# International Financial Reporting Standards' Adoption and Financial Statement Effects: Evidence from Listed Deposit Money Banks in Nigeria

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## Abstract

The motivation of this study is derived from prior studies which relate to the investigation of IFRS impact on the financial statements of banks. It examines the effects of the adoption of the International Financial Reporting Standards on the financial statements of banks. A regression model is estimated using pooled data and fitted with dependent variables. The results show that IFRS adoption has positively impacted some variables in the financial statement of banks, for example, profitability and growth potential. The paper also reveals that given the fair value perspective of IFRS, the transition to IFRS brings instability in income statement figures. Future research may identify the specific provisions of IFRS that are responsible for the positive impact on financial performance measures. Such detailed knowledge is useful to standard setters who may wish to improve existing accounting standards. Further research should extend the sample size and the time horizon of the study in order to add to the findings reported here.

**Keywords:** IFRS, financial statement, income statement, fair value, profitability, growth, financial performance measures.

## 1. Introduction

The pattern of financial reporting varies in the different countries or regions. This variation stands in the way of accountability and sound comparability of financial reporting among different countries (Kamal and Bhuiyan, 2003). The necessity, therefore, of standardization was felt worldwide. For standardization and harmonization of accounting and financial reporting, the International Financial Reporting Standards (IFRS) were developed. It is worthy of note that an unparalleled mark of compromise was reached between the two most powerful accounting standard setting bodies: the Financial Accounting Standards Board (FASB) based in the United States of America and the International Accounting Standards Board (IASB) based in United Kingdom in 2002. The Norwalk Agreement of 2002 was a major record achievement in that it brought together the FASB and the IASB to agree to develop a set of high quality accounting standards for both local and international transactions. These standards are referred to as the International Financial Reporting Standards (IFRS). Nigeria officially adopted IFRS in 2012, although, Nigeria's leading private sector companies, particularly banks adopted the IFRS in 2007. The global financial crisis, which started in 2008 and has continued to ravage and caused convulsion of a number of economies, added impetus to the demand for and importance of accountability and sound financial reporting in the banking industry. Yet, the recent public debate primarily focuses on one feature of bank accounting, namely fair value accounting (Laux and Leuz, 2009). Lack of fair value accounting is accused of having contributed to the crisis and exacerbating the effects of the financial meltdown (Song, et al, 2009; Goh et al, 2009; Kolev, 2008; Fiechter, 2009 and Khan, 2009). However, the current controversy around fair value accounting neglects the fact that the largest part of banks' balance sheets consists of loans which both under the Generally Accepted Accounting Principles (GAAP) and IFRS are measured on an amortized cost basis. Deterioration of credit quality of loans is recognized through loan loss provisions by applying the impairment rules of the respective accounting regimes.

The introduction of IFRS represents a significant change in banks' loan loss accounting in Nigeria as regards the recognition and measurement of credit risks. Unlike under the GAAPs, the incurred loss approach of International Accounting Standards (IAS) 39 requires banks to provide only for incurred losses, but not for future expected losses. Given the importance of loan loss provisions in determining reported earnings of banks (Nichols et al., 2009), it is natural to expect changes in these – by their nature highly discretionary – accruals to have significant aggregate effects on banks' earnings characteristics. It is within this context, therefore, that the study seeks to examine how the voluntary adoption of IFRS in Nigeria and particularly the switch to the incurred loss approach which underlies the recognition of loan losses, impacts financial performance of banks.

The adoption of IFRS would reduce earnings variability and improve accounting quality (Tanko, 2012). It reduces information asymmetry and would subsequently smoothen communications among managers, shareholders, creditors and other interested parties (Bushman and Smith, 2001), resulting in lower agency costs (Healy and Palepu, 2001). Lower information asymmetry would also lead to lower costs of equity and debt financing (El-Gazzar et al, 1999; Botosan and Plumlee, 2002). The paper tests for systematic differences among Nigerian banks given the implications of IFRS on bank accounts. The objective of the paper is to examine the effects on financial statement of the adoption of IFRS in Nigeria and the impact of IFRS adoption.

## 2. Literature Review

There is a considerably large and growing accounting and finance literature devoted to assessing the effect of IFRS adoption on bank financial measures. Even though more than 100 countries have either fully adopted IFRS or are committed to doing so in the near future (Ke, Li and Yuan, 2012), the costs and benefits of global mandatory IFRS adoption are still hotly debated. Proponents of IFRS (Tanko, 2012; Fowokan, 2012; Obazee, 2012; Gebhardt and Novotny-Farkas, 2010; and Negash, 2008) posit that the worldwide mandatory IFRS adoption reduces the costs that international corporations incur in preparing and auditing their financial statements, increases corporations' financial reporting quality (e.g., the comparability of financial information across countries), and decreases corporations' cost of capital.

However, opponents (Watts, 2006; Ball et al, 2003; Ball et al. 2000; and Hung 2001) argue that the quality of corporations' financial statements depends on not only high-quality accounting standards but also corporations' legal and institutional environments and the incentives of managers, investors, and auditors. Because a country's legal and institutional environments and the incentives of relevant decision makers are often slow to change, opponents predict that the quality of financial reporting is unlikely to converge around the world even with the global mandatory adoption of IFRS. Watts (2006) argues further that if standard setters ignore such fundamental economic forces when proposing new accounting standards, severe negative consequences would result for not only investors and managers but also standard setters.

Hung and Subramanyam (2004) investigate the effect of IFRS adoption on the financial statement and their value relevance for a sample of German listed firms during 1998-2002. By implementing an innovative research design they compare accounting numbers reported under German accounting rules with those under IAS for the same set of firm years and document how IAS adoption changes key financial measures and the value relevance of financial statement information. They reported that the total assets and book values of equity as well as variability of book value and net income are significantly higher under IAS/IFRS than under German GAAP. The study also finds that while the IAS adjustments to book value are generally value relevant, the adjustments to income are generally value irrelevant. The study also provides evidence into new insights into the accounting differences between stakeholder-oriented and shareholder-oriented accounting systems and sheds light on the financial statement and valuation implications of adopting IAS in stakeholder oriented economies.

Jermakowicz (2004) examines the adoption of IFRS by BEL-20 companies in Belgium. The study analyses the application of IFRS in the consolidated financial statements of Belgian publicly traded companies. The study provides insights into IFRS implementation problems based on a survey sent to BEL-20 Companies. The survey focused on the impact that IFRS conversion has on companies, their internal organization and accounting and finance strategy. The benefits and challenges of the adoption of IFRS are analyzed as well as the level of understanding and experience with IFRS, perception of the quality of IFRS and the impact of adoption of IFRS on consolidated equity and net income. Principal differences between IFRS and Belgian GAAP having a major impact on the conversion to IFRS are identified.

Stergios, Vazakidis and Dritsakis (2005) investigate the effects of adopting International Accounting Standards (IAS) on financial statements and their value relevance for a sample of Greek firms during 2003-2004. By implementing an innovative research design, they compare accounting results reported under Greek accounting rules (Greek GAAP) with those under IAS for the same set of years and document how IAS adoption changes key financial measures and the value relevance of financial statement information. Greek accounting system is stakeholder-oriented and usually viewed as a historical cost accounting model that gives emphasis in income smoothing while IAS is shareholder-oriented and generally viewed as fair value accounting model that gives emphasis in balance sheet valuation. According to these realizations, they find 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, they find that book value (net income) plays a greater (lesser) valuation role under IAS than under Greek GAAP. Finally, they find that while the IAS adjustments to book value are generally value relevant, the adjustments to net income are generally value irrelevant.

Hung and Subramanyam (2007) use a sample of German firms to investigate the financial statement effects of adopting IFRS during 1998 through 2006. They find that total assets and book value of equity as well as variability of book value and income are significantly higher under IAS than under German GAAP. In addition, book value and income are no more value relevant under IAS than under German GAAP and German IAS income is highly persistent. The study finds weak evidence that IAS income exhibits greater conditional conservatism than German GAAP income. The results are consistent with the fair value income smoothing orientation of IAS.

Goodwin, Ahmed and Heaney (2007) examine the effect of Australian equivalents to IFRS on the accounts and accounting quality of 1,065 listed firms. The data set was retrospective reconciliations from Australian GAAP to IFRS disclosed in the notes to the accounts. They find that IFRS increases total liabilities, decreases equity and more firms have earnings decrease than increases. The leverage ratio is higher under IFRS. Using two different models they find no evidence that IFRS earnings and book value are more value relevant than AGAAP earnings and book value. The study also find that the changes to accounting for share-based payment, intangibles, provisions and impairment components are value relevant but not consistent with the way the market perceives these components, but that goodwill accounting under IFRS improves associations with market value.

