

## Loan Loss Provision and Earnings Management in Nigerian Deposit Money Banks

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### Abstract

*Researchers and financial economists have for long identified that bank managers use loan loss provisions which is a substantial accrual in the banking industry to manage reported earnings in line with the prediction of the agency theory. In Nigeria, this practice remains a mere theoretical insinuation because there are hardly any empirically documented evidences to support the assertion. In order to fill this void in literature, the present study explores 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 indicates that there is a positive relationship between the provision for loan losses and earnings management in Nigerian DMBs. It is therefore, recommended that, if emphasis is on the integrity of financial reports, regulators should put a ceiling on the provision for loan losses rather than leaving it at the total discretion of managers who provide it to suit their selfish interest.*

**Keywords:** loan loss provisions, discretionary loan loss provision, earnings management, DMBs, Nigeria

### 1. Introduction

The use of loan loss provision to manipulate reported earnings have been widely discussed in the literature particularly in the light of developed countries. Different reasons for it have been proffered by researchers including capital market incentives, contracts motivation and regulation motivation. In this regard, Chang, Shen and Fang (2008) note that bank managers use discretion regarding loan loss allowance to manage earnings. The basic argument is that since it is replenished by a charge to earnings and the credit quality of the loan portfolio cannot be determined precisely by objective criteria, the allowance for loan losses has been shown potentially as a means to manage earnings (Grey and Clarke, 2004). Thus, from the regulators' point of view, the emphasis is on whether loan loss estimation truly reflects the prevailing economic conditions of the firm. The question is how adequate is the provision in covering the expected credit losses over the lifespan of the loan?

Atleast three philosophies surround the discussion on loan loss provisioning in the banking industry. In a review of theoretical and empirical evidence regarding the estimation for loan losses, Wall and Koch(2000) note that the philosophies include economists' view, FASB's view and the capital view. While the economists view loan loss allowance as the provision that is intended to capture expected future losses should the borrower fails to pay his obligation as at when due, the FASB's view is concerned with the measurement of a firm's net income over a given period of time. The last view sees loan loss allowance as a form of capital to be accumulated in good times to absorb losses during bad time. Wall and Koch (2000) further note that the

philosophy from which the provision is viewed depends on the researcher's intention. But regardless of the motivation and the philosophy, the behaviour for earnings management implies conflict of interest between managers, owners and minority shareholders.

Like most industries the worldover, the Nigerian banking industry is going through tough times with the recent financial crises which saw a collapse of some banks such as Oceanic Bank and Intercontinental Bank which were eventually acquired by other banks. This, among other things led to the challenge of the governance practice of the Deposit Money Banks (DMBs) in Nigeria. The introduction of new codes of governance practices by the CBN in 2003 and its constant modifications are all in the interest of effective monitoring to align the interest of shareholders with that of managers. Because it was generally observed that undesirable banking practices such as poor risk diversification, inadequate loan evaluation, fraudulent activities were as much responsible as other macroeconomic factors in causing banking crises that shook the financial systems of nations (Arun and Reaz, 2005). Inadequate provisions for loan losses thus served as a major tool used by managers during these crises to cancel true firms economic conditions of their banks.

The reason why banks manipulate earnings is supported by three arguments: signalling argument, income smoothing or earnings management argument and capital management argument (Zhou and Chen, 2004). The signalling argument suggests that banks use discretionary loan loss provision to insinuate that earnings will be high in subsequent periods (Wahlen, 1994: Liu and Ryan, 1995: Beaver and Engel, 1996). Contrary to the signalling argument, 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, Chamberlain & Mogliolo, 1995: Collins, Shackelford & Wahlen, 1995: Rivard, Bland & Morris, 2003). This implies that earnings management in this area can improve a bank's cash flows, capital adequacy, market value and overall performance. While the capital management argument suggests that since increase in loan loss provision increases regulatory capital, management exercises discretion over its provision (Ahmed, *et al.*, 1999: Beatty *et al.*, 1995). Regardless of the industry and the strings attached, managers' discretionary behaviour to achieve personal gains undermines the shareholders' wealth maximization objective of the firm.

