



The Impact of International Financial Reporting Standards (IFRSs) Adoption on Financial Reporting Practice in the Nigerian Banking Sector

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Abstract

The adoption of International Financial Reporting Standards (IFRSs) in different countries of the world has become a contemporary issue especially with respect to the reliability of financial statements. The study examined the impact of valuation of Loan Loss Provisions (LLPs) on earnings management and capital management during the pre and post-adoption of IFRS for listed deposit money banks (DMBs) in Nigeria. Using an Ex-post facto research design approach, this study utilised secondary data extracted from annual reports and accounts of fifteen (15) DMBs for the period of ten (10) years from 2006 – 2016. The results from the use of multiple regression analysis revealed a significant positive relationship between LLPs and earnings management for both pre and post-IFRS adoption. Furthermore, the study also found a positive insignificant relationship between LLPs and capital management for both pre and post IFRS adoption.

1.0 Introduction

The increasing growth in cross-border financial transactions, international trade, and investments; which unavoidably involves the preparation and presentation of accounting reports. With the increasing globalisation of the marketplace, international investors need access to financial information based on harmonized accounting standards and procedures (Beke, 2011). These reports are useful across various national borders and have brought about the development of International Accounting Standard (IAS) which was first published in 1975 by the International Accounting Standards Committee (IASC). Since then, the process for setting international accounting standards has undergone substantial evolution, culminating in the 2001 restructuring of the IASC into the International Accounting Standard Board (IASB). International Financial Reporting Standards (IFRSs) are accounting standards developed by the International Accounting Standards Board (IASB). Many countries have adopted the IFRS as their official domestic accounting standards. Each country adopting IFRS undergoes a transition process in the year of adoption. This process may be fairly disruptive for users of financial statements as accounting treatments of similar items may vary, and impair comparability and trend analysis. The IFRSs provide provision to remove allowable accounting alternatives (that existed in most countries under their respective local GAAPs) and requires accounting measurements that better reflect a firm's economic position and performance.

In Nigeria, the prudential guidelines issued by the Central Bank of Nigeria and the Statement of Accounting Standards form the Nigerian GAAP. It is mandatory for the Deposit Money Banks to comply with the stipulated guidelines in valuation of Loan Loss Provisions and loan balances in the financial statements. The Nigerian GAAP insist on loan classification into performing and non-performing (substandard, doubtful and lost) while IFRS is based on fair value measurement of loan portfolio. In essence, IFRSs are precise, admit an insufficient number of options, and prohibit hidden reserves. Based on this, the adoption of IFRS is expected to significantly reduce the ability to engage in earnings management behaviour. That is IFRS limit the opportunity for management to engage opportunistic behaviour by limiting the accounting options available to them (Barth,

Landsman & Lang 2008). International Accounting Standard (IAS) No. 39 provide guidance on how loan loss provisions (LLPs) should be established and limits the ability of managers to exercise flexibility in determining the provision (IASB, 2003). If the ability to use LLPs to manage earnings is limited, then there will be evidence of lower earnings management in post-IFRS. Prior research shows that loan loss provisions (LLPs) are primarily used as a tool for earnings management and capital management by listed banks (Ahmed, Neel & Wang, 2010; Anandarajan, Hasan & Lozano-Vivas, 2003; Anandarajan, Hasan & McCarthy, 2007; Ozili, 2015). However, the attention on the use of discretion to manage earnings received global impetus after the Enron crises and many other similar cases that followed. The main focus among the companies that were affected both in the U.S. and other parts of the world was financial irregularities, which reiterated the need for a better grasp of earnings management among practitioners, regulators and those in the academia.

Previous studies have identified that loan losses are one of the major causes of these financial crises and its provision has a direct impact on firms' cash flows and consequently the reported earnings (Chang, Shen, & Fang, 2008; Mohammad, Wasiuzzaman, & Zaini, 2011). The agenda of many regulatory bodies responding to the 2007/2008 financial crisis is the loan provisioning (EFRAG 2009). And also, the arguments of what should comprise regulatory capital varied by country with each country's regulatory body setting their respective levels and standards. To overcome this and to level the competitive conditions for banks across different countries, the Basel committee issued two accords (Busch 2009). Basel I introduced minimum capital requirements (Tier 1 and Tier II). The requirements of this accord subsequently extended to more than a hundred countries worldwide. However, Basel I inadvertently created loopholes which, according to Anandarajan *et al.* (2003) and Pérez, Salas-Fumá, and Saurina, (2008) enabled banks to engage in more aggressive earnings management. IFRS aims to ensure that loan loss provisions adequately reflect the current risk of losses, by adjusting historical provisions to prevailing economic circumstances at the time of reporting - IFRS uses the concept of discounted cash flows measurement method (KPMG, 2007). However, Bank regulators continue to stress that LLPs should be sufficient to minimise loan loss on bank loan portfolio, also emerging empirical studies suggest that bank managers may have another incentive(s) to influence

or manipulate reported loan loss provision estimates other than mitigating expected credit loss. Three arguments support the reason why banks manipulate earnings: signalling argument, income smoothing or earnings management argument and capital management argument (Zhou & Chen, 2004). And also earnings management argument holds that managers increase the provision for loan losses in periods when earnings are high, under the assumption of income smoothing (Beatty, Chamberlin & Mogliolo, 1995; Collins, Shackelford & Wahlen, 1995; Rivard, Blind & Morris, 2003). This study therefore seeks to examine the impact of IFRS adoption on financial reporting practice in the Nigerian banking sector.

The main objective of this study is to examine the impact of IFRS adoption on financial reporting practice in the Nigeria banking sector. Consequently, the study hypothesized that; H₀₁: The valuation of LLPs has no significant influence on earnings management after IFRS adoption by listed banks in Nigeria.

H₀₂: LLPs has no significant impact on capital management after the IFRS adoption by listed banks in Nigeria.

2.0 Literature Review

2.1 Earnings Management

Earnings are a central part of financial statements that help a large number of stakeholders to evaluate firms' performance. Stakeholders include current investors, potential investors, creditors, suppliers, customers and other stakeholders. Stakeholders use the reported financial information to measure managers' performance, deciding compensation plans and assessing the future of the company. Reported financial information influences the investor capital allocation decisions (Xu, Taylor & Dugan 2007). Since earnings is a major and central part for management compensation decisions and investor's decision making, it create incentives for managers to practice earnings management.

Healy and Wahlen (1999) defined earnings management as a means management's use of judgment through financial reporting and structuring transactions to conceal the true economic performance of an entity. Earnings management motives are broadly classified as

either opportunistic which exemplifies the classic agency problem; or signaling- which signals private information to capital markets (Beaver, 2002). Kirschenheiter and Melumad (2002) described earnings management as when a manager intentionally uses judgment and assessments to skew earnings towards a desired outcome. According to them, Managers often use manipulating activities to maximize reported earnings. Income maximization is one the more common purposes for using earnings management. However, the opposite is Big- Bath accounting where managers radically decrease earnings, providing the possibility to report positive earnings in future years.