Daske, Hail, Leuz and Verdi (2008) find that firms adopting IFRS in the year of mandatory adoption experience large increases in market liquidity but mixed results for the cost of capital. Tsalavoutas (2009) in a paper titled, Adoption of IFRS by Greek listed companies: Financial Statement Effects, Level of Compliance and Value Relevance, examines issues relating to the mandatory adoption of IFRS by Greek listed companies. The study constructed a disclosure index containing all the disclosure items mandated by the IFRS. The study examines compliance with IFRS mandatory disclosure requirements and changes in the value relevance of accounting information before and immediately after IFRS mandatory implementation was examined. The study finds that Greek listed companies financial statements were affected significantly by the adoption of IFRS. The average level of compliance with IFRS mandatory disclosures approximates to 80%. The impact on net income and shareholder's equity, as a result of the transition to IFRS as well as audit firm size are significantly associated with the extent to which companies comply. The study finds no change in the value relevance of accounting information between 2004 and 2005. The study also finds that reconciliation adjustments are incrementally value relevant and levels of mandatory disclosures do have valuation effects. The study concludes with suggestions for further research on the methods for measuring compliance with IFRS mandatory disclosures.

Lantto and Sahlström (2009) investigate the impact of IFRS on financial ratios in Finland, by comparing ratios calculated under IFRS and Finnish GAAP for the same time period – the year 2004. They found that liquidity ratios decrease under IFRS, while leverage and profitability ratios increase. Profitability ratios increase by 9-19% and the price-earnings ratios decrease by 11%, gearing ratios increase by 2.9% while equity ratios decrease by 0.2%. Liquidity ratios decrease primarily due to additional current liabilities that result from lease accounting under IFRS (IAS 17). Leverage ratios increase as more liabilities are recognized under IFRS; these liabilities result from lease accounting (IAS 17), employee benefit obligations (IAS 19) and financial instruments (IAS 32 and 39). Profitability ratios increase because profit is higher under IFRS due primarily to business combinations (IFRS 3) and the combined effects of several other standards.

Li (2010) examines the effect of IFRS on the cost of equity in the European Union and found that mandatory adopters of IFRS experience significant reductions in the cost of capital in the years of mandatory adoption, but only in countries with strong legal enforcement. Stent, Bradbury and Hooks (2010) in a study titled, IFRS in New Zealand: Effects in Financial Statements and Ratios, examine the financial statement impacts of adopting New Zealand IFRS during 2005 through 2008. The study adopted a stratified random sample of 56 listed companies; 16 of which were early adopters and 40 of which waited until adoption of New Zealand IFRS became mandatory. The results show that 87% of firms are affected by New Zealand IFRS. The median and inter-quartile ranges indicate that for most firms the impact of New Zealand IFRS is small. However, the maximum and minimum values indicate the impact can be large for some entities. The impact has considerable effects on common financial ratios.

Iatridis (2010) investigates the impact of the implementation of IFRS on key financial measures of UK corporations and the volatility effects of IFRS adoption. The findings show that IFRS implementation has favourably affected the financial performance (e.g. profitability and growth potential) of corporations. The study also demonstrates that following the fair value orientation of IFRS the transition to IFRS appears to introduce volatility in income statement figures. Bruggemann, Daske, Homburg and Pope (2011) examine the impact of

IFRS adoption on cross border equity investments by individual investors. They use the open market segment of the Frankfurt Stock Exchange designed for German individual investors to trade foreign stocks. They use a sample of 4,869 firms from 31 countries. They find that stocks experience increase following IFRS adoption and conclude that the effect of IFRS adoption on the stewardship usefulness of financial reporting is an under-researched area.

Brochet, Jagolinzer and Riedl (2012) examine the effect of mandatory IFRS adoption on financial statement comparability. The study isolates the effects of changes in comparability by examining changes in information asymmetry for firms domiciled in UK. UK domestic standards that preceded IFRS adoption are considered very similar to IFRS. The study uses the UK as a setting to isolate changes to the information environment relating to IFRS adoption that more likely to reflect changes in comparability versus information quality. The study notes that abnormal returns to two proxies for private information (insider purchases and analyst recommendation upgrades) are reduced following IFRS adoption. Similar results are obtained for subsamples that further isolate the reduction in private information as attributable to increases in comparability: firms having low amounts of reconciling items between UK GAAP and IFRS and firms having ex ante high quality information environments. Together, the results are consistent with mandatory IFRS adoption leading to enhanced comparability.

Brochet, Jagolinzer and Riedl (2013) examines whether mandatory adoption of IFRS leads to capital market benefits through enhanced financial statement comparability. The study examines changes to information asymmetry for UK-domiciled firms to isolate changes to the information environment relating to IFRS adoption that more likely reflect changes in comparability versus information quality. The study finds that abnormal returns to insider purchases—used to proxy for private information - are reduced following IFRS adoption. Similar results obtain for subsamples that isolate firms that are least likely to have changes attributable to information quality: (a) firms identified as having the largest increases in comparability, or (b) firms identified as having *ex ante* high quality information environments, both using multiple proxies. Together, the results are consistent with mandatory IFRS adoption improving comparability and thus leading to capital market benefits by reducing insiders' ability to exploit private information

Blanchette, Racicot and Girard (2011) provide preliminary evidence of the impact on financial ratios caused by the transition to IFRS in Canada. They found return on assets and return on equity to improve with IFRS adoption in Canada. The effects of IFRS on financial ratios in the areas of liquidity, leverage, coverage and profitability are discussed and verified using a sample cohort of early adopters in Canada. The preliminary evidence reveals significantly higher volatility to most of the ratio sunder IFRS when compared to those derived under pre-changeover Canadian GAAP. While the means and medians of IFRS ratios differ from the means and medians of the same ratios under the pre-changeover Canadian GAAP, the differences are not statistically significant overall. However, important individual discrepancies are in some cases observed. The study concludes by way of recommendation that heightened attention be directed to the new feature – comprehensive income, which incorporates unrealized gains and losses that bypass the income statement. The suggested analytical tools best suited to mitigate the contributing effect include reliance on comprehensive - Return on Assets (ROA) and comprehensive - Return on Equity (ROE).

Punda (2011) relies heavily on Lantto and Sahlstrom (2009) and examine the effects of IFRS adoption on key financial ratios of UK listed firms. He reported a substantial change in the KPIs of these firms post IFRS adoption. All the three profitability ratios significantly increased: operating profit margin (OPM) increased by 10.8%, return on equity by 27% and return on investment by 11.4%. The study also shows that current ratio and price to earnings ratios have not shown such significant change, but still change by 4.2% and -2.9% respectively.

Tanko (2012) uses a multiple regression model to examine financial performance measures under the IFRS. The study defines the change in performance based on two parameters. First, change in accounting quality (earnings management and timely loss recognition). Second, the performance of the firms based on changes on identified financial ratios of the firms. The study tests the impact of adoption as it relates to profitability, growth, leverage, and liquidity performance. Multiple logit regression and t-test were used in the analysis. The study finds that variability of earnings has decreased which suggest that there was low variability in earnings in the post IFRS adoption period. Timely loss recognition is the measure for prevalence of large negative earnings where large negative results suggest that the loss recognition is not timely in the post adoption period. The study also finds large negative net income to be positive which signifies that IFRS firms recognize losses more frequently in the post adoption period than they do in the pre adoption period, the study conclude that accounting quality improves after the adoption of IFRS. The study finds that under IFRS. firms exhibit higher values on profitability measure, such as earnings per share (EPS). The study concludes by recommending comprehensive

implementation of IFRS and that SEC and external auditors should monitor and ensure strict compliance with the adoption and provisions of the standards.

Ahmed and Alam (2012) analyze the changes in accounting surplus (loss), equity and assets, and liabilities as a result of accounting policy changes from the Australian Accounting Standards (AAS) to the International Financial Reporting Standards (IFRS) in Australian local government entities. Using the reconciliation notes disclosed by 117 local government entities, evidence is provided on the effects of IFRS adoption by identifying the key items that of difference between IFRS and AASB. The results show some differences between two sets of accounts prepared under these different accounting standards. While the average surplus (loss) of local councils has decreased, their equities, assets and liabilities have increased, with no major significant changes in their overall financial position, except for liabilities. These results indicate the possible consequences of the adoption of IFRS by local government entities in other countries on performance indicators who have or are yet to implement these standards.