Empirical evidences in this field of research are characterized by conflicting findings. Ma (1988), Anandranjan, Hassan and McCarthy (2006) both find that loan loss allowance are used for earnings management in samples of U.S. banks. Also Rivard *et al.* (2003) and Perez, Fumas and Saurina (2006) find that there is positive interaction between the provision for loan losses in U.S. and Spanish banks respectively. However, Beatty *et al.* (1995) find little statistical relationship between loan loss provisions and earnings management. Moreso, Ahmed *et al.* (1999) fail to document robust relationship between loan loss provision and opportunistic accounting but still they conclude that loan loss provisions reflect meaningful changes in the expected quality of banks' loan portfolios. These differences in findings between studies are due to different sample selections and the use of different time periods being examined. Wall and Koch (2000) conclude though that the available evidence clearly suggests that banks have an incentive to use loan loss accounting to help manage reported earnings.

A considerable number of studies explored the relationship between loan loss allowance and earnings management in the developed countries. However, the attention on developing nations whose economies are rapidly growing and have peculiar corporate control features, capital allocation and regulations have only recently gathered momentum (Bradbury, Mark and Tan, 2006). The differences in economies and level of sophistication of regulatory authorities across the globe call for such investigations in the Nigerian context. Moreso, the existing literature do not yield a conclusive results as conflicting findings trail these studies.

The objective of this work, therefore, is to investigate the relationship between loan loss provisions and earnings management in DMBs in Nigeria. To achieve this aim, it is therefore hypothesized that there is no significant relationship between loan loss provisions and earnings management in DMBs in Nigeria. The contribution of this work is in two ways. Firstly, it adds to the extant literature that examined the interaction

between loan loss provisions and earnings management. Secondly, given that almost all the works in this area are focused on samples of developed economies like the U.S. and Australia, this study therefore extends these research phenomena in the context of emerging economies like Nigeria.

The remaining of this paper is organized as follows. Section two reviews empirical works that are related to this study and presents the theoretical framework. Methodological issues are raised and discussed in section three and the model is specified. In section four results are presented and major findings are discussed together with their policy implications. Finally, in section five the work is concluded and recommendations are offered in the light of major findings.

## 2. Theory and Evidence

In this section, we review existing literature that relates to the present study in order to give a bird's eye view on the concept of earnings management through the use of loan loss provision which is a substantial accrual in the banking industry.

### 2.1 Earnings Management

There is no single universally accepted definition of earnings management (also called creative accounting) in the literature. According to Barnea, Ronen and Sadan (1976) earnings management, is the deliberate dampening of fluctuations about "some level of earnings considered to be normal for the firm". In the words of Schipper (1989:92), "By earnings management I really mean 'disclosure management' in the sense of a purposeful intervention in the external financial reporting process, with a view to obtaining private gain for shareholders or managers". Thus, simply put, earnings management is the deliberate intervention in financial reporting process to achieve personal goals. The definition is important and it encapsulates all aspects of earnings management because it acknowledges that any attempt to temper with financial reporting process in order to intentionally change its true picture is what constitute earnings management.

Healy and Wahlen (1999) define earnings management as the altering of financial statements through the use of judgement in structuring transactions to either mislead the firm's stakeholders about the true economic picture of the firm or to achieve some contractual benefit that is based on accounting numbers. This means that earnings management is the manipulation of financial statement by managers, using accounting choices, estimates and methods, to achieve some objectives that are largely in conflict with the underlying economic status of the firm.