Ahmed, Takeda & Thomas (1999) simply described earnings management as smoothing earnings while Copeland (1968) defined the concept as “the repetitive selection of accounting measurement or reporting rules in a particular pattern, the effect of which is to report a stream of income with a smaller variation from trend than would otherwise have appeared”. Earnings management is a strategy employed by management of a company to deliberately manipulate the company’s earnings so that the figures match a predetermined target. Income smoothing is another reason why managers manipulate earnings. Managers attempt to maintain a steady level of earnings in order to secure employment. If earnings for the current period are high and projected future earnings are low, managers intend to reserve current earnings, creating a possibility of capitalization in the future, referred to as cookie-jar accounting (DeFond & Park, 1997).

There are two methods that could be used for earnings management. First, one could use the flexibility allowed in generally accepted accounting principles (GAAP) to change reported earnings without changing the underlying (past) cash flows, which Healy and Wahlen (1999) describe as usage of managerial judgment in financial reporting. This is called accounting earnings management. Second, a manager may change operating decisions, such as delivery schedule or maintenance, in order to manage the underlying cash flows that will affect the reported income reports, which is being described as structuring of transactions by Healy and Wahlen. This kind of management is usually referred to as economic earnings management.

According to Healy and Wahlen (1999); Graham (2005) if stakeholders believe that managers possess information that is not transparent to stakeholder, they might assume and accept a degree of earnings management being exercised. This indicates that if a firm reports an earning decreases or a loss, stakeholders will assume that earnings management already has been practiced to avoid reporting a decrease in earnings or to report a loss. If a firm report a small loss, the capital markets will punish the firm severely due to the assumption of exhausted manipulation activities from the firm to meet zero earnings benchmark.

According to Roman (2009) "Earnings management occurs when firm management has the opportunity to make accounting decisions that change reported income and exploit those opportunities". He also stated that accounting for business operations requires judgment and estimates. For example, one can't measure revenue without estimating when customers will pay, how many will not pay, how many will return goods for refund and costs to the seller for fulfillment of warranty or maintenance promises. Earnings management is the premeditated dulling of variations about some level of earnings considered to be normal for the organization.

2.2 Loan Loss Provision

According to the revised Central Bank of Nigeria (CBN) Prudential Guidelines (Paragraph 12.1) 2010, licensed Deposit Money Banks (DMBs) are to make adequate provisions for perceived losses based on the credit portfolio classification system prescribed that, in order to reflect their true financial condition. Two types of provisions (that is, specific and general) are considered adequate to achieve the objectives. Specific provision are made on the basis of perceived risk of default on specific credit facilities while general provisions are made in recognition of the fact that even performing credit facility harbor some risk of loan no matter how small. Paragraph 12.3 of the Guidelines provide that, when IFRS is adopted in Nigeria, Banks were required to make provisions for loans as prescribed in the relevant IFRS Standards.

Provisions for loans recognized in the profit and loss account should be determined based on the requirements of IFRS. However, the IFRS provisions should be compared with

provision determined under prudential guidelines and the expected impact/changes in general reserve should be treated as follows: Prudential Provision is greater than IFRS provision; transfer the difference from the general reserve to a non-distributable regulatory reserve. Prudential Provision is less than IFRS provision; the excess charges resulting should be transferred from the regulatory reserve account to the general reserve to the extent of the non-distributable reserve previously recognized. The non-distributable reserve should be classified under Tier 1 as part of core capital.

Grey and Clarke (2004) explained Loan loss provision as an expense on the income statement which signifies managers' assessment of expected future losses. This means that an increase in loan loss provision reduces net income, while a fall in loan losses increases net income. Since it is the result of managers' assessment of the likely loss that the company would incur should the borrower fail to repay his obligations as at when due, the provision for it is considered to have two (2) portions: non-discretionary and discretionary portions. "Non-discretionary is a function of specific quality determinants in the loan portfolio- non-accrual loans, renegotiated loans, loans past due over 90 days, specific analyses on troubled large credits, usually implying internal grading system. In order to influence earnings, banks make large provision for loan losses. It was revealed that banks in the U.S provided inadequate loan losses to understate net assets and profits. Since it is the result of managers' assessment of the likely loss that the company would incur should the borrower fail to repay his obligations as at when due, the provision for it is considered to have two (2) portions; the non-discretionary portion is the provision that is based on fair and objective analysis of the firm's economic conditions, while Mohammad et al. (2011) pointed that, the discretionary portion are those accruals that largely depend on the outcome of the managers' future expectation of uncertain events. However, the attention on the use of discretion to manage earnings received global impetus after the Enron crises and many other similar cases that followed. The main focus among the companies that were affected both in the U.S. and other parts of the world was financial irregularities, which reiterated the need for better grasp of earnings management among practitioners, regulators and those in the academia. (Chang et al. 2008 and Mohammad et al. 2011).

2.3 Capital Management

The Rules governing regulatory capital, its components and required deductions to the capital levels, shall be applied by banks for assessment of qualifying capital. Banks are required to maintain a minimum regulatory capital adequacy ratio (CAR) of 15% on an on-going basis. The Central Bank of Nigeria (CBN) will take into account the relevant risk factors and the internal capital adequacy assessments of each bank to ensure that the capital held by a bank is commensurate with the bank's overall risk profile. This would include, among others, the effectiveness of the bank's risk management systems in identifying, assessing / measuring, monitoring and managing various risks including interest rate risk in the banking book, liquidity risk, concentration risk and residual risk.

Accordingly, CBN will consider prescribing a higher level of minimum capital ratio for each bank under the Pillar 2 framework on the basis of their respective risk profiles and their risk management systems. Furthermore, in terms of the Pillar 2 requirements of the capital adequacy framework, banks are expected to operate at a level well above the minimum requirement. (see CBN Guidance Notes on Regulatory Capital 2015). Capital adequacy refers to the amount of capital held by Nigerian deposit insurance corporation (NDIC) to cover losses. The CBN currently requires capital adequacy requirements for NDIC to be based on

the Bank for International Settlements Basel Committee for Banking Supervision (1988) International Convergence of Capital Measurement and Capital Standards, commonly known as the Basel Accord. The intention of the Basel Accord was to ensure that a consistent standard be applied when determining minimum capital requirements across internationally active banks. Under the rules of the Basel Accord, capital for supervisory purposes is now considered in two tiers: Tier I and Tier II. Tier I (core capital) comprises the highest-quality capital elements. Tier I capital is defined as the sum of book value of equity (common stock and retained earnings), qualifying non-cumulative perpetual preferred stock, and minority interest in equity accounts of subsidiaries less goodwill and other intangible assets. Tier II (supplementary capital) is made up of other elements that contribute to the overall strength of a bank as a going concern but do not satisfy all of the

characteristics of Tier I capital. Tier II capital is the sum of loan loss reserves (up to a maximum of 1.25% of risk weighted assets), perpetual preferred stock, hybrid capital instruments, perpetual debt, mandatory convertible debt securities, term subordinated debt, and intermediate preferred stock. A bank's capital base is the sum of its Tier I and Tier II capital less any deductions. At least 50% of a bank's capital base must be Tier I capital. The Basel Accord requires that the ratio of a bank's capital to risk weighted assets (referred to as the capital adequacy ratio) must be at least 8%.