Hilliard (2013) examines the financial statement effects of firm attributes on the components of equity, the market reaction effects on key events in the adoption of IFRS and the cumulative earnings response coefficient effect in the context of IFRS adoption in Canada. Firm attributes were tested for association with the adjustment to retained earnings at the transition date when first adopting IFRS. Evidence from the analyses of the adjustment to retained earnings model revealed a statistically significant association between the adjustment to retained earnings and the firm attributes of volatility of income, internationality and firm industry. Market reaction was measured for two key events of IFRS adoption: early adoption announcement and the release of first quarter financial results under IFRS. A negative mean for Cumulative Average Return (CAR) resulted from tests of both events. However, only the negative mean CAR from market's reaction to the release of first quarter financial results under IFRS demonstrated statistical significance. The adjustment to retained earnings model used in the study developed a benchmark for tests of value relevance. In the test of value relevance, the benchmark or unexpected adjustment to retained earnings was tested against the actual adjustment to retained earnings for market reaction. The results from the tests of value relevance were not statistically significant. The study contributes to the literature by identifying firm factors: volatility of income, internationality and industry as firm factors associated with the adjustment to retained earnings upon adoption of IFRS. The study further gives evidence from the event study demonstrates that the market reacts negatively to the adoption of IFRS and suggests that the Canadian market may not perceive IFRS as an improvement in financial reporting or a reduction in information asymmetry.

Bala (2013) investigates the effects of the adoption of IFRS on the financial reports of Nigerian listed oil and gas entities. The study first investigates the impact of the adoption of IFRS on exploration and evaluation expenditures and expenditures associated with decommissioning of oil and gas installations. The study further investigates the reaction of the key performance indicators (KPIs) of Nigerian listed oil and gas firms in terms of liquidity, profitability and leverage and other industry specific performance measures on the adoption of the policy. The study employs a mixed method research where accounting numbers of listed oil and gas firms obtained from the published financial statements from 2009 to 2011 and prepared under NGAAP were compared with accounting numbers from 2012 to 2014 prepared under IFRS.

Dimitrios, *et al.* (2013) examine the effect of the implementation of IFRS on financial ratios of listed companies of Athens Exchange. The study places emphasis on the differences between Greek Accounting Standards (GAS) and IFRS and their impact on the calculation of financial ratios which are based on financial statements prepared in accordance with the first or the second accounting standard. The study was applied to two samples of companies. The first sample includes companies that have been listed in Athens Exchange for years and the second sample includes companies that have recently been listed in Athens Exchange. Considering the particular characteristics of each group of companies, the study examines the probability of quantitative differentiations in financial ratios due to the transition from the one accounting standard to the other. The results of the study show that both samples of companies, when not influenced by other factors, do not have significant differences in their behaviour.

A new report by the Certified General Accountants Association of Canada (CGAA, 2013) reveals that the adoption of IFRS has had a noticeable impact on the financial statements of Canadian listed companies. The source of the differences in financial reporting is linked to a broad range of accounting adjustments. The study examines 150 companies listed on the Toronto Stock Exchange (TSX), which mandatorily adopted IFRS in 2011 and compared the accounting figures and financial ratios computed under IFRS and pre-changeover Canadian CGAAP.

Although, the study explains that at the aggregate level, IFRS adoption does not significantly change the central values that describe the financial position and performance of Canadian companies, the findings show that differences between individual IFRS and CGAAP values can be significant. The analysis of individual differences between IFRS and CGAAP values show that assets and liabilities are higher in IFRS than in CGAAP. However, these differences are mostly offset in shareholders' equity. Sales and operating revenues are reduced under IFRS compared to CGAAP, but profit is higher and other comprehensive income (OCI) adjustments are predominantly negative (losses). The scale of differences observed in the balance sheet can be striking (e.g. total assets in IFRS are less than half of the total assets in CGAAP for the company that has the largest negative difference in the sample examined and more than double the total assets in CGAAP for the company with the largest positive difference).

Another result of the study is that the volatility of financial statement figures is mostly higher in IFRS than in CGAAP. This concerns especially the areas of consolidation (including strategic investments), financial instruments (including derivatives and hedges) and fair value for investment property. The study concludes with recommendations to financial analysts and other users of financial statements and recommends that according specific attention to trend analysis may be beneficial when comparing pre-adoption data under CGAAP with post-adoption data in IFRS, that users should be aware that differences in IFRS and CGAAP are particularly noticeable in certain sectors and that it is important to keep in mind that volatility of accounting figures in IFRS is generally higher than in CGAAP.

Blanchette, *et al.* (2013) argue that IFRS has become the new dominant set of accounting standards. However, the transition to the new regime may be fairly disruptive for users of financial statements. Comparability and trend analyses may be impaired as the differences between IFRS and local GAAP may impact figures presented in financial statements and lead to variances in financial ratios computed under the two regimes. The study compared accounting figures and financial ratios computed under IFRS and CGAAP. The differences observed in the accounting figures and ratios are grouped into 18 categories of accounting adjustments. Empirical tests were conducted to identify the main areas of differences and investigate specific effects of related to company's industry affiliation and auditor. The study concludes that at the aggregate level, IFRS adoption does not significantly change the central values that describe the financial position and performance of Canadian companies reported in financial statements.

Corbella, Florio and Rossignoli (2013) focus on IFRS transition with specific reference to the Italian context and explores three interconnected issues: a)identification of the changes in the evaluation criteria – from the Italian regulations and GAAP to IFRS – which actually impact on the financial statements presented by Italian companies in the year of transition; b) appreciation of the importance of such impacts, based on (1) how often each adjustment recurs; (2) whether they determine an increase or decrease of accounting figures and (3) how relevant are their effects on the main accounting figures, namely net earnings and net capital; c) discussion about the managerial discretion introduced by the most impacting evaluation criteria identified, in comparison with the Italian provisions and GAAP previously applied. The overall analysis demonstrates that IFRS introduction determined wide impacts on financial statements, affecting most assets and liabilities, but its impacts on accounting figures were less significant than could be expected. In terms of subjectivity, however, differences are very significant.

Bhargava and Shikha (2013) discuss the impact of IFRS on financial statements and some significant ratios using a case study. The consolidated financial statements as per GAAP were compared with the consolidated financial statements under IFRS. Some selected ratios were been analyzed to indicate the differences between two sets of statements. They find variations in total assets and liabilities because of the reclassification among equity and liabilities and also because of the difference in the concept of revenue recognition. The valuation and depreciation of property plant and equipment is also a big cause of difference.

Abdul-Baki, Uthman and Sanni (2014) examine the effect of IFRS adoption on the performance evaluation of a case firm using some financial ratios selected from four major categories of financial ratios. The study was conducted through comparison of the ratios that were computed from IFRS based financial statements and Nigerian GAAP based financial statements. A one sample Kolmogorov-Smirnov Test was conducted to test data normality. Mann-Whitney U Test was employed in testing whether significance difference exists between the pair of ratios when the normality test showed a non-normal distribution of the data set. The result of the Mann-Whitney U test showed that there is no significant difference between the pair of ratios at 5% level of significance. The study concludes that the disclosure of IFRS compliant set of financial statements was not attributable to higher performance evaluation, through ratios, of the case firm. Rather, such disclosure could have

been motivated by the capital needs theory or signaling theory.

Ibiamke, Adzor and Ateboh-Briggs (2014) examine the impact of International Financial Reporting Standards (IFRS) adoption by Nigerian listed firms on key financial ratios used by investors. The study employs an innovative design known as "same firm-year" research design to examine how IFRS adoption changes key financial ratios of Nigerian listed firms. A sample of 60 companies using a filter scale was used. Gray Index was used to find the impact of IFRS adoption on financial ratios while, Paired sample t test and Levene's F were used to test the statistical significance of the differences in mean and variances between ratios under IFRS and Nigerian Generally Accepted Accounting Principles (NGAAP) respectively. The main finding from the study is that IFRS adoption has caused a negative impact on the financial ratios of Nigerian listed firms, but the impact was not statistically significant. They recommend that analysts and other financial statement users should be mindful of the new features of financial statement when taking economic decisions during this period of transition to IFRS in Nigeria.

Dumont (2015) offers the following explanations on the impact of IFRS on financial statements:
(a) Inventory
Two inventory method standards normally used in the past were first-in, first-out (FIFO) and last-in, first-out (LIFO). However, LIFO is not allowed under IFRS, so firms that have used LIFO in the past under GAAP will have to change their inventory method to FIFO.
(b) Property, Plant and Equipment
Also known as the fixed assets of the firm are reported at their initial cost less accumulated depreciation. GAAP does not allow any upward adjustments of property, plant and equipment, whereas under IFRS they can. This can have a profound impact on a firm's reporting.
(c) Goodwill
An intangible asset, goodwill is treated similarly to property, plant and equipment. It is reported on the balance sheet at the initial cost less accumulated amortization. Any downward reevaluation will cause a loss on the income statement and if it is marked up, which is not allowed under GAAP and then a gain is recorded up to the initial cost amount. Any adjustment beyond that will be reported directly to equity.
(d) Construction contracts
Depending on the accounting method adopted, the revenue and profit for construction projects can be affected. Under GAAP if the outcome of a project cannot be estimated, then the completed contract method is required. However, under IFRS if the outcome of a project cannot be estimated, revenue is recognized only to the extent of contract costs and profit is only recognized at project completion.
(e) Cost of goods sold
Since LIFO is not allowed under IFRS, LIFO firms have to convert their inventory into FIFO terms in the footnotes of the financials. This difference is known as the LIFO reserve and is calculated between the cost of goods sold under LIFO and FIFO. The benefits in doing this, is an increase in the comparability of LIFO and FIFO firms. However, since everything is moving towards IFRS, FIFO is the standard moving forward. This has an effect on the financials of a firm. In particular, during periods of high inflation, a firm that uses LIFO will report higher cost of goods sold and lower inventory as compared to a firm that uses FIFO. Higher cost of goods sold results in lower profitability and lower profits results in lower income taxes. Lower profits will also results in lower equity for the firm, which affects retained earnings in a negative way. In contrast, in a low inflationary period, the effects mentioned are reversed.
(f) Operating expenses
IFRS does not differentiate between expenses and losses but GAAP does. With IFRS any losses that are due to a firm's main business are included in its operating expenses.
(g) Financial ratios
It is important to note that there are impacts on more than one financial ratio when converting GAAP to IFRS. Current and quick ratios (due to the difference in inventory methods), the interest coverage ratio (as EBIT can be affected by the difference in cost of goods sold) and return on assets (net income is affected by the cost of goods sold as well), among others.

