation between the current and the next period's abnormal earnings) as linear and stationary. Ohlson defines this abnormal relation as the difference between accounting earnings and normal earnings. Normal earnings are the net book value of equity multiplied by the risk free rate. The linear information dynamic (models) which assumes a time-series structure on the abnormal earnings are as follows.

The seminal work of Balls and Brown (1968) in associating accounting figure and stock price raised the dust of research in this area. The paper was based on capital market efficiency theory, that is, assuming that the investor are free in making decision and their decisions affect stock price and the market is free from manipulation from authorities.

However, Klimczak (1999) notes that efficient market does not necessarily imply value relevance as accounting earnings may still be of a doubtful quality, accounting methods might not be well defined; manipulation might be common, and internal and external control non-existent. In such a case rational investors will not base their decision on accounting numbers. Therefore, this area of research has grown without a theory to link variable even though models like the discounted cash flow, discounted dividend model and residual income model were developed as valuation models. The modification of RIM by Ohlson 1995 brought about a model based on the clean surplus relation which is the theory underpinning this study.

The Ohlson clean surplus accounting theory demonstrates theoretically that the value of a firm can be derived from financial statement information. The derivation starts with balance sheet net worth and adds discounted expected future abnormal earnings. To the extent that the balance sheet is based on current values, there are less future abnormal earnings to predict, since, by definition, current value incorporates expected future value, either by market value or value-in-use. Thus, other things being equal, the better the balance sheet incorporates current values, the better the predictions of firm value.

The theory underpinning this research is the clean surplus accounting theory. This theory expresses relationship between book value, earnings changes and market price. Clean surplus accounting holds when all transactions affecting value of equity during the period other than transactions with equity holders are recognized on the income statement in the same period. Clean surplus accounting also stipulates that the period to period change must equal the forecasted net of investor's capital withdrawal or infusion.

2.9. Summary

It has been established that the concept of value relevance exist, that there are attributes, approaches and different perspective of value relevance study. The concept of reliability and

relevance; IFRS conceptual framework, development of IFRS through time, roadmap and adoption of IFRS in Nigeria , benefits, impact misconceptions, challenges and ways out were duly and extensively discussed. The empirical work on value relevance of financial information were e reviewed generally and further specifically reviewed literatures on value relevance and IFRS financial information and finally discussed various model and the theory underpinning the study.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1. Introduction

The chapter provides details on the research design and methodology applied in this study. It discusses the research design, population and sample, the sources and methods of data collection, the techniques for data analyses as well as model specification and its justification.

3.2 .Research Design

This study employs correlational research design in examining IFRS adoption and value relevance of financial information of listed DMBs in Nigeria. Correlational research design is used for establishing meaningful relationship between variables. Using the correlational research design, the study seeks to determine the impact of IFRS financial information (EPS, DEPS and BVPS) on stock price. Historical data of earning and book value collected from annual report and regressed on the consequent stock prices.

3.3. Population and Sample

The population of the study consist of seventeen DMBs listed on the Nigerian Stock Exchange as at 31st December, 2013. The banking industry is viewed as the most organised and regulated sector in Nigeria whose annual report is easily accessible.

The sample for the study consists of seven banks after filtering out ten banks on the basis of:

- i. Banks that were in existence and listed as at 31 December 2006.

- ii. Banks that have not been taken over by other banks or changed their names between 2006 to 2013
- iii. Banks that have translated their financial information to IFRS from 2010.

The list of population and sample are attached in the appendix A.

3.4. Sources and Methods of Data Collection

Historical data of earnings per share, change in earnings and book value per share were collected from published annual report and accounts of banks available on bank's website and Nigerian Stock Exchange FACT book. Also, share price data were collected from data base of cashcraft asset management.

These are secondary data and the most suitable for good empirical finding in IFRS and value relevance, primary data would only produce suggestive and forecasted outcome which is bias. The data of EPS, DEPS and BVPS were collected for the period of four years before IFRS adoption and four years after IFRS adoption.

3.5 Data Analysis Techniques

The study adopted the Edward, Bells and Olhson model in order to make inference on value relevance of pre and post IFRS adoption in the DMBs. EPS, DEPS and BVPS were the independent variables in the study while share price is the dependent variable. The study analysed this set of variables each for pre IFRS and Post IFRS.

General least square (GLS) multiple regression analyses are employed to analyse the panel data based on random effect model using STATA 10. The random effect is arrived at from the outcome of Durbin-Wu- Hausman test which made it possible to make a choice between the fixed effects model and random effects model.

Apart from GLS, other supportive analyses were carried out like descriptive statistics which provide information on mean, standard deviation and minimum and maximum values in the set of data analysed. Also, the correlation matrix results were produced in order to understand the interrelationship between variables.

Moreover, the Breusch-Pagan/Cook-Weisberg tests for heteroskedasticity and multicollinearity test for auto correlation were carried out to ensure the fitness of the model.

3.6 Variable Measurement

This section explains how the variables used in this research can be identified ranging from the dependent variable to the independent variables. As earlier indicated, the research is conducted on pre and post IFRS but the same sets of variables are examined in both cases as only the period of research demarcates them.

3.6.1. Dependent variable

The dependent variable for this study is share price. This is the amount at which the share of a firm listed on stock exchange market can be acquired at a particular point in time. The share prices are usually quoted on daily basis for trading information purposes. However, the share price used in the research is the price of bank shares three months after the banks year end.

3.6.2 Independent Variables

Three independent variables were used for this study namely earnings per share, change in earnings per share and book value per share.

3.6.2.1 Earning Per Share

This variable is used to measure the performance of an entity. It is usually derived from the net income after the income statement has been prepared. Earnings per share can be calculated by dividing the net profit or loss of the period attributable to shareholders by the weighted average number of ordinary shares outstanding.

3.6.2.2 Change in Earning per Share

The change in earnings is directly derived from earning. It compares the present performance of a firm to that of the previous year. It is calculated by subtracting the earnings of the previous year from that of the present year.

3.6.2.3 Book Value per Share

This is otherwise referred to as the net asset of a firm and is used to evaluate the total equity of a firm. BVPS is calculated by subtracting total liability from total assets which give the shareholders fund. The shareholders' fund is further divided by weighted average number of ordinary shares outstanding.

VARIABLES	MEASUREMENTS
SP	The price of shares of listed DMBs three months after the fiscal year
EPS	Net profit attributable to shareholders divided by weighted average number of ordinary shares outstanding.
CEPS	Present year EPS minus previous year EPS.
BVPS	The shareholders fund divided by the weighted average number of ordinary shares outstanding.

3.7 Model Specification

In order to find the value relevance of IFRS adoption in the bank EBO model is adopted. EBO model is a price model developed by Edward, Bells and Ohlson in 1995. To be able to conduct the regression analyses, the following models using EBO model have been formulated:

$$SP_{it} = \alpha_0 + \beta_1 EPS_{it}^{pre} + \beta_2 CEPS_{it}^{pre} + \beta_3 BVPS_{it}^{pre} + e_{it} \dots \dots \dots (1)$$

$$SP_{it} = \alpha_0 + \beta_1 EPS_{it}^{post} + \beta_2 CEPS_{it}^{post} + \beta_3 BVPS_{it}^{post} + e_{it} \dots \dots \dots (2)$$

Where:

SP_{it} = the share price of banks three months after publishing reports

EPS_{it} = earnings per share of firm i at time t.

$CEPS_{it}$ = change in earnings of firm i at time t.

$BVPS_{it}$ = book value per share of firm i at time t.

e_{it} = other variables that affect stock price.

The specification shows that share price is the dependent variable while various combinations of the other variables represent the independent variables.

In order to test the four hypotheses postulated in this research, a functional relationship is suggested between EPS, CEPS BVPS and SP in line with EBO model to assess the value relevance of IFRS adoption on financial information of the banking industry.

3.8 Summary

The process and methods used in this research has been enumerated extensively as the chapter discussed the research design correlational in nature, secondary source of data using ordinary least square for analyses in the form of EBO model. The domain as Nigeria banking industry and samples were established and duly justified.

CHAPTER FOUR

DATA PRESENTATION AND ANALYSES

4.1 Introduction

This chapter deals with the presentation of data as well as the robustness test which includes test for multi-collinearity and heteroskedasticity. The chapter presents the result of multiple regressions, discussion of findings in relation to previous findings, test of research hypotheses, discussion of policy implications of findings and summary.