2.4 Review of Empirical Studies

Ozili and Outa (2017) reviewed the recent academic and policy literature on bank loan loss provisioning (LLP) to identify several advances in the literature and observed that there exists some major advancement in country-specific and cross-country analyses and substantial interaction between LLPs and existing prudential, accounting, institutional firm characteristic, cultural, religious, tax and fiscal framework. Ozili (2017) investigated whether discretionary 'loan loss provisioning' by Western European banks is driven by income smoothing or credit risk considerations. The study used the ordinary least square regression to examine the relationship between loan loss provision and earnings before tax and loan loss provisions in the post-financial crisis period. The findings of the study revealed that listed banks in Western Europe carryout discretionary provisioning which is driven by income smoothing incentives in the post-financial crisis period. The study also observed that discretionary provisioning is significantly influenced by credit risk factors, mainly, non-performing loans and loan growth. Overall, the implication of the results of the study is that discretionary provisioning among Western European banks is driven by both income smoothing and credit risk considerations.

Sanyaolu, Iyoha and Ojeka (2017) examined the effect of adopted International Financial Reporting Standards (IFRS) adoption on the earning yield (EY) and earning per share (EPS) of quoted banks in Nigeria. The study made use of cross sectional data obtained for a period of 6 years from 2009 to 2014, while the panel ordinary least method of analysis was used to examine the impact of IFRS adoption on the earnings of all 15 quoted banks in the Nigerian Stock Exchange. The study found a significant and positive relationship between

IFRS adoption and the earnings yield of quoted banks in Nigeria. The study also found a significant and positive relationship between IFRS adoption and EPS of quoted banks in Nigeria. The study concludes that IFRS adoption has improved the decision making capability of the various stakeholders, thus, increasing investor confidence and the inflow of capital in the country through foreign direct investment.

Bello, Abubakar, and Adeyemi (2016) investigated the effects of IFRS adoption on earnings management of non-financial quoted companies in Nigeria. They utilized a sample of seventy-five non-financial quoted companies in Nigeria that have consistently published their audited annual financial reports between 2010 and 2014. They used a dummy variable to separate period of pre and post adoption period; before January 2012 and year-end 2014. The data collected were subjected to descriptive analysis, correlation analysis and a panel multiple regression analysis to explore both trends and possible effects of IFRS adoption on general earnings management. Their findings revealed that IFRS adoption in Nigeria does not significantly affect the tendency of Nigerian companies to manipulate earnings. Explicitly, this is contrary to the general belief that IFRS, as high quality accounting standards will reduce the possibility of earnings management.

Eneje and Paul (2016) examined the effect of IFRS adoption on the mechanics of loan loss provisioning for Nigerian Banks. Specifically, it analyzed how the change in the recognition and measurement of loan loss provision affects the accounting quality of banks thereby reducing the income smoothing behavior of the money deposit banks. Ordinary least square multiple regression analysis was used to analyse secondary data obtained from the annual reports and accounts of deposit money banks covering the period of 2005 to 2015. The findings of the study revealed that the post-IFRS has had significant effects on the mechanics of loan loss provisioning compared to the pre IFRS era in the Nigerian Money Deposit Banks. Their study recommended that banks CEO's should actively sensitize fresh accountants and auditors who are yet to be acquainted with IFRS guidelines and standards.

Nugrahanti (2015) investigated the impact of risk assessment using the risk inherent and quality implementation of quality risk management in the operational activities of banking operations to earnings management practices through loan loss provisions. The

investigator used data pool from 2012 through 2014. Base on the purposive sampling method, 36 listed banks on the Stock Exchange Indonesian were selected as sample of the study. A panel data multivariate regression methodology was used. The findings of the study showed that risk assessment strengthens the decrease in the earning management implementation after the adoption of IFRS in IAS No. 39 and Basel II Accord generally evidence to improve I bank's financial report quality.

Umoren and Enang, (2015) examined whether the mandatory adoption of IFRS has improved the value relevance of financial information in the financial statements of commercial banks in Nigeria. The sample comprises of twelve listed banks in Nigeria. Specifically, financial statement figures of 2010 and 2011 (pre-adoption period) and 2012 and 2013 (post-adoption) were utilized. Descriptive statistics and least square regression were conducted to analyze the effect of IFRS adoption on the accounting quality. The result indicated that the equity value and earnings of banks are relatively value relevant to share prices under IFRS than under the previous Nigerian SAS. Results also indicate that earnings per share is incrementally value relevant during post-IFRS period while book value of equity per share is incrementally less value relevant during the post-IFRS period.

Yahaya, Kutigi, and Mohammed, (2015) investigated how the change in the recognition and measurement of banks' loan loss provision affects earnings management behavior. They investigated the post adoption off IFRS and value relevance of accounting information of quoted banks in Nigeria. Using the price model and the return model, their study found that the EPS increased in the post adoption than in the pre adoption periods. The study concluded that the restriction to incur losses under IFRS significantly reduced the ability of banks to engage in earnings manipulation. The study recommended that investors should understand the IFRS adoption process so as to avoid overvaluation of the economy when the financial markets are doing well.

Ahmed, Mohammed and Adisa (2014) explored the relationship between loan loss provision and earnings management in Nigerian DMBs. Secondary data were obtained from the 8 banks' annual reports for the period of 2006 to 2011 and robust regression was used as a tool for data analysis. The result indicated that there is a positive relationship between

the provision for loan losses and earnings management in Nigerian DMBs. Trabelsi, Hamza & Chila (2013) examined the effect of IFRS on earnings quality in European Stock Market using the sample of 250 French companies listed on Euronext Paris from 2002-2007, the study found that IFRS adoption resulted in a significant improvement of value relevance of earnings. This implies that market valuation is less associated with earnings prepared in line with IFRS than those prepared under IFRS. The explanatory power of earnings improved significantly after the transition to international standards.

Tanko (2012) examined financial performance measures on some selected Nigerian banks that are quoted under the Nigerian stock market under the IFRS regime. The study used regression model to examine the banks financial performance. The study defined the change in performance based on two parameters. First, change in accounting quality (earnings management and timely loss recognition). Secondly, the performance of the firms based on changes on identified financial ratios of the firms. The study test 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 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. They study also find 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 provision of standards.

Leventis, Dimihopoulos and Anandaraja (2011) used a sample of 91 EU listed commercial banks covering a period of ten years (before and after implementation of IFRS), they dichotomize their sample into early and late adopters. They found that earnings management (using loan loss provisions) for both early and late adopters while significant over the estimation window is significantly reduced after implementation of IFRS. They also find that, for risky banks, earnings management behavior is more pronounced when

compared to the less risky banks, but is significantly reduced in the post IFRS period. Capital management behavior by bank managers is not significant in both pre and posts IFRS regimes. Their study conclude that the implementation of IFRS in the EU appears to have improved earnings quality by mitigating the tendency of bank managers of listed commercial banks to engage in earnings management using loan loss provisions.

Outa (2011) investigated if the adoption of IFRSs in Kenya has been associated with higher accounting quality for listed companies. The study applied accounting quality measures; earnings management, timely loss recognition and value relevance. The methodology is based on prior literature definition of metrics of accounting quality mainly earnings management, timely loss recognition and value relevance. The outcomes are mixed (accounting quality had marginally improved and declined) and are very much in line with findings in other studies. Nina, Bernhard, Christopher and Ann-Kristin (2009) analyzed a large sample of German firms in the period from 1998 to 2008 found that voluntary and mandatory adopters differ distinctively in terms of essential firm characteristics. Result from their findings indicates that earnings management in the post-adoption period are mixed. While income smoothing decreases for voluntary but not for mandatory adopters, discretionary accruals only decrease for mandatory but not for voluntary adopters.