## 3. Data and Methodology
Deposit money banks are appropriate for this study for several reasons. The sector, although relatively small, is highly developed with sophisticated participants and information exchange mechanisms. To construct our database of deposit money banks in Nigeria and the IFRS adoption effect on their financials, the paper starts with CBN's cenbank.org. The website lists 21 deposit money banks in Nigeria. Since the study is only interested in listed deposit money banks, banks that are not listed on the Nigerian Stock Exchange were excluded. The banks in the sample are as follows: Access Bank Plc, Diamond Bank Plc, Ecobank Nigeria Plc, Fidelity Bank Plc, First

Bank of Nigeria Plc, First City Monument Bank Plc, Guaranty Trust Bank Plc, Skye Bank Plc, Stanbic IBTC Bank, Sterling Bank, Union Bank, United Bank for Africa, Unity Bank, Wema Bank and Zenith Bank Plc. Data were collected from the banks annual reports spanning a period of 2004-2013. The study compares the financial performance numbers reported under the GAAP based financial numbers reported in the pre-adoption period, i.e. 2008, with the IFRS-restated financial numbers reported in 2008. The logistic regression that is employed uses a dummy variable as the dependent variable, which is dichotomous and takes two values, i.e. 1 for banks reporting IFRS-restated financial numbers in 2008 and 0 for (the same set of) banks reporting their financial performance measures under the GAAP in 2008. The following model was tested to determine the financial statement effects of IFRS adoption by DMBs in Nigeria:

$$RR_{i,t} = a_0 + a_1 Profitability_{i,t} + a_2 Growth_{i,t} + a_3 Leverage_{i,t} + a_4 Liquidity_{i,t} + a_5 Size_{i,t} + a_6 Investment_{i,t} + a_7 Age_{i,t} + e_{i,t} \quad (1)$$

Where:

$RR_{i,t}$ is a dummy variable representing the regulatory regime, 1 for financials reported under IFRS and 0 for financials reported under NGAAP. $Profitability_{i,t}$, $Growth_{i,t}$, $Leverage_{i,t}$, $Liquidity_{i,t}$, $Size_{i,t}$ and $Investment_{i,t}$ and $Age_{i,t}$ are proxies used to control for DMBs profitability, growth, leverage, liquidity, size and investment, respectively, $e_{i,t}$ is the error term, and $i$ and $t$ are bank and year subscripts respectively.

These proxies are explained as follows:
(a)     Profitability is the state or <u>condition</u> of yielding a <u>financial</u> <u>profit</u> or <u>gain</u>. This variable is measured using the following proxies:
(i)     $GIM_{i,t}$ is Gross Interest Margin or gross earnings of bank i at year t
(ii)    $NIM_{i,t}$ is Net Operating Income Margin of bank i at year t
(iii)   $EPS_{i,t}$ is Actual Earnings Per Share of bank i at year t
(iv)    $DPS_{i,t}$ is Dividend Per Share of bank i at year t
(v)     $ROA_{i,t}$ is Return on Asset of bank i at year t
(b)     Growth defined as change in gross earnings.
(i)     $log_{10}GE_{i,t}$ is natural logarithm of gross earnings of bank i at year t.
(c)     Leverage (gearing) is measured by the following proxies:
(i)     $LLTA_{i,t}$ is long-term liabilities to total asset of bank i at year t
(ii)    $TLSF_{i,t}$ is total liabilities to shareholders funds of bank i at year t
(iii)   $INTCOV_{i,t}$ ratio is calculated by dividing a firm's earnings before interest and taxes of one period by the company's interest expenses of the same period.
(d)     Liquidity is measured by the following proxies:
(i)     $CFPS_{i,t}$ is cash flow per share of bank i at year t
(ii)    $QR_{i,t}$ is quick ratio measured by dividing the sum of cash in hand, balances with CBN, treasury bills and due from other banks by current liabilities
(e)     Size is measured as natural log of total assets (Gurbuz, $et\ al$., 2010):
(i)     $Size_{i,t}$ is logTA measured by logarithm of total asset
(ii)    $ANE_{i,t}$ is logANE measured by logarithm of Average Number of Employees
(f)     $INV_{i,t}$ is investment and is described as the purchase of a financial product or other item of value with an expectation of favourable future returns.
(g)     Age refers to ageing, the effect of time on a person, or entity. In this study, $AGE_{i,t}$ is the age of bank i and is calculated by removing the bank year of establishment from 2015.

The regression model shown in equation 1 is expanded to accommodate both the explanatory and control variables as described in the preceding paragraphs as follows:

$$RR_{i,t} = a_0 + a_1 GIM_{i,t} + a_2 NIM_{i,t} + a_3 EPS_{i,t} + a_4 DPS_{i,t} + a_5 ROA_{i,t} + a_6 LOGGE_{i,t} + a_7 LLTA_{i,t} + a_8 TLSF_{i,t} + a_9 INTCOV_{i,t} + a_{10} CFPS_{i,t} + a_{11} QR_{i,t} + a_{12} logTA_{i,t} + a_{13} logANE_{i,t}\ a_{14} INV_{i,t} + a_{15} AGE_{i,t} + e_{it} \quad \ldots\ldots\ldots\ldots\ldots\ldots 2$$

The regression model shown in equation 2 is estimated using pooled (panel) data (pre-adoption, 2004-2008) and (post-adoption, 2009-2013) and fitted with various measures of financials as defined in the equation. The empirical analysis has used the binary logistic regression analysis. The logistic regression is useful in analyzing categorical data, where the dependent variable is dichotomous and takes only two values, i.e. 0 and 1. The parameters of the logistic regression are estimated based on the maximum likelihood method, while the hypothesis testing is based on the Wald statistic.

## 4. Results and Discussions
This section presents the descriptive statistics of summarized variables over the entire panel of aggregate financial attributes pre-adoption of IFRS. Results and interpretations of regression and correlation for aggregate

financials' reaction to IFRS adoption are shown below. The descriptive statistics for the variables – GIM (gross interest margin), NIM (net interest margin), EPS (earnings per share), DPS (dividend per share), ROA (return on asset), LOGGE (natural logarithm of gross earnings as a measure of growth), LLTA (long-term liabilities to total assets), TLSF (total liabilities to shareholders' fund), INTCOV (interest coverage), CFPS (cash flow per share), QR (quick or acid test ratio), LOGTA (natural logarithm of total assets), LOGANE (natural logarithm of average number of employees), LOGINV (natural logarithm of investment) and AGE (age) are given below.