4.2. Data presentation

The data for this research were extracted from annual reports of sample banks and cashcraft data base. The data includes EPS, BVPS, CEPS and SP. For each of the banks, data for eight years were collected that is from 2006 to 2013 considering 2006 to 2009 as pre-IFRS while 2010 to 2013 represents post-IFRS.

4.3 Pre IFRS Results Presentation and Discussion of Findings

This section presents the pre IFRS results which contains descriptive statistics, correlation matrix, Ordinary least square, hausman specification test and random effect regression model.

4.3.1 Descriptive Statistics

This reflects the basic features of the data used for this research and it provides insight into the nature of data and gives a room for further analyses.

Table 4.3.1: Pre IFRS Descriptive Statistics of Variables

	SP	EPS	CEPS	BVPS
Mean	16.396	0.791	-0.077	9.149
Std. Dev.	13.863	0.924	0.795	9.849
Minimum	2.8	-0.03	-2.72	.49
Maximum	48	3.45	0.87	42.06
Observation	28	28	28	28

Source: Descriptive statistics from STATA 10.

Table 4.3.1 shows the nature and properties of data used in the research and it reveals that SP has an average of 16.396 and standard deviation of 13.863 while 2.8 and 48 are the minimum and maximum respectively. The standard deviation reveals that the data of share price are far spread across the mean of the data; this simply implies that the share prices of DMBs in Nigeria are not similar. This is further confirmed by the disparity between the maximum and minimum. Thus, the price of shares of DMBs varies a great deal from one bank to the other.

EPS has a mean of 0.791 and standard deviation of 0.924. From the value of the standard deviation it can be deduced that the EPS is tightly clustered around the mean of data under study, invariably the DMB's earnings are not so different from bank to bank. Moreover, the minimum value is -0.03 and 3.45 as maximum value thus, it has a small range of EPS reading from the minimum and maximum value.

The data CEPS has an average of -0.077 and standard deviation of 0.795 with minimum and maximum values of -2.72 and 0.87 respectively. The average is expected since

the CEPS are derived from differences in the EPS and also the standard deviation is small which means a little variance from the mean or that the data is clustered around the mean.

BVPS has a mean of 9.142, standard deviation as 9.849 with a minimum value of 0.49 and maximum of 42.06. This result shows that the average is far lower than the maximum value and minimum value implying a wide range of variation in the net asset value of DMBs in Nigeria. Also, the standard deviation reflects that BVPS values are widely spread out around the mean because it is relatively large. But, the minimum and maximum value reflect that some firms have very low net assets while the others have very high net assets.

4.3.2 Correlation Matrix

The correlation matrix seeks to establish relationships that exist between variables used in the research. This helps to understand the inter relationship that exists among variables. The results are presented in table 4.3.2

Table 4.3.2: Pre IFRS Correlation Matrix of the Dependent and Independent Variables.

	SP	EPS	CEPS	BVPS
SP	1.000			
EPS	0.563	1.000		
CEPS	-0.046	0.266	1.000	
BVPS	-0.074	0.174	0.170	1.000

Source: Correlation matrix from STATA 10

Table 4.3.2 above indicates the relationship between the variables used for pre IFRS analysis. The relationship between SP and EPS is positive at 0.56, this means that SP increases EPS or vice versa. This is actually expected as a firm with high earnings is supposed to have a high price for its shares. Also, SP is negatively correlated to CEPS with a

coefficient of -0.04 and to BVPS at -0.07. It therefore, suggests that an increase in SP results to decrease in book value and change in earnings of Nigerian DMBs.

EPS has positive relationship with SP, CEPS and BVPS with 0.56, 0.26 and 0.17 respectively. This indicates that an increase in EPS leads to high increase in SP but low increase in the CEPS and BVPS. Moreover, CEPS flows directly from EPS and is expected to have a high correlation with EPS but the outcome shows a low positive correlation.

In addition CEPS is positively correlated to BVPS at 0.17 and EPS 0.26. This shows that CEPS increases with increase in BVPS and EPS at low rate. Also, BVPS has a positive relationship with EPS and CEPS at the same rate of 0.17 while it is negatively related to SP at -0.07.

Generally, the correlation matrix table revealed the likely absence of multi-collinearity among variable as none of the variables is highly correlated to the other.

4.3.3 Robustness Test

The robustness test is carried out to check the fitness of the research model and its element as to whether the result to be provided would be reliable. This section contains multi-collinearity test and heteroskedascity test.

4.3.3.1 Multi-collinearity Test

The test for multi-collinearity is one of the robustness tests carried out in this research. The Variance Inflation Factor (VIF) is used to test excessive correlation among variables which in turn, produce evidence of robustness of the model specified in this study.

As a benchmark for diagnosing multi-collinearity, when the Variance Inflation Factor (VIF) of variables is above 10 or the Tolerance Value (TV) is less than 0.10 it indicates a strong presence of multi-collinearity.

Table 4.3.3: Test of Multi-co-linearity

Variable	VIF	TV
EPS	1.10	0.91
CEPS	1.09	0.91
BVPS	1.05	0.95

Source: output of VIF test from STATA

Table 4.3.3 reveals the absence of multi-collinearity as the EPS, CEPS and BVPS have VIF that are less than 10 and TV that are above 0.1. Based on this, the model can be described as fit and robust for the study since there is no evidence of multi-co-linearity.

4.3.3.2 Heteroskedasticity

The study employs the Breusch-Pagan or Cook-Weisberg test for auto correlation. The null hypothesis indicates that the variance of the residuals is constant. If the p value is significant at 5% then the variance is constant which implies heteroskedasticity. The result reveals Chi2 as 0.49 and the prob>chi2 is 0.4861. This indicates absence of heteroskedasticity since it is not significant at 5% and it further attest to fitness of model. The result of this test is attached in the appendix.

4.3.4 Hausman Specification Test

Considering that a panel data is involved in these analyses, the OLS regression may not produce efficient estimate for this research and as such there is a need to perform Hausman specification test. The test evaluates the significance of an estimator versus an

alternative estimator. Hausman test can be also used to differentiate between fixed effect model and random effect model in a panel in order to determine a more effective model.

The aggregate null hypothesis is that EPS, CEPS and BVPS are not exogenous. Based on the F- significant the null hypothesis will be rejected or otherwise. If the F-statistic is significant then the null hypothesis would be rejected. The result obtained from the hausman test shows that chi2 is 2.52 and p-value is 0.4723 which suggests that random effect model is suitable for the study. The result of Hausman specification test is attached in the appendix.

4.3.5 Pre IFRS Random Effect Regression Result

This section presents the results of random effect regression revealed as appropriate from the hausman specification test and further discusses the findings of the research.

Table 4.3.4: Pre IFRS Random Effect Regression Result

Variable	Coefficient	Std. Err	Z	p>/z/
Constant	10.506	3.537	2.97	0.003
EPS	9.602	2.522	3.81	0.000
CEPS	-3.324	2.929	-1.13	0.256
BVPS	-0.215	0.231	-0.93	0.352
R-Squared: Within	0.1289			
Between	0.6282			
Overall	0.3807			
Wald chi2	14.75			
Prob> chi2	0.0020			

Source: Regression output from STATA. (***) and ** represents 1% and 5%)

Table 4.3.4 represents the summary of regression result after employing STATA 10 for data analyses and therefore the initial equation would be restated as thus:

$$SP = 10.5 + 9.6EPS^{pre} - 3.3CEPS^{pre} - 0.2BVPS^{pre}$$

4.3.5.1 Pre IFRS Earnings Per share and share price

From the table the result shows that EPS has positive impact on share price and significant at 1% with correlation coefficient of 9.6, z-value of 3.81 and p- value of 0.000. This implies that for every 1% increase in EPS, there is a consequent 9.6% increase in share price holding all other variables constant. The result shows that EPS has positive significant impact on share prices thus, value relevant. This meets the normal expectation that EPS should be a basis of making investment decisions in the capital market as EPS has the biggest influence on stock prices. The result is in line with the findings of Alfaraih and Alanezi (2011), Bhatt and Sumangala (2012), Agostino (2009) and Al-deehani (2005) who documented that EPS has positive significant impact on share price while it contradicts the findings of Chang et al (2011) and Khanagha et al (2011) who both found that EPS has positive insignificant relationship with share price.