Various methods for the detection of earnings management have been documented. "Empirical studies have found managers engage in earnings management through changing accounting choice, real transactions, total accruals/discretionary accruals, specific accruals, earnings distributions approach and income smoothing" (Sun and Rath, 2010, p122). Of all these methods, the total accruals approach seems to be the one that has caught the attention of researchers the most. This is due to the fact that it is the most damaging to the usefulness of accounting information because investors are wary of such accruals (Al-Fayoumi, Abuzayed and Alexander, 2010).

Different incentives to manage earnings are widely discussed in the literature. Bhat (1996), linked it to the attempt to enhance shareholders' value and to maximize executive compensation through income smoothing and earnings management respectively. Income smoothing, occasional big bath, living for today and maximization of variability are identified by Wall and Koch (2000). Chang *et al.* (2008) note three incentives to manage earnings. Firstly, because of capital market motivation, which includes initial public offerings, seasoned equity offerings, management buyout plans and plans for mergers to meet earnings forecast, to smooth earnings, etc. Secondly, contracts motivation such as management compensation, debt agreement or job security also constitute the incentive for earnings management. Thirdly, laws and regulations such as import regulation, industrial regulation, antitrust laws, e.t.c., also can serve as incentives.

Most recently, Cornett *et al.* (2009), note that managers use discretionary accruals for opportunistic earnings management. This includes options (the incentive for bonus income by attaining some level of performance) and affecting stock prices to enhance managers' wealth through restricted stock compensation. The use of discretion by managers to target bonus plans was first documented by Healy (1985).

## 2.2 Loan Loss Provisions and Earnings Management

Considerable speculation about the provision of large loan losses to influence earnings sprang in the early 1980s when it was revealed that U.S. banks provided inadequate loan losses to understate net assets and profits (Grey and Clarke 2004). Prior to that, Hepworth (1953) acknowledged that firms manage income for tax purposes, shareholders confidence and expectations that are likely to accompany the report of high earnings. But 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 central theme 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. Previous studies have identified that loan losses is 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 (e.g Chang *et al.* 2008 and Mohammad *et al.* 2011).

Loan loss provision is 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" (Grey and Clarke 2004: 323). The non-discretionary portion, therefore, is the provision that is based on fair and objective analysis of the firm's economic conditions.

While the discretionary portion are those accruals that largely depend on the outcome of the managers' future expectation of uncertain events (Mohammad *et al.* 2011). The components of it are both quantitative and qualitative. Grey and Clarke (2004: 323) point that the qualitative components include political, economic, geographical and political factors, while the quantitative are "statistical analysis of loans not individually analyzed for special reserve and therefore are largely at the discretion of managers".

In their review of earnings management research, Sun and Rath (2010) note that the arguments that support the use of specific accrual (e.g loan loss provision) to detect earnings management is preferred by McNichols (2000: 126) who summarizes its advantages into two. "First, this approach enables researchers to develop intuition for the key factors that influence the behaviour of the accrual. Second, the approach can be applied in industries in which a certain type of business can result in a specific accrual being material". He further notes that the problems attributed with measuring earnings management through specific accruals do not affect banks and insurance because some particular accruals accounts (loan loss provision in the case of banks) are very material due to the peculiar nature of the business. Therefore, since it constitutes large accruals for banks and since its provision has a significant impact on earnings, loan loss provision is an important tool for earnings management in banking sector.

The use of loan loss provision to manipulate earnings has been empirically reported in the literature. Anandranjan *et al.* (2006) find that banks in Australia use loan loss provisions to manage earnings. Their result suggest commercial banks engage more aggressively in the earnings management practice than unlisted commercial banks. conflicting. Ma (1988) examines if loan loss provisions were used as a tool for income smoothing in banks. He concludes that together with loan charge-offs it is used reduce volatility of earnings by banks.

Rivard *et al.* (2003) investigate the income smoothing behaviour of banks in the U.S. under revised international capital requirement. They revised the income smoothing practice using post Basel Accord data. The evidence from the study confirms the existence of income smoothing and extends the proposition that banks have become more aggressive in using loan loss provision as a tool for earnings management.