Table 1 Summary of Descriptive Statistics of Financials' Pre-IFRS Adoption

| Proxies | N | Minimum | Maximum | Mean | Std. Deviation | Skewness | | Kurtosis | |
|---|---|---|---|---|---|---|---|---|---|
| | Statistic | Statistic | Statistic | Statistic | Statistic | Statistic | Std. Error | Statistic | Std. Error |
| GIM | 75 | .06 | .23 | .1343 | .04014 | .656 | .277 | -.466 | .548 |
| NIM | 75 | -.26 | .12 | .0488 | .06324 | -3.102 | .277 | 13.788 | .548 |
| EPS | 75 | -88.56 | 73.52 | 2.4329 | 15.08538 | -1.239 | .277 | 24.246 | .548 |
| DPS | 75 | .00 | 3.11 | .3221 | .58070 | 2.469 | .277 | 7.508 | .548 |
| ROA | 75 | -.30 | .04 | -.0043 | .08436 | -3.043 | .277 | 7.856 | .548 |
| LOGGE | 75 | 3.26 | 7.87 | 4.8104 | .92675 | 2.023 | .277 | 4.513 | .548 |
| LLTA | 75 | .00 | .42 | .1659 | .08388 | .154 | .277 | -.047 | .548 |
| TLSF | 75 | 1.53 | 17.97 | 6.4307 | 3.63321 | 1.271 | .277 | 1.756 | .548 |
| INTCOV | 75 | 1.05 | 1.92 | 1.3743 | .28989 | .621 | .277 | -.750 | .548 |
| CFPS | 75 | 1.98 | 184.84 | 42.8473 | 44.37515 | 1.404 | .277 | 1.392 | .548 |
| QR | 75 | .95 | 1.54 | 1.1857 | .16868 | 1.220 | .277 | .323 | .548 |
| LOGTA | 75 | 4.33 | 6.25 | 5.4700 | .43158 | -.548 | .277 | .377 | .548 |
| LOGANE | 75 | 2.89 | 4.14 | 3.2827 | .27974 | 1.294 | .277 | 1.746 | .548 |
| LOGINV | 75 | 1.88 | 7.66 | 4.5949 | 1.08315 | .608 | .277 | .937 | .548 |
| AGE | 75 | 12.00 | 111.00 | 27.9333 | 23.76253 | 2.712 | .277 | 6.886 | .548 |
| Valid N (listwise) | 75 | | | | | | | | |

Source: IBM SPSS Statistics 22 Output 2015

Table 1 presents detail descriptive statistics of 15 variables of the entire panel of 15 DMBs over 5-year pre-adoption periods (2004-2008). The average GIM is 13.4% with standard deviation of approximately 4.0%. This means that the gross interest margin can deviate from mean to both sides by 4.0%. The highest gross interest margin recorded is 23% and the minimum gross interest margin is 6%. Similarly, the average NIM is 4.9% with standard deviation of approximately 6.3%. This means that the net interest margin can deviate from mean to both sides by 6.3%. The highest net interest margin recorded is 12% and the minimum net loss interest margin is 26%. Furthermore, the average EPS is ₦2.43 with standard deviation of approximately ₦15.10. This means that the earnings per share can deviate from mean to both sides by ₦15.10. The highest EPS recorded is ₦73.5 and the minimum EPS recorded is ₦88.56 (-ve). In the same vein, table 1 shows that the average DPS is 32k with standard deviation of approximately 58k. This means that the dividend per share can deviate from mean to both sides by 58k. The highest DPS recorded is ₦3.11 and the minimum DPS recorded is 0k. The minimum is 0 due to the fact that some DMBs DPS were not published during the period.

Also, table 1 shows that the mean ROA is -0.43% with standard deviation of approximately 8.4%. This means that the return on asset can deviate from mean to both sides by 8.4%. The highest ROA recorded is 4% and the minimum ROA recorded is (30)%. Similarly, the overall mean of LOGGE is ₦4.81 with standard deviation of approximately 93k. This means that the LOGGE can deviate from mean to both sides by 93k. The highest LOGGE recorded is ₦7.87 and the minimum LOGGE recorded is ₦3.26. Table 1 shows that the mean LLTA is 16.6% with standard deviation of approximately 8.4%. This means that the long-term liabilities to total assets can deviate from mean to both sides by 8.4%. The highest LLTA recorded is 42% and the minimum LLTA recorded is 0%. The minimum is 0 due to the fact that some DMBs do not have long-term liabilities during the periods under study. Also, the mean TLSF is 6.43 times with standard deviation of approximately 3.63 times. This is typical of DMBs where total liabilities far outweigh shareholders' funds. This means that the total liabilities to shareholders funds can deviate from mean to both sides by 3.63 times. The highest TLSF recorded is 18 times and the minimum TLSF recorded is 1.53 times.

In addition, the mean INTCOV is 1.4 times with standard deviation of approximately 0.3 times. This means that the interest coverage ratio can deviate from mean to both sides by 0.3 times. The highest INTCOV recorded is 2 times and the minimum INTCOV recorded is 1.1 times. Table 4.2a also shows that the mean CFPS is ₦43 with standard deviation of approximately ₦44. This means that the cash flow per share can deviate from mean to both sides by ₦44. The highest CFPS recorded during the periods under study is approximately ₦185 and the minimum CFPS recorded is ₦2. Also, the mean QR (quick or acid test ratio) is 1.2 times with standard deviation

of approximately 0.17 times. This means that the quick or acid test ratio can deviate from mean to both sides by 0.17 times. The highest QR recorded is 1.54 times and the minimum QR recorded is 0.95 times.

The overall mean of LOGTA is ₦5.5 with standard deviation of approximately 43k. This means that the LOGTA can deviate from mean to both sides by 43k. The highest LOGTA recorded is ₦6.3 and the minimum LOGTA recorded is ₦4.3. Another proxy for measuring size is the average number of employees logged by natural logarithm (LOGANE). As shown in table 4.2a, the mean of LOGANE is 3.3 with standard deviation of approximately 0.28. This means that the LOGANE can deviate from mean to both sides by 0.28. The highest LOGANE recorded is 4.14 and the minimum LOGANE recorded is 2.9. Similarly, the overall mean of LOGINV is ₦4.6 with standard deviation of approximately ₦1.1. This means that the LOGINV can deviate from mean to both sides by ₦1.1. The highest LOGINV recorded is ₦7.7 and the minimum LOGGE recorded is ₦1.9. Finally, the overall mean of AGE is approximately 28 years with standard deviation of approximately 24 years. This suggests that the AGE can deviate from the mean to both sides by 24 years. The highest AGE recorded is 111 years and the minimum AGE recorded during the periods under study is 12 years.

Table 2 Result of Descriptive Statistics of Financials' Post-Adoption of IFRS

| | N | Minimum | Maximum | Mean | Std. Deviation | Skewness | | Kurtosis | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | Statistic | Statistic | Statistic | Statistic | Statistic | Statistic | Std. Error | Statistic | Std. Error |
| GIM | 75 | .05 | .24 | .1443 | .04586 | .426 | .277 | -.586 | .548 |
| NIM | 75 | -.29 | .13 | .0533 | .06960 | -3.215 | .277 | 14.484 | .548 |
| EPS | 75 | -98.30 | 81.61 | 2.7196 | 16.74262 | -1.243 | .277 | 24.266 | .548 |
| DPS | 75 | .00 | 3.42 | .3608 | .64008 | 2.430 | .277 | 7.326 | .548 |
| ROA | 75 | -.34 | .04 | -.0055 | .09592 | -3.046 | .277 | 7.834 | .548 |
| LOGGE | 75 | 3.36 | 8.11 | 4.9540 | .95417 | 2.023 | .277 | 4.513 | .548 |
| LLTA | 75 | .00 | .45 | .1771 | .09022 | .148 | .277 | -.074 | .548 |
| TLSF | 75 | 1.61 | 18.87 | 6.7515 | 3.81519 | 1.272 | .277 | 1.759 | .548 |
| INTCOV | 75 | 1.16 | 2.12 | 1.5140 | .31761 | .643 | .277 | -.706 | .548 |
| CFPS | 75 | 1.78 | 166.35 | 38.5620 | 39.93777 | 1.404 | .277 | 1.392 | .548 |
| QR | 75 | .88 | 1.42 | 1.0905 | .15736 | 1.204 | .277 | .283 | .548 |
| LOGTA | 75 | 4.76 | 6.88 | 6.0161 | .47541 | -.546 | .277 | .385 | .548 |
| LOGANE | 75 | 3.21 | 4.60 | 3.6441 | .31111 | 1.291 | .277 | 1.720 | .548 |
| LOGINV | 75 | 2.06 | 8.42 | 5.0536 | 1.19141 | .606 | .277 | .941 | .548 |
| AGE | 75 | 18.00 | 119.00 | 35.3333 | 24.56835 | 2.485 | .277 | 5.928 | .548 |
| Valid N (listwise) | 75 | | | | | | | | |

Source: IBM SPSS Statistics 22 Output 2015

Table 2 presents the detail descriptive statistics of the 15 variables of the entire panel of 15 DMBs over 5-year post-adoption periods (2009-2013). The overall mean GIM is 14.4% with standard deviation of approximately 4.6%. This means that the gross interest margin can deviate from mean to both sides by 4.6%. The highest gross interest margin recorded is 24% and the minimum gross interest margin is 5%. Similarly, the average NIM is 5.3% with standard deviation of approximately 7%. This means that the net interest margin can deviate from mean to both sides by 7%. The highest net interest margin recorded is 13% and the minimum net interest margin (loss) is 29%.