4.3.5.2 Pre IFRS Change in Earning per share and share price

Moreover, the coefficient for CEPS reveals a negative but insignificant relationship between CEPS and SP. It shows a coefficient of -3.32 and z-value of -1.13 and p-value of 0.256. The implication is that for every 1% increase in CEPS, the SP decrease by -3.32%. Researches so far have not employed the use of CEPS as financial information proxy and as such previous findings on this aspect are not found. But we expect that CEPS should have positive impact on SP if earnings consistently increased with increase in years.

4.3.5.3 Pre IFRS Book Value per Share and Share Price

The coefficient for BVPS reveals an insignificant negative impact on share prices since the coefficient is -0.215, z-value is -0.93 and p-value is 0.352. This implies that for every 1% increase in BVPS there is a resulting -0.21% decrease in share price. By implication, share price decreases with increase in BVPS holding all other variables constant but it has no statistical significance thus, not value relevant.

The result reveals that book value is not value relevant as it has negative insignificant impact on share price in the Nigerian DMBs. This means that an increase in book value suggests decrease in the share price. This result confirms Anadarajan et al (2005) which asserted that book value might appeal to investor in seeking relationship to the value of firms but it might not be a good indicator of value of many firms. This is in tandem with the findings of Agostino et al (2009) which was based on the banks in the EU countries using a multiplicative interactive model while it contradicts the findings of Karunarathne and Rajapakse (2009), Alfaraih and Alanezi (2011), Khanagha (2011), Collins et al (1996), Al-deehani (2005), Lopes (2010) and Galian and Stenheim (2010) who found that book value per share has positive significant impact on share price..

The result of Karunarathne and Rajapakse (2009) can be criticised on the basis of short period of analyses which has the potential to alter a result. However, Alfaraih and Alanezi (2011) had the same result when he conducted his research in Kuwait using a longer period of analyses. Moreover, Al-deehani (2005) used extreme bound analyses and up to nine variables in Kuwait while Collins et al (1996) results could be attributed to the use of firms with small size, intangible intensities and firms reporting negative earnings.

The use of firms with negative earnings by Collins (1996) connects to the view of Burgstahler and Dichev (1997) that the extent of association of earnings and book value is

dependent on the level of success of firms because when a firm is unsuccessful book value becomes an important determinant of equity. Furthermore, Lopes (2010) documented that the result was based on the concentrated ownership capital structure resulting from Brazilian corporate law while that of Galean and Stenhaim (2010) might have differed due to the inclusion of controls for firm size, growth and operational cash flow.

4.3.5.4 Value Relevance of Pre-IFRS Financial Information

The aggregate value relevance of pre-IFRS financial information shows that EPS, CEPS and BVPS in aggregate explains 38% variation in share prices as revealed by overall R-squared of 0.38. The Wald chi2 is 14.75 and prob>chi2 of 0.002 further reveals that the model is fit and significant at 1%. From the above result, it is clear that 38 per cent of variations in share price is dependent on pre-IFRS financial information holding other variables constant. This implies that pre-IFRS financial information is value relevant however, having an overshadowing impact of EPS. The result confirms the findings of Keener (2011), Ai-deehani (2005) and Agostino (2009).

Based on the aggregate result, we have sufficient evidence to reject the null hypothesis that states that: Pre- IFRS financial information has no significant value relevance in the DMBs.

4.4 Post IFRS Result Presentation and Discussion of Findings

This section presents the post IFRS result which contains descriptive statistics, correlation matrix, multi-collinearity test, hausman specification test and random effects regression model.

4.4.1 Descriptive Statistics

This section gives an insight into the properties of that set of data employed for post IFRS analyses.

Table 4.4.1: Post IFRS Descriptive statistics

	SP	EPS	CEPS	BVPS
Mean	10.912	4.870	0.453	11.053
Std. Dev.	6.642	14.871	16.272	11.171
Minimum	2.2	-1.57	-40.07	.17
Maximum	21.3	69.29	69.17	61.21
Observation	28	28	28	28

Source: output of descriptive statistics from STATA

Table 4.4.1 shows the descriptive statistics of variables, nature and properties of data. SP has a mean 10.91 and a standard deviation of 6.64 with a minimum of 2.2 and maximum of 21.3. The data is relatively spread across the mean of SP meaning that SP of banks differs relatively from one bank to the other. This is further confirmed by the mean which is half the maximum value. However, compared to pre IFRS data on SP, the shares DMBs reduced a great deal judging from the mean and maximum of the pre IFRS data.

EPS has an average of 4.87 and standard deviation is 14.87 with a minimum of -1.57 and a maximum of 69.29 resulting from 28 observations. Though the mean is low compared to the maximum, the standard deviation proves that the data set for EPS is widely spread across the mean indicating that some DMBs earn very low while the others earn very high. The earnings of DMBs in Nigeria seem to have increased after adoption of IFRS compared to the pre IFRS earnings. This could be attributed to changes in valuation methods and recognition of earnings in IFRS framework

The CEPS has a mean value of 0.45 which is very small but attributed to the fact that it is the difference in earnings that are considered. It also has a standard deviation of 16.27 showing wide disparity among values of CEPS of different banks. The minimum value is -40.21 while the maximum is 69.17.

BVPS has an average 11.05 while its standard deviation 11.17 with a minimum value of 0.71 and maximum of 61.21. The standard deviation is high and so implies that the data is spread widely across the mean value. Also the minimum is too small compared to the maximum, that is, the net assets of some DMBs are very high while the others are very low. The values for BVPS increased after IFRS adoption because the values of mean, standard deviation, minimum and maximum are lower than what we have after adoption.

4.4.2. Correlation Matrix

The correlation matrix seeks to establish relationships that exist between variables used in the research post IFRS analyses. This helps to understand the inter relationship that exist among variables especially the independent variables.

Table 4.4.2: Post IFRS Correlation Matrix

	SP	EPS	CEPS	BVPS
SP	1.000			
EPS	0.379	1.000		
CEPS	0.105	0.538	1.000	
BVPS	0.082	-0.146	-0.069	1.000

Source: output of correlation matrix from STATA

Table 4.4.2 indicates the relationship between the variables used for post IFRS analysis. It shows that SP is positively related with EPS, CEPS and BVPS at 0.37, 0.10 and 0.08 respectively. It simply implies that SP and EPS have higher positive relationship but

lower with CEPS and BVPS. Invariably, higher earnings attract higher SP but net asset has a little to influence share price of DMBs.

EPS correlates positively with SP at 0.37 and CEPS 0.53 while negatively with BVPS -0.15. CEPS is highly positively correlated with EPS which is as expected since CEPS is derived from EPS but EPS and BVPS relationship shows that increased EPS goes with decrease in BVPS.

CEPS is negatively related to BVPS at -0.07 and by implication move in opposite direction such that when there is a positive change in earnings the net asset of firm tend to reduce. Moreover, CEPS is also related positively to EPS and SP which is expected and BVPS is positively related to SP while it has a negative relationship with EPS and CEPS.

4.4.3 Robustness Test

The robustness test is carried out to check the fitness of the research model and its element as to whether the result to be provided would be reliable. This section contains multi-collinearity test, heteroskedascity test in respect of post IFRS.

4.4.3.1 Multi-collinearity Test

The test for multi-co-linearity is one of the robustness test carried out in this research. The Variance Inflation Factor (VIF) is used to test excessive correlation among variables and this is used to produce evidence of robustness of the model specified in this study.

Table 4.4.3: Post IFRS Multicollinearity test

Variable	VIF	TV
EPS	1.43	0.69
DEPS	1.41	0.71
BVPS	1.02	0.97

Source: VIF test from STATA 10.

Table 4.4.3 reveals the absence of multi-collinearity as the EPS, DEPS and BVPS of post IFRS all have VIF that are less than 10 and TV that are above 0.1. Based on this result, the model can be described as fit and robust for the study since there is no evidence of multi-collinearity.

4.4.3.2 Heteroskedasticity

The study employs the Breusch-Pagan or Cook-Weisberg test for heteroskedasticity. The null hypothesis indicates that the variance of the residuals is constant. If the p value is significant at 5% then the variance is not constant which implies heteroskedascity. The result reveals Chi2 of 1.67 and the prob>chi2 is 0.1963. This then indicates absence of heteroskedasticity since it is not significant at 5%. These results further attest to the fitness of the post IFRS model.

4.4.4 Hausman Specification Test

The result obtained from the hausman specification test which is based on post IFRS data shows that chi2 is 0.84 and p-value is 0.8408. The result suggests that random effect is more suitable for the study.