Anandarajan, Hasan and McCarthy (2005) examined whether Australian banks engage in earnings, capital management and signaling, and, if so, the extent to which loan loss provisions (LLPs) are used for this purpose. Their results indicated that banks in Australia used loan loss provisions to manage earnings. Furthermore, listed commercial banks engage more aggressively in earnings management using LLPs than other banks. Anandarajan et al (2005) also found that earnings management behavior is more pronounced after implementation of the Basel Accord. However, they did not find evidence to indicate a relationship between LLPs and capital management. This may be because loan loss reserves no longer constitute part of Tier I capital in the numerator of the capital adequacy ratio. Overall, the found a significant understating of loan loss provisions in the post-Basel period relative to the pre-Basel period. It indicated that reported earnings may not reflect the true economic reality underlying those numbers. They concluded that,

Australian banks do not appear to use LLPs for signaling future intentions of higher earnings to investors.

The concept of signaling was first studied in the context of job market by Akerlof (1970). While, Spence (1973) developed the signal equilibrium theory which provided that a good firm can distinguish itself from a bad firm by sending signal about its quality to capital markets. Signals have become useful tools for obtaining financial reports from management to potential investors. The theory also argued that a signal is a perceivable action or structure that is intended to or has evolved to indicate an otherwise not perceivable quality about the signaler or the signaler's environment. i.e., the purpose of a signal is to indicate a certain quality - Signaling by banks using Loan Loss Provision (LLPs). He also argued that the existence of information asymmetric can also be taken as a reason for good companies to use financial information to send signal to the market.

This study adopts signaling theory due to its focus on intentional disclosure of positive information. Signal is the information disclosed from the financial statements. However, bank managers known as the signalers have an incentive to manipulate the financial statements to get decision makers to act as preferred by the managers.

3.0 Methodology

The Ex-post facto research design is used in this study. The population of the study comprise of all listed deposit money banks (DMBs) in Nigeria from the period 2006–2016, taken from the Nigerian Stock Exchange (NSE) official website. Though there are 22 banks that were listed by the NSE as at 2016, 15 banks were selected for this study. The 15 banks meet the following criteria:

- (i) Banks that their complete annual reports is readily available and accessible to the researcher within the period under consideration,
- (ii) Banks that had their toxic assets purchased by AMCOM due to their inability to meet the CBN September 30, 2011 deadline to fully recapitalize or be liquidated, were excluded from this study.
- (iii) And finally, banks that have not received any form of bailout by CBN within the period of the study.

Secondary data was used in this study and extracted from the annual reports and accounts of the banks for the periods under review. The data was collected over a period of 10 years which covers pre-IFRS adoption and post-IFRS adoption, ranging from 2006-2016, excluding 2011 which is the year of adoption. The period from 2006 – 2010 form the pre-adoption, while 2012 – 2016 form the post-adoption. The model used for testing the earnings and capital management hypotheses is a modified and extended version of the cross-sectional model used by Leventis, Dimitropoulos and Anandarajan (2011) in equations 3.1 and 3.2

$$LLP_{it} = \beta_0 + \beta_1 EBT_{it} + \beta_2 NPL_{it} + \beta_3 SIZE_{it} + \beta_4 AGE_{it} + \beta_5 \Delta LLA_{it} + \beta_6 CFEER_{it} + e \dots (3.1)$$

$$LLP_{it} = \gamma_0 + \gamma_1 MCAR_{it} + \gamma_2 NPL_{it} + \gamma_3 SIZE_{it} + \gamma_4 AGE_{it} + \gamma_5 \Delta LLA_{it} + \gamma_6 CFEER_{it} + e \dots (3.2)$$

Where: β_{0-6} and γ_{0-6} are the coefficient of parameters to be estimated. The dependent variable in this study is LLP (proxy for loan loss provision to total loans outstanding). The independent or explanatory variables are EBT (proxy for earnings management) and MCAR (Capital Management), while NPL, SIZE, AGE, ΔLLA and CFEER are control variables. Three models (Random effect, Fixed effect, and Pool effect model) was formulated for each scenarios; that is, model with EBT and model with MCAR both for pre-IFRS and post-IFRS. The variables are measured thus:

LLP = ratio of loan loss provisions to total loans

EBT = ratio of earnings before taxes and LLPs to total assets

MCAR = ratio of actual regulatory capital (tier 1 capital) before loan loss reserves to the minimum required regulatory capital

NPL = ratio of loans and advances to customers divided by total bank total asset

SIZE = natural logarithm of total assets

AGE = no. of years the bank has been in operation from the date being quoted on the Nigeria Stock Exchange

ΔLLA = change in loan losses /total assets

CFEER = commission and fee income to total assets

e = error term which capture other variables not included in the model

4.0 Results

Table 4.1 Pre-IFRS and Post-IFRS Adoption MODEL with Earnings Management

| Regressors | Random effect model | | Random effect model | |
|---------------------|---------------------|---------|---------------------|---------|
| | B | p-value | B | p-value |
| EBT | 0.3027 | 0.0000 | 0.6570 | 0.0000 |
| NPL | 0.0259 | 0.5607 | 0.0496 | 0.2611 |
| SIZE | -0.0046 | 0.1896 | -0.0134 | 0.0002 |
| AGE | 0.0003 | 0.5255 | -0.0003 | 0.6882 |
| LLA | 0.0706 | 0.4981 | 0.0520 | 0.6080 |
| CFEER | 1.0070 | 0.0404 | -0.0175 | 0.9441 |
| R-Squared | 0.3721 | | 0.6988 | |
| Adj. R-Squared | 0.3167 | | 0.6722 | |
| F-statistic p-value | 0.0000 | | 0.0000 | |

Source: SPSS output, 2017

As observed from the regression models selected above for the pre-IFRS and the post-IFRS performance. EBT in pre-IFRS was observed to have explained LLP at 0.3027 units with a p-value of 0.000 which is less than the 5% level of significance. While in the post-IFRS EBT is explaining the LLP at 0.6570 units with p-value of 0.000 which is also less than the 5% level of significance. The independent variables are able to explain 31.67% variation in Loan loss provision in the pre IFRS era while the variation as shown in Table 4.1 for post IFRS era is 67.22%

Table 4.2 Pre-IFRS and Post-IFRS Adoption Model with Capital Management

| Regressors | Fixed effect model | | Fixed effect model | |
|---------------------|--------------------|---------|--------------------|---------|
| | B | p-value | B | p-value |
| MCAR | 0.0709 | 0.3023 | 0.1157 | 0.0963 |
| NPL | 0.1085 | 0.1049 | 0.0709 | 0.3852 |
| SIZE | -0.0037 | 0.4669 | -0.0043 | 0.5586 |
| AGE | -0.0075 | 0.3295 | 0.0173 | 0.0185 |
| LLA | 0.0246 | 0.8597 | 0.1022 | 0.6035 |
| CFEER | 0.8791 | 0.1876 | 0.6169 | 0.1969 |
| R-Squared | 0.1062 | | 0.1681 | |
| Adj. R-Squared | 0.2249 | | 0.1401 | |
| F-statistic p-value | 0.3926 | | 0.1128 | |

Source: SPSS output, 2017

As observed from the regression models presented in table 4.2 for the pre-IFRS and the post-IFRS performance. MCAR in pre-IFRS was observed to have explained LLP at 0.0709 units with a p-value of 0.3023 which is greater than the 5% level of significance. While in the post-IFRS MCAR is explaining the LLP at 0.1157 units with p-value of 0.0963 which is also greater than the 5% level of significance.