Furthermore, the average EPS is ₦2.72 with standard deviation of approximately ₦17. This means that the earnings per share can deviate from mean to both sides by ₦17. The highest EPS recorded is ₦82 and the minimum EPS recorded is ₦98 (-ve). In the same vein, table 2 shows that the overall mean DPS is 36k with standard deviation of approximately 64k. This means that the dividend per share can deviate from mean to both sides by 64k. The highest DPS recorded is ₦3.42 and the minimum DPS recorded is 0k. The minimum is 0 due to the fact that some DMBs DPS were not published during the period. Table 2 also shows that the average ROA is -0.55% with standard deviation of approximately 9.6%. This means that the return on asset can deviate from mean to both sides by 9.6%. The highest ROA recorded is 4% and the minimum ROA recorded is (34)%. Similarly, the overall mean of LOGGE is ₦4.95 with standard deviation of approximately 95k. This means that the LOGGE can deviate from mean to both sides by 95k. The highest LOGGE recorded is ₦8.11 and the minimum LOGGE recorded is ₦3.36.

Furthermore, table 2 shows that the mean LLTA is 18% with standard deviation of approximately 9%. This

means that the long-term liabilities to total assets can deviate from mean to both sides by 9%. The highest LLTA recorded is 45% and the minimum LLTA recorded is 0%. The minimum is 0 due to the fact that some DMBs do not have long-term liabilities during the periods (2009-2013) under study. The mean TLSF is 6.75 times with standard deviation of approximately 3.8 times. This is typical of DMBs where total liabilities far outweigh shareholders' funds. This means that the total liabilities to shareholders funds can deviate from mean to both sides by 3.8 times. The highest TLSF recorded is 19 times and the minimum TLSF recorded is 1.6 times.

Also, the mean INTCOV is 1.5 times with standard deviation of approximately 0.32 times. This means that the interest coverage ratio can deviate from mean to both sides by 0.32 times. The highest INTCOV recorded is 2.12 times and the minimum INTCOV recorded is 1.16 times. The table also shows that the mean CFPS is ₦38.56 with standard deviation of approximately ₦40. This means that the cash flow per share can deviate from mean to both sides by ₦40. The highest CFPS recorded during the periods under study is approximately ₦166.35 and the minimum CFPS recorded is ₦1.8. Also, the mean QR (quick or acid test ratio) is 1.1 times with standard deviation of approximately 0.16 times. This means that the quick or acid test ratio can deviate from mean to both sides by 0.16 times. The highest QR recorded is 1.4 times and the minimum QR recorded is 0.9 times.

The overall mean of LOGTA is ₦6 with standard deviation of approximately 47k. This means that the LOGTA can deviate from mean to both sides by 47k. The highest LOGTA recorded is ₦6.9 and the minimum LOGTA recorded is ₦4.8. Another proxy for measuring size is the average number of employees logged by natural logarithm (LOGANE). As shown in table 2, the mean of LOGANE is 3.6 with standard deviation of approximately 0.31. This means that the LOGANE can deviate from mean to both sides by 0.31. The highest LOGANE recorded is 4.6 and the minimum LOGANE recorded is 3.2. Similarly, the overall mean of LOGINV is ₦5.1 with standard deviation of approximately ₦1.20. This means that the LOGINV can deviate from mean to both sides by ₦1.20. The highest LOGINV recorded is ₦8.4 and the minimum LOGGE recorded is ₦2.1. Finally, the overall mean of AGE is approximately 35 years with standard deviation of approximately 25years. This suggests that the AGE can deviate from the mean to both sides by 25 years. The highest AGE recorded is 119 years and the minimum AGE recorded during the periods under study is 18 years. Table 3 presents a comparative summary of descriptive statistics (minimum, maximum, mean and standard deviation) of both pre-adoption and post-adoption of IFRS.

Table 3 Summary of Descriptive Statistics of Financials Pre- and Post-IFRS Adoption

| PROXIES | N | MIN PRE | MIN POST | MAX PRE | MAX POST | MEAN PRE | MEAN POST | STD PRE | STD POST |
|---|---|---|---|---|---|---|---|---|---|
| GIM (%) | 75 | 6 | 5 | 23 | 24 | 13 | 14 | 4 | 4.5 |
| NIM (%) | 75 | -26 | -29 | 12 | 13 | 4.9 | 5.3 | 6.3 | 6.96 |
| EPS (₦) | 75 | -88.6 | -98.3 | 73.5 | 81.6 | 2.43 | 2.72 | 15.1 | 16.74 |
| DPS (₦) | 75 | 0.0 | 0.0 | 3.11 | 3.42 | 0.32 | 0.36 | 0.58 | 0.64 |
| ROA (%) | 75 | -0.30 | -0.34 | 0.04 | 0.04 | -0.0043 | -0.0055 | 0.08 | 0.09 |
| LOGGE | 75 | 3.26 | 3.36 | 7.87 | 8.11 | 4.81 | 4.95 | 0.93 | 0.954 |
| LLTA | 75 | 0 | 0.0 | 0.42 | 0.45 | 0.166 | 0.177 | 0.08 | 0.09 |
| TLSF | 75 | 1.53 | 1.61 | 17.97 | 18.87 | 6.43 | 6.75 | 3.63 | 3.81 |
| INTCOV | 75 | 1.05 | 1.16 | 1.92 | 2.12 | 1.37 | 1.51 | 0.29 | 0.32 |
| CFPS | 75 | 1.98 | 1.78 | 184.8 | 166.4 | 42.8 | 38.56 | 44.3 | 39.93 |
| QR | 75 | 0.95 | 0.88 | 1.54 | 1.42 | 1.18 | 1.09 | 0.17 | 0.157 |
| LOGTA | 75 | 4.33 | 4.76 | 6.25 | 6.88 | 5.47 | 6.02 | 0.43 | 0.475 |
| LOGANE | 75 | 2.89 | 3.21 | 4.14 | 4.6 | 3.28 | 3.64 | 0.28 | 0.311 |
| LOGINV | 75 | 1.88 | 2.06 | 7.66 | 8.42 | 4.59 | 5.05 | 1.08 | 1.20 |
| AGE (yrs) | 75 | 12 | 18 | 111 | 119 | 28 | 35 | 24 | 25 |

Source: Extracts from Tables 1 and 2

Table 3 provides summary of the descriptive statistics of pre- and post-IFRS adoption. This allows the study to carry out paired-samples t-test on the mean values of pre- and post-IFRS adoption financials. The output of the t-test is shown below:

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Table 4 Paired-Samples T-Test Results of Model 2

| | | Paired Differences | | | | | | |
| | | | | | 95% Confidence Interval of the Difference | | | | Sig. (2-tailed) |
| | | Mean | Std. Deviation | Std. Error Mean | Lower | Upper | t | df | |
| Pair 1 | PRE - POST | -.42532 | 2.17622 | .56190 | -1.63047 | .77983 | -.757 | 14 | .462 |

Source: IBM SPSS Statistics 22 Output 2015 based on Data in Table 3

To determine the overall significance of model 2, table 4 shows that the probability value is 0.462. Since the value is greater than 0.05, the study concludes that there is no significant difference between pre- and post-IFRS adoption financials. However, there is increase in the mean values from 7.92 to 8.34 and standard deviation values from 11.96 to 12.1 over the period. The next level of analysis is to calculate the Eta squared, which indicates the magnitude of the intervention's effect. From table 4, Eta squared is calculated as follows:

$$\frac{(-0.757)^2}{(-0.757)^2 + 15 - 1} = 0.04$$

From the result, it shows that there is small effect of adoption of IFRS on the financials of DMBs in Nigeria. The next level of analysis is to compare the t table value (1.771) with the t calculated value (-0.757). From t-distribution table, degree of freedom is 13 (n – 2) at 5% level of significance (two-tail test) yields pr (t > 1.771). The decision rule is that reject the null hypothesis if the t-calculated value is > the t-table value at 5% level of significance, accept the null hypothesis if the t-calculated value is < the t-table value at 5% level of significance. Since in this case, the t-calculated value is < the t-table value at 5% level of significance, the null hypothesis is hereby accepted. Further to the above t-test analyses, the study also uses the Mann-Whitney U Test to test for statistical significance of the effect of IFRS on the 15 variables representing financial statements pre and post-adoption of IFRS by DMBs in Nigeria. Table 5 shows the results from the test for statistical significance.

Table 5 Result of Mann-Whitney U Test for Model 2

### Hypothesis Test Summary

| | Null Hypothesis | Test | Sig. | Decision |
| --- | --- | --- | --- | --- |
| 1 | The distribution of IFRS is the same across categories of GROUP. | Independent-Samples Mann-Whitney U Test | .775[1] | Retain the null hypothesis. |

Asymptotic significances are displayed. The significance level is .05.

[1]Exact significance is displayed for this test.

Source: IBM SPSS Statistics 22 Output 2015
The obtained value is statistically significant if it is equal to or smaller than the value in the table. In this case, the obtained value of 0.775 is less than the table value of 70. Thus, calculated *U* value is statistically significant. Similarly, since the calculated *U* value of 0.775 is greater than 0.05, the decision rule is to accept the null hypothesis. The next level of analysis is to carry out empirical analysis of model 2 using the binary logistic regression analysis. The binary logistic regression analysis is useful in analysing categorical data, where the dependent variable is dichotomous and takes only two values, i.e. 0 and 1. The parameters of the binary logistic regression are estimated based on the maximum likelihood method, while the hypothesis testing is based on the Wald statistic.