4.4.5 Random Effect Model Regression

The result of the post IFRS random effect regression is presented in the table below and the findings will be discussed in this section.

Table 4.4.4 Random effect regression

Variable	Coefficient	Std. Err	Z	p>/z/
Constant	10.514	2.609	4.03	0.000
EPS	0.028	0.033	0.86	0.389
CEPS	0.028	0.023	1.23	0.219
BVPS	0.022	0.027	0.82	0.412
R-Squared: Within	0.2997			
Between	0.3351			
Overall	0.0859			
Wald chi2	8.03			
Prob>chi2	0.0454			

Source: random effect regression output from STATA 10

Table 4.4.4 shows the result from estimated regression of post IFRS analyses and therefore the equation is:

$$SP = 10.514 + 0.028EPS^{post} + 0.028CEPS^{post} + 0.022BVPS^{post}$$

4.4.5.1 Post IFRS EPS and Share Price

From the above table, EPS has a correlation coefficient of 0.028; z- value of 0.86 and P-value of 0.389. The result reveals that EPS based on IFRS has positive insignificant effect on share price in the DMBs thereby, insinuating that EPS after IFRS adoption is not value relevant. This result confirms the findings of Qu and Zhang (2010), Kargin (2013), Beisland

(2009) and Galaen (2010) while it contradicts Agostino (2009), Dung (2009), Alfaraih and Alanezi (2011), Turel (2009), Chalmers et al (2010), and Khanagha (2011).

4.4.5.2 Post IFRS CEPS and Share Price

The CEPS during IFRS adoption has a correlation coefficient of 0.028; z-value of 0.23 and a p-value of 0.219. This outcome indicates an inverse impact of CEPS on SP even though it is not statistically significant. However, researches have not used CEPS as a financial information variable for post IFRS researches.

4.4.5.3 Post IFRS BVPS and Share Price

The BVPS results revealed a positive insignificant impact on share price with a coefficient of 0.02, z- value of 0.82 and p- value of 0.412. IFRS based BVPS has positive but insignificant effect on stock price. The insignificance of co-efficient implies that IFRS has no significant impact on the value relevance of BVPS. BVPS being the net asset of a firm should not be relied on in making investment decision as it does not significantly explain variation in share price.

This finding confirms the result of Agostino (2009) and Qu and Zhang (2010) while it contradicts the general notion that if net asset is close to its realistic value it is value relevant. With IFRS adoption, the use of fair value measurement for asset becomes prominent and the fair value is assumed to be closer to real value of an asset at a point in time unlike the historical cost accounting. The fact that fair value is used in measurement of asset should make the net asset close to its real value and consequently enhancing value relevance of book value.

However, the following reasons could be proffered for getting a result of this nature.

Firstly, the BVPS reveal a general view of a firms statement of financial position since its computation includes all the content of a balance sheet. Now IFRS adoption involves valuing assets at a point in time and as such increases the volatility in book values of firms. Secondly, this finding is particular to Nigerian DMBs. This is because the banks are prominently known for the trading of financial instruments and derivatives which should be measured at fair value. More so, IFRS adoption led to reclassification of this financial instrument which are to be treated differently i.e. in accordance to their classification. Thirdly, with IFRS adoption the definition of intangible asset changed. The Implication is that items that were usually considered as assets and treated in the statement of financial position are now expensed in the income statements.

Nevertheless, some studies reported that BVPS is value relevant under IFRS adoption like Beisland (2009), Stergois et al (2005) Galean (2010), Qu and Zhang (2010) and Kargin (2013). In trying to affirm this result, it is obvious that Kargin (2013) carried out his investigation on firms with positive earnings, which perhaps explains the reason for this result. However, this outcome contradicts the statement of Burgstahler and Dichev (1997) that the extent of association of earnings and book value is dependent on the level of success of a firm, because when a firm is unsuccessful book value becomes an important determinant of equity value. Moreover, Beisland (2009) did not employ traditional value relevant regression. Instead, he included sign and disaggregated effect in the regression analyses while Stergois et al (2005) based their analyses on a two year period. The above point can actually limit the reliability of their result.

4.4.5.4 IFRS Adoption and Value Relevance of Financial Statement

The aggregate result from the post IFRS regression analyses reveal that R-squared overall is 0.08 which means that 8% variation in share price is explained by variation in post

IFRS financial information. Moreover, the Wald chi2 at 8.03 and $P > 0.045$ is significant at 5% it thereby, depicts that the model is fit and reliable.

This result indicates that post IFRS financial information has a weak value relevance. However, the elements that made up financial information are not value relevant in post IFRS adoption thereby giving a low cumulative relationship to share price.

Based on the above, we conclude that IFRS adoption does not enhance value relevance of financial information in the Nigerian DMBs. This supports the findings of Clarkson et al (2011), Psaroulis (2011), Qu and Zhang (2010) and (Khanagha (2011) for UAE while it contradicts the findings of Lee et al (2013), Kargin (2013), Tsalavoutas (2009), (Khanagha 2011.for Bahrain), Gjerde (2008), Alfaraih (2009), Galaen and Stenheim (2010) and Chalmers (2010), Palae (2013).

It is however expected that IFRS adopted financial information will be highly value relevant but the reverse is the case in Nigerian DMBs. This could have resulted from the time Nigeria adopted IFRS and the level of preparation to meet the changes that accompany IFRS adoption.

4.4.6 Relative Value Relevance of Pre and Post IFRS financial information

Relative value relevance helps to compare the value relevance of two separate set of financial information in order to ascertain which one is more value relevant. Houthausen and Watts (2000), who conducted a research on value relevance of value relevance studies, established that the relative value relevance can be ascertained by comparing the R- squared of accounting information involved in the analyses. This approach was also confirmed by Lambart (1996).

Based on the above understanding, we compare R-squared of Pre IFRS financial information to that of post IFRS. The study revealed Pre IFRS R-squared to be 0.38 while

post IFRS R-squared is 0.08. We therefore conclude that post IFRS financial information does not have relative value relevance over and above pre IFRS financial information.

The finding of this study confirms the outcome of Bridges (2009), Khanagha (2011) and Palea (2013) while it contradicts the findings of Agostino (2009), Turel (2009), Kargin (2013), Lee (2013) and Galaen & Stenheim (2010).

Based on the foregoing result we have enough evidence to fail to reject the null hypothesis that states: that there is no significant difference between the value relevance of financial information of Pre and post IFRS adoption in Nigerian DMBs.

4.5 Policy Implications of Findings

This study, being timely, relate to the major change in financial reporting globally. IFRS has attracted so many reactions over time and the challenge of a new reporting standard bothers many as to whether it is worth the change. This study is significant to standard setters, bank manager, academia, investors and analyst as they seek to know if truly a high quality accounting has a higher ability to produce a value relevant accounting information, that is accounting information that can be reflected in share price or better explain variations in share price.

IFRS accounting methods create a better environment and a level playing ground for accounting globally. From the findings of this study IFRS has not enhanced the predictive ability of accounting information. Since EPS, CEPS and BVPS are not value relevant after IFRS adoption as compared to EPS, CEPS and BVPS before IFRS adoption, thus the implications are:

- i. Regarding the value relevance of earnings the study provide evidence that earnings before IFRS adoption is highly value relevant but the reverse became the case after IFRS adoption. Reclassification of financial instruments, definition of intangibles,

earnings recognition and fair value measurement were employed to derived high predictive ability from published accounting information. Analysts seem to prefer fair value accounting which is based on IFRS because it tends to represent reality more than historical cost accounting. However, the findings of this research prove that IFRS is not closer to reality since earnings drastically reduced in its predictive ability in the Nigerian DMBs after IFRS adoption. Therefore, there is a need for the Nigerian education system to incorporate IFRS fully and all agencies to be involved in order to equip Nigerians with IFRS knowledge. This should be accompanied by adequate measure needed for the implementation to be put in place.