This model result suggests strongly that the MCAR does not have a significant relationship with LLP both in the pre-IFRS and post-IFRS. Although, the unit of its explanation on LLP changes from 0.0709 to 0.1157 units in the pre-IFRS to post-IFRS adoption periods. This also suggests that the adoption of the IFRS increases the not significant performance of MCAR on LLP since there is an incremental variation in the MCARs explanatory coefficient for the pre-IFRS and post-IFRS adoption periods.

Since the MCAR's coefficients p-value of (pre-IFRS=0.3023 & post-IFRS=0.0963) and are both greater than 0.05(5%) level of significance, we cannot reject the null hypothesis "LLPs has no significant impact on capital management (MCAR) during the post-IFRS adoption for listed banks in Nigeria." and conclude statistically that there is no significant impact of LLPs on capital management (MCAR) during the pre-IFRS and post-IFRS adoption for listed banks in Nigeria.

5.0 Discussion

The study was carried out with the aim of achieving two specific objectives which were hitherto stated in chapter one of this study. Findings from each of the objective reveals as follows;

5.1 Earnings Management;

i. The test of hypothesis to examine whether the valuation of Loan Loss Provisions (LLPs) significantly influence earnings management under IFRS adoption for banks under consideration. The results in Table 4.1 revealed that earnings before taxes (EBT) is positive and significant at 5% level of significance in both the pre and post-adoption of IFRS. A positive and significant relationship between earnings and LLPs would mean that LLPs are used as a tool for earnings management. These findings indicate that LLPs are used as a tool for earnings management in both periods, but more aggressively so in the post-IFRS

period, thus we disagree and reject hypothesis one which states that the valuation of LLPs has no significant influence on earnings management after IFRS adoption by listed banks in Nigeria.

ii. The indication is that LLPs are being used for earnings management purposes over the entire period of the analysis. The results also indicates that banks with lower earnings have an incentive to manipulate by lowering LLPs. This is possible because the expected loss approach basis for loan loss provisioning as required by IFRS may allow managers the opportunistic behavior.

iii. Despite the result showing that LLPs being used for earnings management purpose and an increase in earning management during the post-IFRS, the study also relate its findings with the prudent risk management, which states that When the economic cycle is positive, bank loans grow and bank profits tend to be relatively higher, more prudent banks may increase their loan loss provisions because these are the times when expected losses are generated and growing.

This finding corroborates the findings of other researchers (refer Ahmed et al. 1999; Anandarajan et al. 2003, 2007; Perez et al. 2008; Ozili 2015 and Leventis, et al. 2011who reported a significant and positive results relationship between LLP and EBT in the pre and post-IFRS period.

5.2 Capital Management

i. The result for the MCAR show a positive but not significant at more than 5% level in both pre and post-adoption of IFRS for listed banks in Nigeria. This indicates that there is relationship between capital management and LLPs but no sufficient evidence that LLPs are used to manage capital adequacy ratio in post-IFRS. This finding support and agreed with null hypothesis 2, the study accepts the hypothesis that states that LLPs has no significant impact on capital management after the IFRS adoption by listed banks in Nigeria. However, when CFEER*MCAR is interacted or included, the coefficient is more than 5% level of significant. This indicates insufficient evidence that LLPs will be used more aggressively to manage capital in the post-IFRS regime. Overall, we conclude that LLPs are not used as a tool for capital management.

ii. This result agrees with the studies of Anandarajan et al. (2005) and Leventis et al. (2011) that examined the use of LLPs and other related tools for capital management. They found that capital management is not significant in both pre and post IFRS regimes and banks does not use LLPs by inflating loan loss reserves when capital levels were close to violating minimum capital regulations. In Nigeria, where the CBN provide prudential guidelines for listed banks to guide in their banking operations, therefore it is difficult to violate both the IFRS and the CBN prudential guidelines.

6.0 Conclusions

The aim of this study is to examine whether loan loss provisions of IFRS has significant effect on earnings management and capital management of banks in Nigeria. We conclude that in the post-IFRS regime, there were evidence of accentuated earnings management behavior using LLPs in the sampled Nigerian listed DMBs. Furthermore, the study also found no evidence of capital management through the use of LLPs in the sampled Nigerian listed DMBs during the post-IFRS regime.

References

- Ahmed, A., Mohammed, A. Y., & Adisa A. O. (2014). Loan Loss Provision and Earnings Management in Nigerian Deposit Money Banks. *Mediterranean Journal of Social Sciences*, 5 (17), 250-251.
- Ahmed ASC., Takeda C., & Thomas, S. (1999). Bank loan loss provisions: a reexamination of capital management, earnings management and signaling effects. *Journal of Accounting and Economics* 29, 1-25.
- Ahmed, A. S., Neel M. J., & Wang D. D. (2010). 'Does mandatory adoption of IFRS improve accounting quality? Preliminary evidence.' Working paper, Texas A&M University, 2010. Retrieved January 26, 2016 from http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1502909.
- Ahmed, A. S., Takeda, C., & Thomas, S. (1999). Bank loan loss provisions: a reexamination of capital management, earnings management and signaling effects, *Journal of Accounting and Economics*, 28, 1-25.
- Akerlof, G. U. (1970). The market for 'lemons': quality uncertainty and the market mechanism, *Quantitative Journal of Economics*, 89, 488-500.

- Anandarajan, A. E., Hasan, I. E., & Lozano-Vivas, A. O. (2003). The role of loan loss provisions in earnings management, capital management and signaling: The Spanish experience, *Advances in International Accounting*, 16, 45-65.
- Anandrajan, A., Hassan, I., & McCarthy, C. (2005). The use of loan loss provision for capital management and signalling by Australian banks. *Finland Discussion Papers*, Paper 22: (2005).
- Anandarajan, A. E., Hasan, I. O., & McCarthy, C. J. (2007). Use of loan loss provisions for capital, earnings management and signaling by Australian banks, *Accounting & Finance*, 47 (3), 357-379.
- Barth, M. E., Landsman, W. R., & Lang, M. H. (2008). International accounting standards and accounting quality. *Journal of Accounting Research* 46, 467-498.
- Beatty, A. L., Chamberlain, S. L., & Magliolo, J. (1995). Managing Financial Reports of Commercial banks: the influence of taxes, regulatory capital and earnings. *Journal of Accounting Research*, 333, 231-262.
- Beaver, W. (2002). Perspectives on recent capital market research. *The Accounting Review*, 453- 474.
- Beke, J. U. (2011). International Accounting Standardization Practice in Hungary. *Regional and Business Studies*, 3(1), 9-24.
- Bello, A., Abubakar, S., & Tesleem A. (2016). IFRS Adoption and Earnings Management in Nigerian Non-Financial Quoted Companies. International Conference on Accounting Studies (ICAS) 15-18.
- Busch, A. (2009). Banking regulation and globalization. Oxford University Press, USA.
- Chang, R. D., Shen, W. H.,s & Fang, C. J. (2008). Discretionary loan loss provisions and earnings management for the banking industry. *International Business & Economics Research Journal*, 7(3), 9-20.
- Collins, J., Shackelford, D., & Wahlen, J. (1995). Bank differences in the coordination of regulatory capital, earnings and taxes. *Journal of Accounting Research*, 33, 263-292.
- Copeland, R. (1968). Income smoothing. *Journal of Accounting Research*, 6, 101-116
- DeFond, M. L., & Park, C. W. (1997). Smoothing income in anticipation of future earnings. *Journal of Accounting and Economics* 23, 115-139.
- EFRAG (2009). European Financial Reporting Advisory Group. <http://www.efrag.org/homepage.asp>.