Perez *et al.* (2006) explore earnings and capital management in alternative loan loss provision regulatory regimes. Using sample of Spanish banks and panel data econometric techniques, the study documents that loan loss provisioning is used as a tool for earnings management. Regarding, capital management, however, a robust relationship is not documented. They conclude that the introduction of IFRS in Europe does not prevent managers from decreasing earnings volatility. Similarly, Oosterbosch (2009) tests the effect of IFRS implementation on discretionary use of loan loss provision. Using a sample of European banks and single stage regression, evidence suggests that detailed disclosure requirements regarding loan loss accounting do not deter bank managers from using the provision for loan losses to their discretion for income smoothing.

Collins *et al.* (1995) investigates whether, in addition to the provision for loan losses, other tools such as loan charge-offs and securities issuances were used for earnings management. They document a positive association only between loan loss provisions and earnings management, and conclude that the other tools were used primarily for capital management. Looking at the special characteristics of those banks that engage in opportunistic accounting through the use of loan loss provisions, Greenawalt and Sinkey (1988) find that regional banks engaged in more aggressive income smoothing than money-centred banks. Bhat (1996) establishes that banks that engaged in aggressive income smoothing were in poorer financial health relative to others.

However, there are other studies fail to find a robust association between loan loss provisions and earnings manipulations. They include Beatty *et al.* (1995) and Ahmed *et al.* (1999). Anandrajana *et al.* (2006) note that their finding of no association was surprising, since the capital adequacy regulation removed the costs of earnings management. They attribute the differences in results to difference in model specification.

For capital management and income smoothing, the use of loan loss provision has also been empirically tested. Liu and Ryan (1995) conclude that increases in loan loss provisions are good news only for banks that the market perceives to have loan default problems; if prognosis is already good, no significant stock market reaction occurs. Beaver and Engel (1996) document that increases in the discretionary component of loan loss provision are viewed as good news items. Also, Moyer (1990) find that banks used provisions for loan losses by inflating loan loss reserves when capital levels were close to violating minimum capital regulations. However, they did not find significant association with other tools, such as charge-offs.

In another context, Bushman and Williams (2011) examine the triangular relationship between accounting discretion, loan loss provision and discipline of banks' risk-taking. Their sample consists of large banks from 27 countries. They find, among other things, that discretionary provisioning in the form of earnings smoothing dampens disciplinary pressure on risk-taking, consistent with the assumption that smoothing reduces bank transparency and inhibits monitoring by outsiders.

From the above discussion, it is evident that the use of loan loss provision to manipulate financial reports has gained the attention of researchers lately. Although, these evidences are drawn from the empirical results of the developed countries, the practice of the banks worldwide are similar. Loan loss provisions, thus constitute significant accrual that is potentially used as a tool for earnings manipulation in the industry.

Agency theory provides natural backdrop upon which this research is based. This is because of its relevance in proffering solution to agency problems that characterize the modern day businesses. The theory predicts that in the presence of information asymmetry, the manager is exposed to some privilege information regarding the firm, a situation which induces opportunistic tendencies. Lambert (1984) as cited in Rivard *et al.* (2003) notes that earnings management can arise solely as a natural byproduct of the agency relationship. It is optimal for the principal to pick a contract which motivates to smooth the reported earnings over time.

Earnings management, therefore arises as an optimal equilibrium behavior in the agency setting.

### 3. Methodology and Model Specification

This work is a correlational research that attempts to link loan loss provisions with earnings management. As the first step in establishing relationships, a correlational study measures the association or variability of two or more variables. The population consists of all 18 DMBs listed on the Nigerian Stock Exchange (NSE) as at 31st December, 2011 while the sample consists of 8 banks whose data for the study period, which is 2007 to 2011 are available. Thus, we have pooled panel data of 40 firm-year observations. This period is relevant as it is considered as the height of financial crises in recent times and inadequate provisions for loan losses has been identified as one of the factors that led to the collapse of quite a number of corporations. The study uses secondary data only as a method of data collection while OLS multiple regression (robust) is used as a tool for analysis. The robust regression automatically tackles heteroskedasticity and serial correlation.