Table 6 Model Summary and Hosmer and Lemeshow Test Results

| Step | -2 Log likelihood | Cox & Snell R Square | Nagelkerke R Square |
|---|---|---|---|
| 1 | 34.703[a] | .685 | .913 |

a. Estimation terminated at iteration number 10 because parameter estimates changed by less than .001.

Source: IBM SPSS Statistics 22 Output 2015

Table 6 shows that the Cox & Snell R Square ($R^2$) is 0.685 while that of Nagelkerke R Square ($R^2$) 0.913. Similarly, the table shows a $chi^2$ of 2.887 and probability value of 0.941. Since the probability value is greater than 0.05, the study concludes that there is no statistical significant difference between pre- and post-IFRS adoption.

Table 7 Result of Binary Logistic Regression Analysis

| | | B | S.E. | Wald | df | Sig. | Exp(B) |
|---|---|---|---|---|---|---|---|
| Step 1[a] | GIM | 43.996 | 17.878 | 6.056 | 1 | .014 | 1279585725984 |
| | NIM | -20.115 | 10.907 | 3.401 | 1 | .065 | .000 |
| | EPS | .006 | .022 | .076 | 1 | .782 | 1.006 |
| | DPS | -1.100 | 1.499 | .538 | 1 | .463 | .333 |
| | ROA | 13.431 | 8.592 | 2.443 | 1 | .118 | 680622.989 |
| | LOGGE | -1.325 | .998 | 1.763 | 1 | .184 | .266 |
| | LLTA | 19.544 | 8.839 | 4.889 | 1 | .027 | 307456096.459 |
| | TLSF | -.255 | .160 | 2.557 | 1 | .110 | .775 |
| | INTCOV | 12.894 | 4.404 | 8.570 | 1 | .003 | 397955.720 |
| | CFPS | -.126 | .046 | 7.305 | 1 | .007 | .882 |
| | QR | -8.110 | 4.207 | 3.716 | 1 | .054 | .000 |
| | LOGTA | 6.778 | 2.346 | 8.348 | 1 | .004 | 878.143 |
| | LOGANE | 21.169 | 7.159 | 8.742 | 1 | .003 | 1560857358.473 |
| | LOGINV | .697 | .850 | .674 | 1 | .412 | 2.008 |
| | AGE | .040 | .028 | 2.019 | 1 | .155 | 1.041 |
| | Constant | -121.166 | 40.314 | 9.033 | 1 | .003 | .000 |

a. Variable(s) entered on step 1: GIM, NIM, EPS, DPS, ROA, LOGGE, LLTA, TLSF, INTCOV, CFPS, QR, LOGTA, LOGANE, LOGINV, AGE.

Source: IBM SPSS Statistics 22 Output 2015

All the explanatory variables were entered/removed from the binary logistic regression using a step-wise procedure with a p-value of 0.05 to enter and a p-value of 0.10 to remove. The Wald statistic was used to test the null hypothesis that each coefficient is zero. Table 9 compares the pre-IFRS based financial numbers reported during 2004-2008 and the post-IFRS financial numbers reported during 2009-2013. The results provide evidence that IFRS adoption exhibits a favourable impact on the financial measures of DMBs in Nigeria. The adoption of IFRS does not adversely affect DMBs profitability. Under IFRS, DMBs exhibit higher values on a number of profitability measures, such as gross interest margin (GIM), net interest margin (NIM) and earnings per share (EPS), compared to the NGAAP regime. The higher profitability that is reported under IFRS enables DMBs to overcome the financial crisis of 2008 as shown by the positive coefficient of return on assets (ROA). Whether, the higher profitability observed under IFRSs is volatile or not, following the fair value orientation of IFRS, is an issue that will be studied further below. The fair value orientation of IFRS has led to a higher LOGTA under IFRS. The transformation of DMBs accounts from NGAAP-based into IFRS-based together with the international dimension and use of IFRS as a widely accepted financial reporting language should reinforce DMBs' growth prospects.

Table 9 shows that GIM, LLTA, INTCOV, CFPS, LOGTA and LOGANE are all statistically significant at 5% level. It also shows that under IFRS, DMBs display higher leverage measures, i.e. long-term liabilities to total assets (LLTA), total liabilities to shareholders' funds (TLSF) and interest cover (INTCOV). The higher quality of IFRS financial reporting would enhance the credibility of DMBs financial statements, and would in turn provide investors and lenders with more certainty and information about the ability of DMBs to timely meet their financial obligations, leading thus to better investment and borrowing terms. In addition, the higher leverage measures and financial obligations that are reported for the IFRS era, table 9 shows that DMBs exhibit lower liquidity, as shown by the negative coefficient of cash flow per share (CFPS) and dividend per share (DPS).

## 5. Conclusions and Recommendations

IFRS adoption has positively impact the overall financial performance and position of banks. Under IFRS, important financial performance figures, such as profitability and growth, appear to be higher. Given the fair value perspective of IFRS, its adoption is likely to introduce volatility in income statement and statement of financial position figures. The paper has shown the overall effect of mandatory IFRS adoption on the financial measures of banks in Nigeria. Future research may identify the specific provisions of IFRS that are responsible for the positive impact on financial performance measures. Such detailed knowledge is useful to standard setters who may wish to improve existing accounting standards. Further research should extend the sample size and the time horizon of the study in order to add to the findings reported here.

## References

Aharony, J., Barniv, R. and Falk, H. (2010). The Impact of Mandatory IFRS Adoption on Equity Valuation of Accounting Numbers for Security Investors in the EU. *European Accounting Review*, 19(3), 535-78.

Ahmed, A., Takeda, C. and Thomas, S. (1999). Bank Loan Loss Provisions: A Re-examination of Capital Management, Earnings Management and Signalling Effects. *Journal of Accounting and Economics*, 28(1), 1-25.

Alexander, D. and Archer, S. (2001). *European Accounting Guide*, Harcourt Brace, San Diego, CA.

Ali, A. and Hwang, L. (2000). Country-specific Factors Related to Financial Reporting and the Value Relevance of Accounting Data. *Journal of Accounting Research*, 38(1), 1-21.

Andrews, B. (2005). Standards Deviation. *Business Review Weekly*, 17 February, 86.

Ashbaugh, H. (2001). Non-US Firms' Accounting Standards Choice. *Journal of Accounting and Public Policy*, 20(2), 129-153.

Ashbaugh, H. and Pincus, M. (2001). Domestic Accounting Standards, International Accounting Standards and the Predictability of Earnings. *Journal of Accounting Research*, 39(3), 417-434.

Ayres, F. (1986). Characteristics of Firms Electing Early Adoption of SFAS 52. *Journal of Accounting and Economics*, 8(2), 143-158.

Ball, R., Kothari, S. P. and Robin, A. (2000). The Effect of International Institutional Factors on Properties of Accounting Earnings. *Journal of Accounting and Economics*, 29(1),1-51.

Ball, R., Robin, A. and Wu, J. (2003). Incentives versus Standards: Properties of Accounting Income in Four East Asian Countries. *Journal of Accounting and Economics*, 36, 235-270.

Barth, M., Landsman, W. and Lang, M. (2005). International Accounting Standards and Accounting Quality. *Working paper*, Stanford University and University of North Carolina.

Beuselinck, C. (2010). *Essays on Financial Reporting Quality, Earning Management, and Corporate Disclosure*. University of Ghent, Ghent, Belgium.

Biddle, G. and Saudagaran, S. (1989). The Effects of Financial Disclosure Levels on Firms' Choices Among Alternative Foreign Stock Exchange Listings. *Journal of International Financial Management and Accounting*, 1, 55-87.

Botosan, C. and Plumlee, M. (2002). A Re-examination of Disclosure Level and the Expected Cost of Equity Capital. *Journal of Accounting Research*, 40, 21-40.

Brüggemann, U., Hitz, J. and Sellhorn, T. (2011). Intended and Unintended Consequences of Mandatory IFRS Adoption: Extant Evidence and Suggestions for Future Research. *Working paper*, Lancaster University.

Bushman, R. and Smith, A. (2001). Financial Accounting Information and Corporate Governance, *Journal of Accounting and Economics*, 32, 237-334.

Byard, D., Li, Y. and Yu, Y. (2011). The Effect of Mandatory IFRS Adoption on Financial Analysts' Information Environment. *Journal of Accounting Research*, 49(1), 69-96.

Capkun, V., Collins, D. W. and Jeanjean, T. (2011). Does Adoption of IAS/IFRS Deter Earnings Management? *Working paper*, HEC Paris, University of Iowa and ESSEC Business School.

Cascino, S. and Gassen, J. (2010). Mandatory IFRS Adoption and Accounting Comparability, *Working paper*, London School of Economics and Humboldt University of Berlin.