- ii. The study provides evidence that both pre and post IFRS BVPS are not value relevant in the Nigerian DMBs. However, the result for post IFRS is expected to be value relevant owing to fair value measurement of financial asset which is said to be more realistic as against historical cost accounting. This could be as a result of the economy which is characterized by political instability, weak regulatory framework and lacks sophistication needed to bring out the benefits of IFRS adoption. Thus, a policy dialogue is needed to discuss how Nigeria will improve on its facilities and overcome the obstacles facing developing nations.
- iii. Moreover, this study provides evidence that accounting information before IFRS adoption is generally more value relevant than post IFRS financial information. This is contrary to the general expectation that a single set of accounting standard with its component is to have high value relevance. If the adoption of IFRS arose strongly due to financial scandals and economic melts down then it should be able to solve the problem by ensuring that accounting information are reflected in share prices of firms. This finding is significant to Financial Reporting Council and other local regulators

who are to enforce consistency in IFRS policy adoption and also align IFRS reporting requirements to other local directives as this will enhance maximum benefits.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary

The inception of IFRS is one of the most challenging changes in the framework of accounting globally. The content of IFRS has been an issue of discourse and argument among scholars over decades most especially on historical cost accounting and fair value measurement. Whether NGAAP financial information has any impact on variation in share price has been a major regulatory and academic subject matter in Nigeria. IFRS adoption raised the need to investigate whether IFRS financial information has any impact on the variation of share price. This is rather a new aspect in accounting, especially Nigeria

So far, value relevance of IFRS adoption on financial information has not been delved into in the Nigerian context. Researches in Nigeria are dominated by descriptive research with use of primary sources that are biased and filled with assumptions. This study is interested in the empirical investigation of IFRS adoption and value relevance of financial information in the Nigerian DMBs.

The literatures related to this research were reviewed particularly, the concept of value relevance, financial information, IFRS, relevance and reliability, empirical reviews and the clean surplus accounting theory which underpins this study. The theory connects the relationship between earnings, book value and share price with any other factor that affects share price. Correlational research design was employed and secondary data covering of EPS, DEPS and BVPS were collected from published annual reports of banks that had adopted IFRS from 2010 – 2013 and existed in 2006. Data of share prices were sourced from cashcraft data base and panel data regression analyses using the random effect model were employed. In order to test the model fitness the Breusch-pagan/cook-Weisberg test for

heteroskedasticity was carried out to check for the presence of constant variance while VIF was used to test for multi-collinearity.

The study found that pre IFRS EPS is value relevant while post IFRS EPS is not value relevant. Both Pre and post IFRS CEPS are not value relevant. Also, the BVPS pre and Post IFRS are not value relevant. Finally, the post IFRS aggregate has weak value relevance while pre IFRS aggregate financial information has strong value relevance.

5.2 Conclusion

A high quality accounting is expected to make financial information to reflect in changes in stock price i.e. explaining a reasonable part of variation in stock price. A change in accounting and financial reporting should mean an improvement over the previously existing standard.

In the light of these findings, the study concludes that pre IFRS financial information is value relevant and post IFRS financial information is also value relevant. The study further concludes that post IFRS financial information is more value relevant. Therefore, accounting information has value relevance and IFRS adoption has pronounced impact in the Nigeria banking industry. The study then specifically concludes that:

- i. EPS before IFRS adoption has positive impact on stock price and as such could be a basis for making market decisions while EPS after IFRS adoption has positive insignificant impact. The EPS before IFRS is value relevant but the EPS after IFRS adoption is not value relevance.
- ii. CEPS before and after IFRS adoption has no significant impact on share price and as such they are not value relevant.
- iii. BVPS before and after IFRS adoption has no significant impact on stock price. Thus, BVPS before and after IFRS adoption is not value relevant.

5.3 Recommendations

Flowing from the finding of this study, it is realised that the general notion of improved value relevance with the adoption of IFRS has been confirmed since the Nigerian DMBs present value relevant accounting information based on only earnings. Book values and change in earnings proved value irrelevant. It is therefore recommended that:

- i. Management, external auditors and regulators should work together to tighten compliance in the Nigerian DMBs in order to enhance the impact of IFRS. Enforcement is better than the standard setting itself as rigid regulation and enforcement could bring out the benefit of IFRS.
- ii. Organisations should provide all necessary resources needed to understand the impact of IFRS on their organisation and train staff on IFRS and changes in accounting framework.
- iii. Organisations should ensure that corporate governance is strongly implemented since it ensures the quality of earnings. IFRS should be adopted not just in form but in in substance.

5.4 Limitations of the study

This study has tried to establish the impact of IFRS adoption on the value relevance of accounting information. However it is not devoid of limitations. The results of this finding might not fully be relied on considering the following shortcomings;

- i. IFRS is a new reporting standard to Nigeria of which most firm adopted in 2012 and translated 2011 and 2010 from Nigerian GAAP to IFRS. However, to curb such anomaly that would have resulted from using a translated financial statement, the share price of three months after the fiscal year of

translation was used. This method has held in so many foreign IFRS research and has produce results.

- ii. The sample selection was dependant on firms that has adopted IFRS and was in existence in 2006. This method is not scientific and contains some element of bias, but with sufficient observations of 7 listed banks and 8 years period of study, the research findings can stand.

REFERENCES

- Agostino, M., Drago, D., and Silipo, D. (2009). The value relevance of IFRS in the European banking industry. Department of Economics and Statistics, University of Della, Calabria, Italy.
- Aksoy, F. (2008). The information content of earnings and systematic risk in changing economic conjecture; the Turkish Case. M.B.A Thesis, Department of Business Administration, Bilkent University.
- Alagiah (2009). Writing the future: A theoretical Justification for a uniform and Universal system of currency in accounting. *Journal of Modern Accounting and Auditing*, 5(7).
- Al-Deehani, T.M (2005).The determinants of stock prices in the Kuwait Stock Exchange; an extreme bound analyses. *Investment Management and Financial Innovation*, vol.3
- Alfaraih, M. (2009). Compliance with International Financial Reporting Standard and Value relevance of accounting information in emerging stock market: Evidence from Kuwait. A thesis submitted in fulfilment of the requirement for degree of Doctor of Philosophy to the school of accounting, University of Technology, Queensland.
- Alfaraih M. and Alanezi F. (2011). The usefulness of earnings and book value for equity valuation to Kuwait Stock Exchange participants. *International Business and Economic Research Journal*, vol.10.
- Amir, E. and Lev, B. (1996). Value relevance of Non- financial Information: The wireless communication industry. *Journal of Accounting and Economics*, vol.22 (3-30).
- Anandarajan A., Hasan I., Isik I., and McCarthy C. (2005). The role of earning and book value in pricing stocks: Evidence from Turkey. A working paper, School of Management, New Jersey.
- Ball, R. and Brown, P., (1968). An Empirical Evaluation of Accounting Income Number. *Journal of Accounting Research* (6), 159-178.
- Barth, M. E. (1994). Fair value accounting: Evidence from Investment Securities and the Market Valuation of Banks. *Accounting Review*, 69(1-25).
- Barth, M., Beaver, W. and Landsman, W. (2001). The relevance of the value relevance literature for financial accounting standard setting: ‘Another View’ *Journal of Accounting & Economics*, (31) 77-104.
- Barua A. (1996). Using the FASB qualitative characteristics in earnings quality measures. A Dissertation Submitted to the Graduate Faculty of Louisiana State University and Agricultural and Mechanical College in Partial Fulfilment of the requirement of the Degree of Doctor Philosophy in Department of Accounting.

- Beaver, W.H Griffin,P.A and Landsmans W.R., (1982). Incremental information content of replacement cost earnings. *Journal of Accounting and Economics*, (14) 15-39.
- Beisland, L.A. (2010). Is the value relevance of accounting information consistently Underestimated? *Open Business Journal*, vol. (3) pp. 1-7.
- Bello, A. (2009). Financial Information Quality and Inflation Accounting Disclosure: A Ph.D. Dissertation Presented in Department of Accounting, Ahmadu Bello University, Zaria.
- Bhatt P. and Sumangla J.K (2012). Impact of earnings per share on market value of equity share: An empirical study in Indian Capital Market. *Journal of Finance, Accounting and Management*, vol.3 (2).
- Burgsthler D. and Dichev I. (1997). Earnings, Adaptation and Equity Values. *The Accounting Review*, April: 187-125.
- Chalmers, K. Clinch, G. and Godfrey, J.M (2009). Changes in value relevance of accounting information upon IFRS adoption: Evidence from Australia. American Accounting Association, annual meeting.
- Chang, J. (1998). The Decline in Value Relevance of Earnings and Book Values: Wharton School University of Pennsylvania.
- Changh H.L et al (2008). The Relationship between Stock Price and Earnings Per Share Evidence Based on Taiwan Panel Data. *Economic Bulletin*.
- Chen Q.I, Goldstein I. and Jiang (2007). Price Informativeness and Investment Sensitivity to Stock Price. *The Review of Financial Studies*, vol. 20 (3).
- Cho M. (2005). The Usefulness of Earnings, the Magnitude of Price Change and the Return-Earnings Covariance: Beyond the ERC and R². University of Maryland, College Park, Maryland.
- Christensen, H.B and Niklova, V.V (2011). Does fair value accounting for non-financial asset pass the market test, the university of Chicago Booth School of Business south woodlann Avenue chicago IL 60637.
- Clarkson, P. Hanna, J.D. Richardson, G.D and Thompson R. (2011). The impact of IFRS adoption and the value relevance of book value and earnings. [Http://ssrn.com/abstract=1614362](http://ssrn.com/abstract=1614362).
- Cocker, A.L. (2005). Relevance and Reliability: A trade off? A dissertation Submitted in partial completion of the requirements of the degree of bachelor of commerce (Honours) at the University of Otago, Duneden, New Zealand.
- Collins, D.W., Maydew, E.L and Weiss (1997). Changes in the value of earnings and book values over the past forty years. *Journal of Accounting and Economics*, vol. 24 issue 1