- Graham, J. R., Harvey, C. R., & Rajgopal, S. (2005). The economic implications of corporate financial reporting. *Journal of Accounting and Economics*, 40(1), 3-73.
- Gray, R. P., & Clarke, F. L. (2004). A Methodology for calculating the allowance for loan losses in commercial banks" *ABACUS*, 40(3), 45-48.
- Healy, P. M., & Wahlen, J. (1999). A Review of the earnings management literature and its implication for standard setting. *Accounting Horizons* 13(4), 365-383.
- IASB (2008). International Financial Reporting Standards. International Accounting Standards Board, London.
- Kirschenheiter, M., & Melumad, N. D. (2002). Can "Big Bath" and Earnings Smoothing Co-exist as Equilibrium Financial Reporting Strategies? *Journal of Accounting Research* 40, 761-796.
- KPMG (2007). Loan impairment modeling according to IAS 39 by using Basel II parameters. *KPMG Romania. April 2007.*
- Leventis, S., Dimitropoulos, P. E., & Anandarajan, A. J. (2011). Loan Loss Provisions, Earnings Management and Capital Management under IFRS: The Case of EU Commercial Banks. *Journal of Financial Service Research* 40(1), 103-122.
- Mohammad, W. M., Wasiuzzaman, S., & Zaini, R.M. (2011). Panel data analysis of the relationship between earnings management, bank risks, loan loss provision and dividend per share. *Journal of Business and Policy Research*, 6(1), 46-56.
- Nugrahanti, T. P. (2015). Risk Assessment and Earning Management in Banking of Indonesia: Corporate Governance Mechanisms. *Global Journal of Business and Social Science Review* 4(1), 50-55.
- Nina, G., Bernhard, K., Christopher, A., & Ann, K. (2009). Working Paper, International financial reporting standards and earnings Quality: the myth of voluntary vs. mandatory adoption Center for Entrepreneurial and Financial Studies
- Outa, E. R. (2011). The Impact of International Financial Reporting Standards (IFRS) Adoption on the Accounting Quality of Listed Companies in Kenya. *International Journal of Accounting and Financial Reporting*, 1(1), 212-241.
- Ozili, P. K. (2015). Loan Loss Provisioning, Income Smoothing, Signalling, Capital Management and Procyclicality: Does IFRS Matter? Empirical Evidence from Nigeria, *Mediterranean Journal of Social Science* 6(2), 224-232.
- Ozili P. K. (2017). Discretionary Provisioning Practices among Western European Banks, *Journal of Financial Economic Policy*, 9(1), 109-118.

- Ozili P. K., & Outa, E. R. (2017). Bank Loan Loss Provisions Research: *A Review Munich Personal RePEc Archive (MPRA) Paper*
- Pérez, D., Salas-Fumás, V., & Saurina, J. (2008). Earnings and capital management in alternative loan loss provision regulatory regimes, *European Accounting Review*, 17, 423-445.
- Rivard, R., Bland, E., & Morris, G. (2003). Income Smoothing Behavior of U.S. Banks under Revised International Capital Requirements, *International Advances In Economic Research*, 9(4), 288-294
- Sanyaolu, O. A., Iyoha, F. O., & Ojeka, S. A. (2017). International Financial Reporting Standards Adoption and Earnings of Quoted Banks in Nigeria, *International Journal of Economics and Financial Issues*, 7(1), 279-284
- Spence, M. (1973). Job Market Signaling, *Quality Journal of Economics*, 87, 355-374.
- Tanko, M. E. (2012). The effect of International Financial Reporting Standards (IFRS) Adoption on the Performance of Firms in Nigeria. Paper Presentation, IFRS Conference-Challenges and Opportunities Organized by College of Business and Economics, Qassim University – Saudi Arabia
- Trabelsi, N. S., Hamza, S. E., & Chila, H. (2013). The effects of IFRS on earnings quality in European stock markets: evidence from France. *Interdisciplinary Journal of Research in Business*, 2(12), 35-47.
- Umoren, A. O., & Enang, E. R. (2015), IFRS adoption and value relevance of financial statements of Nigerian banks. *International Journal of Finance and Accounting*, 4(1), 1-7.
- Xu, Z., Taylor, G., & Dugan, M. (2007). Review of Real Earnings Management Literature. *Journal of Accounting Literature*, 26, 195-228
- Yahaya, O. A., Kutigi, U. M., & Mohammed, A. (2015). International financial reporting standards and earnings management behavior of listed deposit money banks in Nigeria. *European Journal of Business and Management*, 7(18).
- Zhou, J., & Chen, K.Y. (2004). Audit committee, board characteristics and earnings Management by commercial banks. Retrieved May 21, 2016 from aaahq.org/audit/midyear/05midyear/.../ZHOU_CG_EM_DEC16A.pdf

Appendices

Table 1: Descriptive Statistics

| VAR | N | PostIFRS | PreIFRS | PostIFRS | PreIFRS | PostIFRS | PreIFRS | PostIFRS | PreIFRS | PostIFRS | PreIFRS |
|-------|----|----------|---------|----------|---------|----------|---------|----------|---------|----------------|----------------|
| | | Range | Range | Minimum | Minimum | Maximum | Maximum | Mean | Mean | Std. Deviation | Std. Deviation |
| LLP | 75 | 0.430 | 0.390 | 0.000 | 0.000 | 0.430 | 0.390 | 0.044 | 0.034 | 0.088 | 0.063 |
| EBT | 75 | 0.510 | 0.640 | -0.010 | 0.000 | 0.500 | 0.640 | 0.069 | 0.064 | 0.106 | 0.094 |
| MCAR | 75 | 1.160 | 0.770 | -0.160 | -0.130 | 1.000 | 0.640 | 0.208 | 0.172 | 0.223 | 0.173 |
| NPL | 75 | 0.560 | 0.620 | 0.000 | 0.000 | 0.560 | 0.620 | 0.404 | 0.334 | 0.149 | 0.148 |
| SIZE | 75 | 9.650 | 9.250 | 0.000 | 0.000 | 9.650 | 9.250 | 7.695 | 7.314 | 2.224 | 1.872 |
| AGE | 75 | 38.000 | 47.000 | 7.000 | 0.000 | 45.000 | 47.000 | 19.867 | 14.307 | 11.377 | 12.676 |
| LLA | 75 | 0.390 | 0.410 | 0.000 | 0.000 | 0.390 | 0.410 | 0.017 | 0.029 | 0.060 | 0.060 |
| CFEER | 75 | 0.190 | 0.070 | 0.000 | 0.000 | 0.190 | 0.070 | 0.016 | 0.021 | 0.023 | 0.014 |