Chung, R., Firth, M. and Kim, J. (2002). Institutional Monitoring and Opportunistic Earnings Management. *Journal of Corporate Finance*, 8(1), 29-48.

Christensen, H. B., Lee, E. and Walker, M. (2007). Incentives or Standards: What Determine Accounting Quality Changes around IFRS Adoption? *Working paper*, Manchester Business School.

Daske, H, Hail, L, Leuz, C. and Verdi, R. (2008). Adopting a Label. Heterogeneity in the Economic Consequences of IFRS Adoptions, *Unpublished presentation*, AAA conference, Anaheim.

DeFond, M., Hu, X. S., Hung, M. Y. and Li, S. Q. (2011). The Impact of Mandatory IFRS Adoption on Foreign Mutual Fund Ownership: The Role of Comparability. *Journal of Accounting and Economics*, 51, 240-258.

Dyck, A. and Zingales, L. (2004). Private Benefits of Control: An International Comparison. *Journal of Finance*, 59(2), 537-600.

El-Gazzar, S., Finn, P. and Jacob, R. (1999). An Empirical Investigation of Multinational Firms' Compliance with International Accounting Standards. *The International Journal of Accounting*, 34(2), 239-248.

Fiechter, P. (2009). Application of the Fair Value Option under IAS 39: Effects on the Volatility of Bank Earnings. *Working Paper*, University of Zürich.

Fowokan, T. (2012). IFRS Adoption in Nigeria -Tax Implications, *Paper presentation*, CITN Seminar on IFRS Adoption in Nigeria.

Gebhardt, G. and Novotny-Farkas, Z. (2010). The Effects of IFRS Adoption on the Financial Reporting Quality of European Banks, *Marie Curie Research Training Network*

Goh, B. W., Ng, J. and Young, K. O. (2009). Market Pricing of Banks´ Fair Value Assets reported under SFAS 157 during the 2008 Economic Crisis. *Working Paper*, Singapore Management University.

Goodwin, J. and Ahmed, K. (2006). The Impact of International Financial Reporting Standards: Does Size Matter? *Managerial Auditing Journal*, 21(5), 460-475.

Guidry, F., Leone, A. J. and Rock, S. (1999). Earnings-based Bonus Plans and Earnings Management by Business Managers. *Journal of Accounting & Economics*, 26, 113-142.

Harris, M. and Muller, K. (1999). The Market Valuation of IAS versus U.S. GAAP Accounting Measures Using Form 20-F Reconciliations. *Journal of Accounting and Economics*, 26, 285-312.

Healy, P. and Palepu, K. (2001). Information Asymmetry, Corporate Disclosure, and the Capital Markets: A Review of the Empirical Disclosure Literature. *Journal of Accounting and Economics*, 31, 405–440.

Hung, M. (2001). Accounting Standards and Value Relevance of Earnings: An International Analysis. *Journal of Accounting and Economics*, 30, 401-420.

Hung, M. and Subramanyam, K. (2007). Financial Statement Effects of Adopting International Accounting Standards: The Case of Germany. *Review of Accounting Studies*, 12(4), 21-48.

Iatridis, G. (2008). International Financial Reporting Standards and the Quality of Financial Statement Information. *Working paper*, University of Thessaly.

Kamal, Y. and Bhuiyan, N.U. (2003). Standardization of Accounting and Financial Reporting Practices in the Banking Sector in Bangladesh: An Evaluation of the Implementation of IAS 30 by the Banks in the Private Sector. *Journal of Business Studies*, 24(2), 25-37.

Kasznik, R. (1999). On the Association between Voluntary Disclosure and Earnings Management. *Journal of Accounting Research*, 37, 57-81.

Ke, B., li, Y. and Yuan, H. (2012). The Effect of Mandatory IFRS Adoption on the Stewardship Usefulness of Financial Reporting. *The International Journal of Accounting*, 34(2), 223-228.

Khan, U. (2009). Does Fair Value Accounting Contribute to Systematic Risk in the Banking Industry? *Working paper*, Columbia University.

Kolev, K. (2008). Do Investors Perceive Marking-to-Model as Marking-to-Myth? Early Evidence from FAS 157 Disclosures. *Working Paper*, Yale School of Management.

Landsman, W. R., Maydew, E. L. and Thornock, J. R. (2011). The Information Content of Annual Earnings Announcements and Mandatory Adoption of IFRS. *Journal of Accounting and Economics*, 22(1), 23-28.

Lang, M., Maffett, M. and Owens, E. (2010). Earnings Comovement and Accounting Comparability: The Effects of Mandatory IFRS Adoption. *Working paper*, UNC-Chapel Hill.

Laux, C. and Leuz, C. (2009). The Crisis of Fair-value Accounting: Making Sense of the Recent Debate. *Accounting, Organizations and Society*, 34, 826-834.

Leuz, C. and Verrecchia, R. (2000). The Economic Consequences of Increased Disclosure. *Journal of Accounting Research*, 38, 91–124.

Leuz, C. (2003). IAS versus U.S. GAAP: Information Asymmetry-based Evidence from Germany's New Market. *Journal of Accounting Research*, 41(3), 445-472.

Li, S. (2010). Does Mandatory Adoption of International Financial Reporting Standards in the European Union reduce the Cost of Equity Capital? *The Accounting Review*, 85, 607–636.

Negash, M. (2008). Liberalization and the Value Relevance of Accrual Accounting Information: Evidence from the Johannesburg Securities Exchange. *Afro Asian Journal of Finance and Accounting*, 1(1) 84-101.

Nenova, T. (2003). The Value of Corporate Voting Rights and Control: A Cross-country Analysis. *Journal of Financial Economics*, 68(3), 325-351.

Nichols, D. C., Wahlen, J. M. and Wieland, M. M. (2009). Publicly traded versus Privately Held: Implications for Conditional Conservatism in Bank Accounting', *Review of Accounting Studies*, 14(1), 88-122.

Obazee, J.O. (2012). International Financial Reporting Standards Implementation: Implications for the Nigerian

Capital Market. *Business Day*, Friday, 21 September.

Ozkan, N., Singer, Z. and You, H. (2012). Mandatory IFRS Adoption in Europe and the Contractual Usefulness of Accounting Information in Executive Compensation. *Journal of Accounting Research*, 33(3), 132-140.

Renders, A. and Gaeremynck, A. (2007). The Impact of Legal and Voluntary Investor Protection on the Early Adoption of International Financial Reporting Standards. *De Economist*, 155, 49-72.

Shahzad, K. (2010). The Quality of Financial Reporting under IFRS: Evidence from Credit Ratings. *Working paper*, Erasmus University Rotterdam.

Song, C. J., Thomas, W. and Yi, H. (2009). Value Relevance of FAS 157 Fair Value Hierarchy Information and the Impact of Corporate Governance Mechanisms. *Working Paper*.

Street, D., Nichols, N. and Gray, S. (2000). Assessing the Acceptability of International Accounting Standards in the US: An Empirical Study of the Materiality of US GAAP Reconciliations by Non-US Companies Complying with IASC Standards. *The International Journal of Accounting*, 35(1), 27-63.

Tan, H., Wang, S., and Welker, M. (2009). Foreign Analyst following and Forecast Accuracy around Mandated IFRS Adoptions. *Working paper*, University of Waterloo, Hong Kong University of Science, and Technology and Queen's University.

Tanko, M. (2012). The Effect of International Financial Reporting Standards (IFRS) Adoption on the Performance of Firms in Nigeria. *Paper presentation*, IFRS Conference -Challenges & Opportunities Organized by College of Business & Economics, Qassim University - Saudi Arabia.

Tarca, A. (2004). International Convergence of Accounting Practices: Choosing Between IAS and U.S. GAAP. *Journal of International Financial Management and Accounting*, 15, 60-91.

Tendeloo, B. and Vanstraelen, A. (2005). Earnings Management Under German GAAP versus IFRS. *European Accounting Review*, 14(1), 155-180.

Voulgaris, G., Stathopoulos, K. and Walker, M. (2011). IFRS and the Use of Accounting-Based Performance Measures in Executive Pay. *Working paper*, University of Edinburgh and The University of Manchester.

Watts, R. L. (2006). What has the Invisible Hand Achieved? *Accounting & Business Research*, 36, 51-61.

Wu, J. and Zhang, I. (2009a). The Adoption of Internationally Recognized Accounting Standards: Implications for the Credit Markets. *Working paper*, University of Rochester.

Wu, J., and Zhang, I. (2009b). The Voluntary Adoption of Internationally Recognized Accounting Standards and Firm Internal Performance Evaluation. *The Accounting Review* 84(4), 1281-1309.

Wu, J. and Zhang, I. (2011). Accounting Integration and Comparability: Evidence from Relative Performance Evaluation around IFRS Adoption. *Working paper*, University of Rochester.

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