Various models have been advanced by researchers in identifying the accruals that is discretionary in the banking sector. Most of these models largely emanate from McNichols and Wilson (1988) who used estimated residuals of bad debts regression model as a surrogate of discretionary accruals. This approach is known as the specific accruals method, which focuses on specific industries such as banks and insurance firms and use knowledge of institutional arrangements to characterize the likely nondiscretionary behaviour of accruals.

The aim of discretionary accruals models is to segment total accruals into discretionary and nondiscretionary components. Consistent with McNichols and Wilson (1988) and Chang *et al.* (2008), a cross-sectional regression of loan loss provision (as the explained variable) is run against loans outstanding at the beginning of the year and loan charge-offs for that year (explanatory variables). The difference between the error term, on one hand and total loan loss provision, beginning balance for loan losses, on the other, will be used to estimate for the discretionary loan loss provision for each year. The result obtained will in turn be used in the second model as the dependent variable.

Loan loss provisions (*LLP*) is defined as the sum of the ending balance of allowance for bad and doubtful debts and loan charge-offs, then deducting the beginning balance of allowance for bad debts (Chang *et al.*, 2008). The reason for the inclusion of beginning balance of total loan losses is due to the fact that it arises from past accumulations and serves as an inventory in setting the current loan loss allowance level. Mathematically, it is expressed as follows:

$$LLP = f(LCO, BBAL) \quad (i)$$

The intuition underlying the choice of these variables is that "in practice most bank managers decide the amount of loan loss provisions every month according to individual risk assessment on potential uncollectible loans and loans write-offs." (Chang *et al.*, 2008:13). Since discretionary accruals can not be observed directly, it is estimated by regressing loan loss provision on the independent variables in equation (ii). The discretionary loan loss provision is the error term which is the difference between loan loss provision, on the one hand and loan charge-offs for the year and the beginning balance of loan losses, on the other. All variables are scaled by the beginning balance of total assets to mitigate spurious size effects in the explanation of provisions. The regression equation, therefore is as follows:

$$LLP_i / TA_{t-1} = \alpha_0 1 / TA_{t-1} + \alpha_1 LCO_i / TA_{t-1} + \alpha_2 BBAL_i / TA_{t-1} + \varepsilon_i \quad (ii)$$

Where: *LLP* = Loan Loss Provision for firm *i* at time *t*.

*LCO* = the Loan Charge-offs for firm *i* at time *t*.

*BBAL* = the beginning balance of *LLP* for firm *i* at time *t*.

*TA* = the beginning total asset of firm *i* at time *t*.

$\varepsilon$  = the error term

$\alpha_0$  = the intercept.

$\alpha_1$  and  $\alpha_2$  are parameter estimates of the variables.

Earnings management is the residual of the regression from equation (ii).

$$|DLLP_i / TA_{i-1}| = LLP_i / TA_{i-1} - [\alpha_0 1 / TA_{i-1} + \alpha_1 LCO_i / TA_{i-1} + \alpha_2 BBAL_i / TA_{i-1}] \quad (iii)$$

The higher the value of the  $|DLLP|$ , the higher the present of earnings manipulation via loan loss provision. This research focuses on absolute  $DLLP$  rather than the signed values of the accruals because the interest is on the magnitude rather than the direction of the accruals. The signed value only gives an insight into whether earnings are being managed upwards or downwards.