Source: SPSS output, 2017

Correlation Analysis

Table 2 Correlation for the Pre-IFRS Variables

| | | LLP | EBT | MCAR | NPL | SIZE | AGE | LLA | CFEER |
|--|-------|--------|--------|--------|-------|--------|--------|-------|-------|
| Pearson Correlation | LLP | 1 | | | | | | | |
| Sig. (2-tailed) | | | | | | | | | |
| Pearson Correlation | EBT | .562** | 1 | | | | | | |
| Sig. (2-tailed) | | 0.000 | | | | | | | |
| Pearson Correlation | MCAR | 0.096 | -0.012 | 1 | | | | | |
| Sig. (2-tailed) | | 0.415 | 0.920 | | | | | | |
| Pearson Correlation | NPL | 0.208 | .230* | .309** | 1 | | | | |
| Sig. (2-tailed) | | 0.073 | 0.047 | 0.007 | | | | | |
| Pearson Correlation | SIZE | -0.109 | -0.080 | 0.219 | .270* | 1 | | | |
| Sig. (2-tailed) | | 0.351 | 0.496 | 0.059 | 0.019 | | | | |
| Pearson Correlation | AGE | 0.111 | 0.154 | -0.221 | 0.064 | -0.019 | 1 | | |
| Sig. (2-tailed) | | 0.344 | 0.187 | 0.056 | 0.583 | 0.868 | | | |
| Pearson Correlation | LLA | 0.201 | 0.183 | 0.132 | 0.212 | 0.083 | -0.014 | 1 | |
| Sig. (2-tailed) | | 0.083 | 0.116 | 0.258 | 0.068 | 0.480 | 0.904 | | |
| Pearson Correlation | CFEER | .353** | .261* | 0.162 | .271* | 0.169 | -0.150 | 0.153 | 1 |
| Sig. (2-tailed) | | 0.002 | 0.023 | 0.164 | 0.019 | 0.147 | 0.199 | 0.189 | |
| **. Correlation is significant at the 0.01 level (2-tailed). | | | | | | | | | |
| *. Correlation is significant at the 0.05 level (2-tailed). | | | | | | | | | |

Source: SPSS output, 2017

Key:

***LLP**: Loan loss provision. ***EBT**: Earnings before Taxes.

***MCAR**: is the ratio of actual regulatory capital (Tier 1 capital) before loan loss reserve to minimum required capital.

***NPL**: is ratio of ratio of loans and advances to customers divided by total bank total asset (LOAN).

***SIZE**: the natural logarithm of total assets capturing the effect of bank size,

***AGE**: is the No. of years the bank has being operating from the date being quoted on the Nigerian Stock Exchange (NSE).

***LLA**: is measure as ratio of loan loss to total assets. ***CFEER**: is the ratio of commission and fee income to total asset.

Table 3 Correlation for the Post-IFRS Variables

| | | LLP | EBT | MCAR | NPL | SIZE | AGE | LLA | CFEER |
|---|-------|---------------|---------------|----------------|---------------|---------------|---------------|--------------|--------------|
| Pearson Correlation | LLP | <i>1.000</i> | | | | | | | |
| Sig. (2-tailed) | | | | | | | | | |
| Pearson Correlation | EBT | <i>.802**</i> | <i>1.000</i> | | | | | | |
| Sig. (2-tailed) | | <i>0.000</i> | | | | | | | |
| Pearson Correlation | MCAR | <i>0.158</i> | <i>0.157</i> | <i>1.000</i> | | | | | |
| Sig. (2-tailed) | | <i>0.177</i> | <i>0.177</i> | | | | | | |
| Pearson Correlation | NPL | <i>0.032</i> | <i>0.069</i> | <i>0.150</i> | <i>1.000</i> | | | | |
| Sig. (2-tailed) | | <i>0.784</i> | <i>0.557</i> | <i>0.200</i> | | | | | |
| Pearson Correlation | SIZE | <i>-0.215</i> | <i>-0.025</i> | <i>.230*</i> | <i>.517**</i> | <i>1.000</i> | | | |
| Sig. (2-tailed) | | <i>0.064</i> | <i>0.829</i> | <i>0.047</i> | <i>0.000</i> | | | | |
| Pearson Correlation | AGE | <i>0.003</i> | <i>0.004</i> | <i>-.363**</i> | <i>-0.151</i> | <i>-0.198</i> | <i>1.000</i> | | |
| Sig. (2-tailed) | | <i>0.978</i> | <i>0.975</i> | <i>0.001</i> | <i>0.195</i> | <i>0.088</i> | | | |
| Pearson Correlation | LLA | <i>-0.057</i> | <i>-0.050</i> | <i>0.154</i> | <i>0.006</i> | <i>0.142</i> | <i>-0.161</i> | <i>1.000</i> | |
| Sig. (2-tailed) | | <i>0.628</i> | <i>0.668</i> | <i>0.186</i> | <i>0.962</i> | <i>0.223</i> | <i>0.169</i> | | |
| Pearson Correlation | CFEER | <i>-0.094</i> | <i>-0.039</i> | <i>-0.226</i> | <i>0.090</i> | <i>0.179</i> | <i>-0.044</i> | <i>0.039</i> | <i>1.000</i> |
| Sig. (2-tailed) | | <i>0.424</i> | <i>0.741</i> | <i>0.051</i> | <i>0.445</i> | <i>0.125</i> | <i>0.708</i> | <i>0.742</i> | |
| ** . Correlation is significant at the 0.01 level (2-tailed). | | | | | | | | | |
| * . Correlation is significant at the 0.05 level (2-tailed). | | | | | | | | | |

Source: SPSS output, 2017

Hausman Test

Table 4 Hausman Test for pre-IFRS Adoption

| Output for Pre-IFRS Adoption (Earnings Management) | | Output for Pre-IFRS Adoption (Capital Management) | |
|---|--------|--|---------|
| > phtest (pre.fixed1, pre.random1) | | > phtest (pre.fixed1,pre.random1) | |
| Chi Square | 8.414 | Chi Square | 12.283 |
| Df | 6 | df | 6 |
| F-statistic p-value | 0.2093 | F-statistic p-value | 0.05594 |

Source: SPSS output, 2017

Table 5 Hausman Test for Post-IFRS Adoption

| Output for Post-IFRS Adoption (Earnings Management) | | Output for Post-IFRS Adoption (Capital Management) | |
|--|--------|---|--------|
| > phtest (pre.fixed2, pre.random2) | | > phtest (pre.fixed2,pre.random2) | |
| Chi Square | 9.996 | Chi Square | 8.1935 |
| Df | 6 | df | 6 |
| F-statistic p-value | 0.1248 | F-statistic p-value | 0.2243 |

Source: SPSS output, 2017

Table 6 variance Inflation Factor

| Model | Collinearity Statistics | |
|-------|-------------------------|-------|
| | Tolerance | VIF |
| 1 LLP | .880 | 1.136 |
| NPL | .704 | 1.420 |
| SIZE | .609 | 1.643 |
| AGE | .831 | 1.203 |
| LLA | .943 | 1.060 |
| CFEER | .880 | 1.137 |