- Daines, H.C. (1929). The changing objectives of accounting. *The Accounting Review*, vol. 4, pp. 94-110.
- Dahmash, F.N and Qabajeh, M. (2012). Value relevance of Olhson model with Jordanian data. *Interdisciplinary Journal of Contemporary Research in Business*, (3)11.
- Dechow, P. 1994. Accounting Earnings and Cash Flows as Measures of Firm Performance: The Role of Accounting Accruals, *Journal of Accounting and Economics*, vol. 18, pp. 3-42.
- Delloite, A.W (2013). IFRS transition – Navigating complexities. Delloite Global Services Limited, Partners in Learning.
- Dimos, A.A (2011). IFRS and European commercial banks. Value relevance and economic consequences. A thesis submitted to the University of Birmingham U.K for the degree of Doctor of Philosophy Birmingham business school.
- Dung, N.V. (2009). Value Relevance of Financial Statement Market Information: A Flexible Application of Modern to Vietnamese Stock Department of Financial Management, Faculty of Banking and Finance, Trade University.
- Edwards, E.O. and Bell W.O (1961). *The Theory and Measurement of Business Income*, Berkeley, CA: University of California Press.
- Financial Accounting Standard Board (FASB). (1980). *Qualitative Characteristics of Accounting Information, Statement of Financial Accounting Concepts 2*. Stamford, CT:FASB.
- Fischer, D.E and Jordan, R.J (2005). *Security Analysis and Portfolio Management*. Prentice-Hall of India Private Limited, New Delhi.
- Francis, J. and Schipper, k. (1999). Has Financial Statement Lost their Relevance? *Journal of Accounting Research*, vol. 37 pp.319-352.
- Galaen, A. and Stenhaim, T. (2010). Differences in accounting quality between Norwegian GAAP and IFRS. A master thesis submitted to Buskend University College, spring, Norway.
- Gjerde, Q., Knivsfla, K.H and Saetem, F. (2011). The Value Relevance of Financial Reporting on Oslo Stock Exchange over the Period of 1964-2003. *Scandinavian Journal of Management*, Vol.27, 113-128.
- Harris, M.S and Muller, K.A (1999). The market valuation of IAS versus US.GAAP accounting measures using Form 20-F reconciliation. *Journal of Accounting and Economics*, vol.26 (285-312).
- Hayes, H.V. (1913). Original cost versus replacement cost as a basis for rate regulation. *Quarterly Journal of Economics*, vol. 27, pp.616-629.

- Herbert, W.E., Tsegba, I.N., Ohanele, A.C and Anyahara L.O (2013). Adoption of IFRS: insight from Nigerian academics and practitioners. *Research Journal of Finance and Accounting*, 4(6).
- Hellstrom, K. (2005). The value relevance of Financial Accounting in a Transitional Economy: the case of Czech Republic, Working paper Series in Business Administration.
- Holthausen, R.W and Watts, R.L. (2001). The relevance of value relevance literature for Financial Accounting Standards Setting. *Journal of Accounting and Economics*, Vol. 31, pp.2-75.
- Icanz, (2004). Applicable financial reporting standards: New Zealand equivalents to International Financial Reporting Standards (Vol. January 2005). Auckland: Institute of Chartered Accountants of New Zealand.
- Ikpefan, O.A, and Akande A.O (2012). Benefits, obstacles and intrigues for implementation in Nigeria. *Research journal of finance and accounting*, 3(10).
- Ikpehai, M. (2011). Implications of IFRS. martins.ikpehai@ng.ey.com
- Isenmila, P.A., and Adeyemo, K.A. (2013). Mandatory adoption of IFRS in Nigeria: The unresolved institutional question. *Mediterranean journal of social science*, 4(1).
- Johnson T.L (2005). Relevance and Reliability, *Article from FASB Report*.
- Kargin, S. (2013) the impact of IFRS on the value relevance of accounting information: Evidence of Turkish firms. *International Journal of Economics and Finance*, 5(4).
- Karunarathne, W.V.A.D.and Rajapakse, R.M.D.A.P. (2010). The value relevance of Financial statements information: with special reference to the listed companies in Columbo. Doctoral Candidate, Department of Government Economics Huashay Normal University.
- Keener M.H (2010), the relative value relevance of earnings and book value across in Columbo. Doctoral Candidate, Department of Government
- Khanagha J.B (2011). international financial reporting standard and value relevance of accounting information: evidence from Bahrain and United Arab Emirate stock market. *African Journal of Social Sciences*. vol. 1, pp. 101-114.
- Khanagha J.B, Mohamad S.,Hassan T., and Sori Z.M (2011). The impact of reforms on the value relevance of accounting information: Evidence from Iran. *African Journal of Business Management*. 5(1), 96-107.
- Kirkman R.A (1974). *Accounting under Inflationary Conditions*. Great Britain: George Allen and Unwin Ltd.

- Kirkulak, B. and Balsari, C.K (2009): Value Relevance of Inflation-adjusted Equity and Income. *The International Journal of Accounting*. 44 (363-377).
- Klimczak K.M, (1999). Testing Value Relevance of Accounting Earnings: Theory and Methods. Leon Kozmiski Academy of Entrepreneur and Management.
- Lambart R. (1996). Financial Reporting Research and Standard Setting. Working paper, Stanford University.
- Lee, E., Walker, M. and Zeng, C. (2013). Does IFRS convergence affect financial reporting quality in China. Association of Chattered Certified Accountants, Educational Trust London 29 Lincolns Inn field London.
- Lopes B.A (2002). The value relevance of earnings and book value in Brazil: Old Versus New Economy.
- Nassaka D. and Rottenburg Z. (2011). Analyses of corporate valuation theories and valuation of ISS A/S. A Master Thesis Presented at Archus School of Business and Social Sciences, Archus University.
- Nilsson H. (2005). Essay on the value relevance of financial statement information. *Studies in Business Administration*, series B. No 50.
- Obaidat A.N (2007). Accounting information qualitative characteristics gap: Evidence from Jordan. *International Management Review*, 3(2).
- Odia, J.O, and Ogiedu, K.O (2013). IFRS adoption: Issues, challenges and lesson for Nigeria and other adopters. *Mediterranean Journals of Social Sciences* MCSGR publishing Rome Italy.
- Ohlson, J. (1995). Earnings, Book values, and Dividend in Equity Valuation. *Contemporary Accounting Research*, spring, 661-687.
- Ohlson, J. (1995). Accounting- based valuation formula. *Review of Accounting Studies*, 10 (323-347).
- Ojo, M. (2008) The need for global adoption and adaptation of IFRS. Post. Enron consequences and the restoration of confidence of capital market following 2005 financial market crises. <http://ssrn/abstract/2143610>.
- Okafor, C. and Ogiedu K.O. (2011). Potential effects of adoption and implementation of IFRS in Nigeria . *Jorind*, 9(2).
- Palea, V. (2013). Capital market effects of IFRS adoption for separate financial statement: Evidence from Italian stock market. Department of Economics Cogneetti De Martiis, University of Torino, Italy. Working papers.
- PKF: transition to IFRS: A general overview and roadmap.