To test the study hypothesis, consistent with Grey and Clark (2004) and Chang *et al.* (2008), wmodel discretionary loan loss provision ( $DLLP$ ) which is also referred to as earnings management as a function of loan loss provision ( $LLP$ ), Change in non-performing loans ( $\Delta NPL$ ) and bank size which is proxy by natural log of total asset ( $\ln TA$ ). Both Change in non-performing loans and bank size are included in the model as control variables.

$$DLLP = f(LLP, \Delta NPL, \ln TA) \quad (iv)$$

The intuition underlying the choice of these variables is that “in practice most bank managers decide the amount of loan loss provisions every month according to individual risk assessment on potential uncollectible loans and loans write-offs.” (Chang *et al.*, 2008:13). In order to mitigate the possibility of spurious data that may result if the discretionary accruals is taken in its raw form, the study uses lagged total assets to scale all the variables. This approach is consistent with Sarkar, Sarkar and Sen (2006) and Al-Fayoumi *et al.* (2010). The model of the study is therefore specified as follows:

$$DLLP_{it} = a_0 + a_1 LLP_{it} + a_2 \Delta NPL_{it} + a_3 \ln TA_{it} + \varepsilon_{it} \quad (v)$$

#### 4. Result and Discussion

In this section, the study results are presented and discussed. A set of descriptive statistics are first presented, then followed by the regression result.

**Table 1:** Summary of Descriptive Statistics.

	<i>DLLP</i>	<i>LLP</i>	$\Delta NPL$	<i>lnTA</i>
<b>Mean</b>	.0116293	.008585	.0265455	80.3
<b>Std. Dev.</b>	.033437	.0153452	.0432047	65.772
<b>Minimum</b>	-.1795355	0	.00169	25
<b>Maximum</b>	.0957049	.0793218	.277709	27500
<b>Observation</b>	48	48	48	48

**Source:** Output of summary statistics obtained from Stata 9

Table 1 above reveals average  $DLLP$  of 1% of total lagged asset of the sample banks with a standard deviation of .03. The minimum is -.18 while the maximum is .09. Average  $LLP$  is approximately 1%, the standard deviation is .01 and lying between 0 and 7%.  $\Delta NPL$  has a mean of 3% and the standard deviation is .04 and the minimum and maximum are .01% and 27 percent respectively.  $\ln TA$  averages 80.3 billion Naira revealing that Nigerian banks are large in terms of capital base. There is a wide gap across the industry regarding bank size as the minimum is 25 billion Naira while the maximum is as high as 2.75 trillion. This is reflected in the wide difference between the mean (80 billion) and the standard deviation, which is 65 billion Naira. The standard deviations of  $LLP$  and  $\Delta NPL$  are relatively large which implies different level of pressure borne by individual banks. It is worthy of note that the averages of the variables do not differ substantially from their respective standard deviations which means that the data are not skewed and are fit to produce a reliable result.

**Table 2:** Correlation Matrix Table

	<i>DLLP</i>	<i>LLP</i>	<i>ΔNPL</i>	<i>InTA</i>
<i>DLLP</i>	1.000			
<i>LLP</i>	0.3628	1.000		
<i>ΔNPL</i>	-0.2648	0.2794	1.000	
<i>InTA</i>	0.7645	0.0653	-0.7521	1.000

**Source:** Output of Correlation Matrix obtained from Stata 9.

Correlation matrix shows the relationship between explanatory variables and explained variable and also the relationship among the individual variables themselves. The result indicates that apart from *ΔNPL* all independent variables revealed a positive interaction with the dependent variable. This is enough to infer that variables are well selected and they explain the dependent variable strongly. The result calls for a verification as to whether only *LLP* and *InTA* impact on *DLLP* in Nigerian DMBs by regressing only the variables on the regressor. However, the result shows a lower R-square Adjusted suggesting that the extend to which the two variables together explain the dependent variables is more than when they are taken separately. The result is not shown for brevity.

The correlation matrix is an alternative test for multicollinearity. Gujarati (2004) notes that correlation above 0.8 between variables is a concern as it indicates excessive correlation. From the correlation table, the results reveal only a mild correlation among the independent variables which indicates that the model performs well.