Source: SPSS output, 2017

Table 7 Pre-IFRS Adoption Model with Earnings Management

| Dependent Variable: LLP | | | | | | |
|-------------------------|---------------------|---------|--------------------|---------|-------------------|---------|
| Regressors | Random effect model | | Fixed effect model | | Pool effect model | |
| | B | p-value | B | p-value | β | p-value |
| EBT | 0.3027 | 0.0000 | 0.3011 | 0.0001 | 0.3018 | 0.0001 |
| NPL | 0.0259 | 0.5607 | 0.0554 | 0.3510 | 0.0226 | 0.6131 |
| SIZE | -0.0046 | 0.1896 | -0.0034 | 0.4355 | -0.0045 | 0.1876 |
| AGE | 0.0003 | 0.5255 | -0.0011 | 0.8327 | 0.0004 | 0.4597 |
| LLA | 0.0706 | 0.4981 | -0.0336 | 0.7777 | 0.0874 | 0.4023 |
| CFEER | 1.0070 | 0.0404 | 0.3045 | 0.6055 | 1.1010 | 0.0234 |
| R-Squared | 0.3721 | | 0.3055 | | 0.3882 | |
| Adj. R-Squared | 0.3167 | | 0.0483 | | 0.3342 | |
| F-statistic p-value | 0.0000 | | 0.0024 | | 0.0000 | |

Source: SPSS output, 2017

Table 8 Pre-IFRS Adoption Model with Capital Management

| Dependent Variable: LLP | | | | | | |
|-------------------------|---------------------|---------|--------------------|---------|-------------------|---------|
| Regressors | Random effect model | | Fixed effect model | | Pool effect model | |
| | B | p-value | B | p-value | β | p-value |
| MCAR | 0.0264 | 0.5383 | 0.0709 | 0.3023 | 0.0263 | 0.5388 |
| NPL | 0.0470 | 0.3620 | 0.1085 | 0.1049 | 0.0469 | 0.3628 |
| SIZE | -0.0075 | 0.0524 | -0.0037 | 0.4669 | -0.0075 | 0.0520 |
| AGE | 0.0008 | 0.1341 | -0.0075 | 0.3295 | 0.0008 | 0.1330 |
| LLA | 0.1416 | 0.2259 | 0.0246 | 0.8597 | 0.1422 | 0.2240 |
| CFEER | 1.6069 | 0.0028 | 0.8791 | 0.1876 | 1.6091 | 0.0027 |
| R-Squared | 0.2245 | | 0.1062 | | 0.2252 | |
| Adj. R-Squared | 0.1561 | | 0.2249 | | 0.1568 | |
| F-statistic p-value | 0.0068 | | 0.3926 | | 0.0066 | |

Source: SPSS output, 2017

Table 9 Post-IFRS Adoption Model with Earning Management

| Dependent Variable: LLP | | | | | | |
|-------------------------|---------------------|---------|--------------------|---------|-------------------|---------|
| Regressors | Random effect model | | Fixed effect model | | Pool effect model | |
| | B | p-value | B | p-value | B | p-value |
| EBT | 0.6570 | 0.0000 | 0.6830 | 0.0000 | 0.6537 | 0.0000 |
| NPL | 0.0496 | 0.2611 | 0.0335 | 0.4595 | 0.0629 | 0.1847 |
| SIZE | -0.0134 | 0.0002 | -0.0184 | 0.0001 | -0.0100 | 0.0027 |
| AGE | -0.0003 | 0.6882 | 0.0006 | 0.8827 | -0.0003 | 0.6381 |
| LLA | 0.0520 | 0.6080 | 0.0853 | 0.4495 | 0.0205 | 0.8393 |
| CFEER | -0.0175 | 0.9441 | 0.0617 | 0.8187 | -0.1137 | 0.6690 |
| R-Squared | 0.6988 | | 0.7256 | | 0.6915 | |
| Adj. R-Squared | 0.6722 | | 0.6240 | | 0.6643 | |
| F-statistic p-value | 0.0000 | | 0.0000 | | 0.0000 | |

Source: SPSS output, 2017

Table 10 Post-IFRS Adoption Model with Capital Management

| Dependent Variable: LLP | | | | | | |
|-------------------------|---------------------|---------|--------------------|---------|-------------------|---------|
| Regressors | Random effect model | | Fixed effect model | | Pool effect model | |
| | B | p-value | B | p-value | B | p-value |
| MCAR | 0.1027 | 0.0747 | 0.1157 | 0.0963 | 0.0922 | 0.0781 |
| NPL | 0.0896 | 0.2445 | 0.0709 | 0.3852 | 0.1093 | 0.1711 |
| SIZE | -0.0117 | 0.0511 | -0.0043 | 0.5586 | -0.0139 | 0.0138 |
| AGE | 0.0007 | 0.5712 | 0.0173 | 0.0185 | 0.0003 | 0.7459 |
| LLA | -0.0215 | 0.9028 | 0.1022 | 0.6035 | -0.0549 | 0.7488 |
| CFEER | 0.2044 | 0.6476 | 0.6169 | 0.1969 | 0.0342 | 0.9421 |
| R-Squared | 0.0957 | | 0.1681 | | 0.1199 | |
| Adj. R-Squared | 0.0159 | | 0.1401 | | 0.0423 | |
| F-statistic p-value | 0.3176 | | 0.1128 | | 0.1771 | |

Source: SPSS output, 2017

Table 11 Pre-IFRS and Post-IFRS Model Comparison (Earning Management)

Pre-IFRS vs Post-IFRS Adoption MODEL with EBT

| Regressors | Random effect model | | Random effect model | |
|---------------------|---------------------|---------|---------------------|---------|
| | B | p-value | B | p-value |
| EBT | 0.3027 | 0.0000 | 0.6570 | 0.0000 |
| NPL | 0.0259 | 0.5607 | 0.0496 | 0.2611 |
| SIZE | -0.0046 | 0.1896 | -0.0134 | 0.0002 |
| AGE | 0.0003 | 0.5255 | -0.0003 | 0.6882 |
| LLA | 0.0706 | 0.4981 | 0.0520 | 0.6080 |
| CFEER | 1.0070 | 0.0404 | -0.0175 | 0.9441 |
| R-Squared | 0.3721 | | 0.6988 | |
| Adj. R-Squared | 0.3167 | | 0.6722 | |
| F-statistic p-value | 0.0000 | | 0.0000 | |

Source: SPSS output, 2017

Table 12 Pre-IFRS and Post-IFRS Model Comparison (Capital Management)

Pre-IFRS vs Post-IFRS Adoption MODEL with Capital Management

| Regressors | Fixed effect model | | Fixed effect model | |
|---------------------|--------------------|---------|--------------------|---------|
| | B | p-value | B | p-value |
| MCAR | 0.0709 | 0.3023 | 0.1157 | 0.0963 |
| NPL | 0.1085 | 0.1049 | 0.0709 | 0.3852 |
| SIZE | -0.0037 | 0.4669 | -0.0043 | 0.5586 |
| AGE | -0.0075 | 0.3295 | 0.0173 | 0.0185 |
| LLA | 0.0246 | 0.8597 | 0.1022 | 0.6035 |
| CFEER | 0.8791 | 0.1876 | 0.6169 | 0.1969 |
| R-Squared | 0.1062 | | 0.1681 | |
| Adj. R-Squared | 0.2249 | | 0.1401 | |
| F-statistic p-value | 0.3926 | | 0.1128 | |

Source: SPSS output, 2017