- Pologeorgis, N. (2013). The impact of combined U.S. GAAP and IFRS, CFA Institute of Certificate. cfainstitute.org/claritas
- Psaroulis, A., (2011). Did financial reporting quality increase after adoption of IFRS in Greece? A master thesis in fulfilment of M.Sc. in Banking and Financial Management in department of banking and financial management, university of Piraeus, Greece.
- Qu X. and Zhang G. (2011). Changes in the Value Relevance of Earnings and Book Values over the Institutional Transition and the Suitability of Fair Value Accounting in an Emerging Market: A Case Study of China. *Institute of Financial and Accounting Studies*. Xiamen University, Xiamen, Fujian.
- Sharayri M. and Momani G.F (2011). The Impact of Reliability and Relevance of Financial Position Information and Decision Making: Field Study on Jordan Companies Working in Electricity Sector. *The Review of Financial and Accounting Studies*, Issue 1.
- Sing T.Y and Meng S.C (2005). Fair value accounting relevance, reliability and Progress in Malaysia, University College Sedeya International.
- Stamp, E. (1982). First steps towards a British conceptual framework. *Accountancy*, 93, pp.123-130.
- Stergois, A. Athanasios, V. and Niklolaev,D (2005). Financial statement effect of adopting IAS: The case of Greece. Department of Applied Informatics, University of Macedonia.
- Sterling R.R. (1970). The Theory of the Measurement of Enterprise Income, Lawrence, Universities Press of Kansas.
- Tsalavoutas, I. (2009) the adoption of IFRS by Greek listed companies: Financial statement effects Level of compliance and value relevance. A thesis submitted for examination for the degree of Doctor in Philosophy University of Edinburgh.
- Talebnia G.A, Valipour H. and Askari Z. (2012). Effect of free cash flow agency on the value relevance of earnings per share and book value per share with stock price in the chemical and medical industries: Evidence from Tehram stock exchange. *American Journal of Scientific Research* Vol.46 pp.118-127.
- Thinggaard, F., and Damkierb, J. (2008). Has financial statement information become less relevant? Longitudinal evidence from Denmark *Scandinavian Journal of Management*.
- Vishnani, S. and Shah, B.K (2008).Value Relevance of Published Financial Statement with special emphases on the Impact of Cash Flow Reporting. *International Research Journal of Finance and Economics*. <http://www.eurojournals.co/finance.htm>.
- Vazquez, R.D, Valdes, A.L and Herrera, H.V (2006). Value Relevance of the Ohlson model with Mexican data.

- Vieth S. and Werner J.R (2010). Comparing value relevance across countries: Does the Return window specification matters?
- Wensveen, M.V. (2010). Practical challenges in IFRS implementation: What Banks regulators need to know. *IFRS International Conference*. Partner financial services KPMG Netherland.

APPENDICES

Appendix A

Population of the Study

Banks Listed on the NSE as at 31st December, 2012

1. Access Bank Plc
2. Diamond Bank Plc
3. Ecobank Plc
4. Fidelity Bank Plc
5. First City Monument Bank Plc
6. First Bank of Nigeria Plc
7. Guarantee Trust Bank Plc
8. Keystone Bank Plc
9. Mainstreet Bank Plc
10. Skye Bank Plc
11. Stanbic-IBTC
12. Sterling Bank Plc
13. Wema Bank plc
14. United Bank for Africa Plc
15. Unity Bank Plc
16. Union Bank of Nigeria Plc
- 17. Zenith Bank Plc**

Sample of the study

1. Access Bank Plc
2. Diamond Bank Plc
3. Ecobank Plc
4. Fidelity Bank Plc
5. First City Monument Bank Plc
6. First Bank of Nigeria Plc
7. Zenith International Bank Plc

Appendix B

PRE - IFRS DATA

NAME	YR	ID	SP	EPS	CEPS	BVPS
Access	2006	1	11.59	0.07	-0.05	2.07
Access	2007	1	11.59	0.87	0.8	7.38
Access	2008	1	24.25	1.73	0.86	17.08
Access	2009	1	4.85	1.41	-0.32	12.68
Diamond	2006	2	7.75	0.59	0.37	28.2
Diamond	2007	2	10.7	0.89	0.3	31.78
Diamond	2008	2	18.5	1.1	0.21	42.06
Diamond	2009	2	4.76	0.48	-0.62	11.16
Ecobank	2006	3	7.50	0.27	0.12	4.4
Ecobank	2007	3	6.39	0.03	-0.24	0.49
Ecobank	2008	3	7.95	0.14	0.11	0.55
Ecobank	2009	3	27.96	0.05	-0.09	4.67
FBN	2006	4	37.00	2.69	-0.39	1.4
FBN	2007	4	38	0.34	-2.35	1.6
FBN	2008	4	47.24	-0.03	-0.37	4.4
FBN	2009	4	15.8	0.06	0.09	7.16
FCMB	2006	5	3.89	0.36	0.11	2.7
FCMB	2007	5	9.95	0.63	0.27	2.7
FCMB	2008	5	18.5	0.35	-0.28	7.16
FCMB	2009	5	3.9	0.25	-0.1	7.42
Fidelity	2006	6	2.93	0.2	0.42	1.52
Fidelity	2007	6	4.98	0.29	0.27	5.73
Fidelity	2008	6	10.9	0.45	0.16	8.89
Fidelity	2009	6	2.8	0.08	-0.37	7.62
Zenith	2006	7	19.64	1.91	0.09	10.52
Zenith	2007	7	40	2.78	0.87	4.06
Zenith	2008	7	48	3.45	0.67	10.6
Zenith	2009	7	11.77	0.73	-2.72	10.19

Appendix C

POST IFRS DATA

NAME	ID	YR	SP	EPS	CEPS	BVPS
Access	1	2010	10.2	0.89	-0.52	61.21
Access	1	2011	10.2	0.6	-0.29	13.45
Access	1	2012	10.2	2.33	1.73	11.3
Access	1	2013	7.45	1.59	-0.74	1.41
Diamond	2	2010	7	1.06	0.33	13.07
Diamond	2	2011	7	1.32	0.26	13.95
Diamond	2	2012	7	3.05	1.73	16.42
Diamond	2	2013	6.31	2.06	-0.99	1.21
Ecobank	3	2010	14	0.2	0.15	4.64
Ecobank	3	2011	14	0.55	0.35	18.54
Ecobank	3	2012	14	0.69	0.14	23.5
Ecobank	3	2013	13.2	0.63	-0.06	8.47
FBN	4	2010	19.8	0.12	0.06	4.4
FBN	4	2011	19.8	69.29	69.17	3.54
FBN	4	2012	19.8	42.23	-27.06	6.77
FBN	4	2013	12.6	2.16	-40.07	9.44
FCMB	5	2010	4.8	0.45	1.2	8.14
FCMB	5	2011	4.8	-0.68	-1.13	7.19
FCMB	5	2012	4.8	0.66	1.34	6.89
FCMB	5	2013	3.38	0.3	-0.36	7.25
Fidelity	6	2010	3.04	0.45	-0.03	8.89
Fidelity	6	2011	3.04	-1.57	2.02	5.81
Fidelity	6	2012	3.04	1.59	3.16	7.41
Fidelity	6	2013	2.2	0.27	-1.32	0.17
Zenith	7	2010	21.3	0.44	1.08	10.12
Zenith	7	2011	21.3	1.02	0.58	10.73
Zenith	7	2012	21.3	1.69	0.67	10.53
Zenith	7	2013	20	2.99	1.3	15.05

Appendix D

Pre IFRS descriptive statistics

```
. summarize sp eps ceps bvps
```

Variable	Obs	Mean	Std. Dev.	Min	Max
-----+-----					
sp	28	16.39607	13.86259	2.8	48
eps	28	.7917857	.9245221	-.03	3.45
ceps	28	-.0778571	.7953446	-2.72	.87
bvps	28	9.149643	9.849531	.49	42.06

Appendix E

Pre IFRS correlation matrix

```
. correlate sp eps ceps bvps
```

```
(obs=28)
```

```
      |    sp    eps    ceps    bvps
-----+-----
      sp |  1.0000
      eps |  0.5630  1.0000
      ceps | -0.0463  0.2663  1.0000
      bvps | -0.0741  0.1741  0.1700  1.0000
```

Appendix F

Pre IFRS Multicollinearity Test

. vif

Variable	VIF	1/VIF
-----+-----		
eps	1.10	0.912007
ceps	1.09	0.913346
bvps	1.05	0.953236
-----+-----		
Mean VIF	1.08	