**Table 3:** Regression Result

Variable	Coefficient	Std Error	t	Prob
<i>Intercept</i>	.0427109	.0480161	0.81	.0379
<i>LLP</i>	.8478068	.142384	5.95	0.000
<i>ΔNPL</i>	-.1889831	.0765496	-2.47	0.018
<i>InTA</i>	.4152929	.0605093	6.86	0.000
Adj.R-Square	0.8609			
F.	47.08			
Prob. of F.	0.0000			

**Source:** Regression output from Stata 9

Table 3 above reveals that there is a positive relationship between *DLLP* and *LLP* having coefficient of 0.84 with a t-value of 5.95 and significant at 1% indicating. This implies that 1% increase in *LLP* leads to 8% increase in earnings management. The result indicates that banks plan to maintain almost the same percentage of *LLP* during the sample period. *ΔNPL* and *DLLP* exhibit an inverse interaction which is significant at 5% and having coefficient of -0.18 and t-value of -2.47 which signifies 1% increase in the *ΔNPL* results to a fall in earnings management by 2%. The result also reveals a positive relationship between *DLLP* and *InTA* having a coefficient of 0.41 and a t-value of 6.86 and significant at 1% implying that 1% rise in bank size results in rise of earnings management by 4%.

From the results, the positive association between earnings management (*DLLP*) and *LLP* suggests that banks increase provision for loan losses to manage (smooth earnings). However this management is not indicated whether upward or downward (income-increasing or income-decreasing) because the study adopts the absolute *DLLP* rather than the signed values. Also, the positive relationship between earnings management and *ΔNPL* suggests that as the amount of non-performing loan increases, bank managers may

increase the provision for loan losses in order to reduce the ratio of non-performing loans. The result of this study is in line with the findings of Collins *et al.* (1995), Greenwalt and Sinkey (1988), Bhat (1996), Rivard *et al.* (2003) and Chang *et al.* (2008). While it contradicts the findings of Moyer (1990), Beatty *et al.* (1995) Ahmed *et al.* (1999) and Anandrajan *et al.* (2006). Conclusively, it is documented in this study that bank managers intend to use discretionary loan loss provisions to influence reported earnings when they have high loan loss provisions or high non-performing loans. Thus, the earlier conjecture that there is no relationship between loan loss provision and earnings management in Nigerian DMBs is rejected.

The control variable positively relates with earnings management. This opposes the view that because large banks have more resources than their smaller counterparts they are more likely to avoid the use of loan loss provision to manipulate reported earnings. On the contrary, perhaps because of the pressure exerted on large banks by their stakeholders, banks have incentive to manage earnings to please their complex stakeholders.

Overall, the aggregate influence of the explanatory variables included in the model are able to explain DLLP up to 86% which is indicated by R-square (overall), while the remaining 14% are controlled by other factors that are not included in the model. The F-Statistics of 47.08 and significant at better than 1% shows that the model is well fitted and therefore provides substantial evidence that loan loss provision is positively related with earnings management in DMBs in Nigeria.

## 5. Conclusion and Recommendation

The purpose of loan loss provisions is to adjust banks' loan loss reserves to reflect expected future losses on their loan portfolios. Bank managers have an incentive to smooth earnings through the discretionary part of the allowance for loan losses because less volatility in earnings is a fundamental foundation for stable stock prices. The manipulation of earnings is made possible by the existence of information asymmetry provided by the agency relationship that exists between managers and shareholders of modern day corporations. Empirical studies that explored the relationship between loan loss provisions and manipulation of earnings in Nigeria is almost non-existent thus it is not known with certainty whether the theoretical insinuation that bank managers use the provision for loan losses to manage earnings holds water. In this study, it is documented that earnings management is positively related with loan loss provision in DMBs in Nigeria. It is therefore recommended that regulatory authorities such as CBN and SEC should place a provision ceiling regarding loan loss allowance in order to curb managerial discretion in accounting for loan losses.

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