Appendix G

Pre IFRS Heteroskedasticity Test

. hettest

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity

Ho: Constant variance

Variables: fitted values of sp

chi2(1) = 0.49

Prob > chi2 = 0.4861

Appendix H

Pre IFRS Fixed Effect Regression

. tsset id year

panel variable: id (strongly balanced)

time variable: year, 2006 to 2009

delta: 1 unit

. xtreg sp eps ceps bvps, fe

Fixed-effects (within) regression Number of obs = 28

Group variable: id Number of groups = 7

R-sq: within = 0.2686 Obs per group: min = 4

between = 0.1131 avg = 4.0

overall = 0.1779 max = 4

F(3,18) = 2.20

corr(u_i, Xb) = -0.0445 Prob > F = 0.1229

sp	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
----	-------	-----------	---	------	----------------------

-----+-----

eps	5.487421	3.355226	1.64	0.119	-1.561648 12.53649
-----	----------	----------	------	-------	--------------------

ceps	1.918279	2.968825	0.65	0.526	-4.318991 8.155549
------	----------	----------	------	-------	--------------------

bvps	.1827569	.3521963	0.52	0.610	-.55718 .9226939
------	----------	----------	------	-------	------------------

_cons	10.5284	4.440139	2.37	0.029	1.200016 19.85679
-------	---------	----------	------	-------	-------------------

-----+-----

sigma_u | 10.525274

sigma_e | 9.4638689

rho | .55294981 (fraction of variance due to u_i)

F test that all u_i=0: F(6, 18) = 2.98 Prob > F = 0.0336

Appendix I

Pre IFRS Random-effects GLS regression

. xtreg sp eps ceps bvps, re

Random-effects GLS regression Number of obs = 28

Group variable: id Number of groups = 7

R-sq: within = 0.1289 Obs per group: min = 4

 between = 0.6282 avg = 4.0

 overall = 0.3807 max = 4

Random effects u_i ~ Gaussian Wald chi2(3) = 14.75

corr(u_i, X) = 0 (assumed) Prob > chi2 = 0.0020

sp	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]
----	-------	-----------	---	------	----------------------

-----+-----

eps	9.602582	2.52217	3.81	0.000	4.659219	14.54595
ceps	-3.324612	2.929662	-1.13	0.256	-9.066645	2.417421
bvps	-.2155568	.2315661	-0.93	0.352	-.669418	.2383044
_cons	10.50631	3.537092	2.97	0.003	3.573734	17.43888

-----+-----

sigma_u | 0

sigma_e | 9.4638689

rho | 0 (fraction of variance due to u_i)

Appendix J

Hausman Specification Test

---- Coefficients ----				
	(b)	(B)	(b-B)	sqrt(diag(V_b-V_B))
	fixed	random	Difference	S.E.
-----+-----				
eps	5.487421	9.602582	-4.115162	2.212736
ceps	1.918279	-3.324612	5.242891	.4806236
bvps	.1827569	-.2155568	.3983137	.2653665

b = consistent under Ho and Ha; obtained from xtreg

B = inconsistent under Ha, efficient under Ho; obtained from xtreg

Test: Ho: difference in coefficients not systematic

$$\chi^2(3) = (b-B)'[(V_b-V_B)^{-1}](b-B)$$

$$= 2.52$$

$$\text{Prob} > \chi^2 = 0.4723$$

(V_b-V_B is not positive definite)

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800-STATA-PC <http://www.stata.com>

979-696-4600 stata@stata.com

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28-student Stata for Windows (network) perpetual license:

Serial number: 1910569294

Licensed to: James Lin

UC Riverside

Notes:

1. (/m# option or -set memory-) 1.00 MB allocated to data

Checking <http://www.stata.com> for update... host not found

unable to check for update; verify Internet settings are correct.

. edit

(6 vars, 28 obs pasted into editor)

Appendix K

Post IFRS Descriptive Statistics

. summarize sp eps ceps bvps

Variable	Obs	Mean	Std. Dev.	Min	Max
-----+-----					
sp	28	10.91286	6.642191	2.2	21.3
eps	28	4.870714	14.87119	-1.57	69.29
ceps	28	.4535714	16.27186	-40.07	69.17
bvps	28	11.05357	11.17107	.17	61.21

Appendix L

Post IFRS correlation matrix

. correlate sp eps ceps bvps

(obs=28)

	sp	eps	ceps	bvps
sp	1.0000			
eps	0.3793	1.0000		
ceps	0.1054	0.5384	1.0000	
bvps	0.0824	-0.1463	-0.0697	1.0000

Appendix M

Post IFRS Multicollinearity test

. vif

Variable	VIF	1/VIF
-----+-----		
eps	1.43	0.698217
ceps	1.41	0.710028
bvps	1.02	0.978472
-----+-----		
Mean VIF	1.29	

Appendix N

Post IFRS Heteroskedasticity Test

. hettest

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity

Ho: Constant variance

Variables: fitted values of sp

chi2(1) = 1.67

Prob > chi2 = 0.1963

Appendix O

Post IFRS Fixed Effect regression

. tsset id year

panel variable: id (strongly balanced)

time variable: year, 2010 to 2013

delta: 1 unit

. xtreg sp eps ceps bvps, fe

Fixed-effects (within) regression Number of obs = 28

Group variable: id Number of groups = 7

R-sq: within = 0.2997 Obs per group: min = 4

between = 0.3457 avg = 4.0

overall = 0.0744 max = 4

F(3,18) = 2.57

corr(u_i, Xb) = 0.1636 Prob > F = 0.0865

sp	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
----	-------	-----------	---	------	----------------------

-----+-----

eps	.0242808	.0339763	0.71	0.484	-.0471008 .0956623
-----	----------	----------	------	-------	--------------------

ceps	.0306939	.0233504	1.31	0.205	-.0183634 .0797512
------	----------	----------	------	-------	--------------------

bvps	.0216368	.0270794	0.80	0.435	-.0352549 .0785285
------	----------	----------	------	-------	--------------------

_cons	10.54151	.4269391	24.69	0.000	9.644541 11.43847
-------	----------	----------	-------	-------	-------------------

-----+-----

sigma_u | 6.7635201

sigma_e | 1.3764425

rho | .96023086 (fraction of variance due to u_i)

F test that all u_i=0: F(6, 18) = 83.19 Prob > F = 0.0000

Appendix P

Post IFRS random effect GLS Regression

```
. xtreg sp eps ceps bvps, re
```

Random-effects GLS regression Number of obs = 28

Group variable: id Number of groups = 7

R-sq: within = 0.2991 Obs per group: min = 4

 between = 0.3351 avg = 4.0

 overall = 0.0859 max = 4

Random effects u_i ~ Gaussian Wald chi2(3) = 8.03

corr(u_i, X) = 0 (assumed) Prob > chi2 = 0.0454

sp	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]
----	-------	-----------	---	------	----------------------

-----+-----

eps	.0288951	.0335594	0.86	0.389	-.0368801 .0946703
-----	----------	----------	------	-------	--------------------

ceps	.0284612	.0231513	1.23	0.219	-.0169146 .0738369
------	----------	----------	------	-------	--------------------

bvps	.0220947	.0269183	0.82	0.412	-.0306643 .0748536
------	----------	----------	------	-------	--------------------

_cons	10.51498	2.609054	4.03	0.000	5.40133 15.62864
-------	----------	----------	------	-------	------------------

-----+-----

sigma_u | 6.8414352

sigma_e | 1.3764425

rho | .9610965 (fraction of variance due to u_i)

Appendix Q

Post IFRS Hausman Specification test.

hausman fixed random

---- Coefficients ----				
	(b)	(B)	(b-B)	sqrt(diag(V_b-V_B))
	fixed	random	Difference	S.E.
-----+-----				
eps	.0242808	.0288951	-.0046144	.0053061
ceps	.0306939	.0284612	.0022327	.0030425
bvps	.0216368	.0220947	-.0004579	.002949

b = consistent under Ho and Ha; obtained from xtreg

B = inconsistent under Ha, efficient under Ho; obtained from xtreg

Test: Ho: difference in coefficients not systematic

$$\chi^2(3) = (b-B)'[(V_b-V_B)^{-1}](b-B)$$

$$= 0.84$$

$$\text{Prob}>\chi^2 = 0.8408$$