

# The Effect of Accounting Information on Lending Decision of Quoted Deposit Money Banks in Nigeria

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**Abstract:** *This study investigated the effect of Accounting Information (earnings per share and return on equity) on lending decision (measured by non-performing loan) of quoted deposit money banks in Nigeria from 2008 to 2017, using Simple Linear Regression. The R-squared coefficient of determination was adopted to show the degree of variation of non-performing loan that is explained by the explanatory variable. Also, the T-Statistic and F-Statistic were adopted to show the degree at which the independent variable affects the dependent variable. This study selected 15 deposit money banks for the study period. The regression analysis reveals that individual regression of the proxies for Accounting Information which is Earnings per Share and Return on Equity have positive and statistical significant effect on non-performing loan at 5% level of significant respectively. The study conclude that banks should adopt ethical standards in the preparation and presentation of their accounting information in order to increase their accounting earnings. The study also recommends that CBN and other regulatory bodies should strengthen supervision of banks to prevent a sharp buildup of NPLs in the future.*

**Keywords:** Non-performing loans, Deposit Money Banks, Earnings Per Share and Return on Equity.

## 1. INTRODUCTION

Accounting information as a scientific process is about provision of financial information needed to take decision especially when it comes to acquisition and use of scarce corporate resources as well as the elimination of wastes in the wealth creation chain to maximize profit. Seetharaman and Raj (2011) defined accounting information as data organized for the special purpose of decision making. They consider information to represent data or knowledge evaluated for specific use, though information is not the same with data. According to Zhu (2013), information consists of data that have been retrieved, processed or otherwise used for informative or inference purpose, argument or as a basis for forecasting or decision making. Experts in business management have come to agree that in today's business environment, where competition has become extremely keen, available and effective information is critical factor which enables business organization to have that vital edge over its competitors.

The efficiency and effectiveness of the operations as well as the overall success of an enterprise, depend to a large extent on the quality of information available to the management. Management must keep abreast with information that will enable it to plan for the attainment of pre-determined objectives, if business is to survive in rapidly changing environment. Financial statements must properly reflect the organization's financial and economic reality, so that the users are not induced to take decisions on misleading information.

Deposit money banks have to plan, because their planning environment also changes rapidly. They require adequate information for the purpose of operating their business efficiently since, their profitability depends principally on the amount of loan and advance granted. In utilizing the data presentation to them by customers for purpose of lending, the banks are interested in financial accounting information which enables them to reach an initial loan decision and also helps them to monitor progress after the advance has been made. These places of information are those that deal with solvency, liquidity and profitability by obtaining information that will describe a firm's financial stand and long term viability. The bank as users of accounting information would want to satisfy themselves that the company will be able to meet the interest payment accruing during the period of the loan and repayment of capital sum at the end of the loan period. This should be the banker's prime consideration. If forecasts indicate that these conditions cannot be met, the advances should be discarded.

The bankers emphasize on different aspects of his investigation depending on the expected duration of loan for a short term loan, the banker is interested in estimates of the net cash flow over the next few months, whereas for a long term advance the banker will need to be convinced that the company is financially able and that adequate profits will be earned throughout the foreseeable future (Vishnani & Shah, 2018). According to Hou and Dickinson (2007), many researches on the causes of bank failures found that asset quality is a statistically significant predictor of insolvency, and that failing bank institutions always have high level of Non-performing loans prior to failure. Therefore, in managing the lending portfolio to attain the desired results, the bank should

give adequate attention to the above factors. In recent years however, banks have taken a cautious approach in extending loans to industries such as, agribusiness, manufacturing, service industry as well as private persons and governments, due to increase in levels of non-performing assets in the industry.

According to Paul & Juliana (2015), to avoid financial reporting fraud and scandals that might hinder effective and informed investment decision making by investors and other users of these information, financial information is highly expected to be prepared according to national standards, corporate governance, professional ethics and the code of conducts as stipulated by the Companies and Allied Matters Act (CAMA) of 2004 as amended, the International Financial Reporting Standards (IFRSs), and the Nigerian Statement of Accounting Standards (SASs). Hence, the perceived relevance of financial information will provide reliable information about the true and actual financial position, performance (profitability), and changes in financial position of a business investment opportunity that could be useful to a wide range of prospective investors, managers, directors, financial institutions, financial analysts, government, regulatory agencies, the media, vendors and the general public in making informed or rational investment decision (Pushpa & Sumangala, 2012).

This research work was necessitated by the fact that quoted deposit money banks on the Nigerian Stock Exchange has undergone many turbulent times caused by the crumbling interest of investors in quoted banking industries with lending decision. These problems largely contribute to the failure of the use of accounting information in business to monitor lending activities with the result that inaccurate decisions are made to the detriment of the organization. Again, regardless of their extensive use and enduring advance, there is some concern that accounting theory and practice have not kept pace with rapid economic changes and high technology changes. This situation affects the relevance of accounting information (Meyer, 2007).

Nevertheless, it is believed that accounting information plays an important role in influencing lending decision. The problem however lies in the quality and validity of the information, that is, if it is timely, adequate, and clear. The major purpose of the use of accounting information (such as inventory turnover ratio, liquid ratio, return on net worth, net book value, dividend per share, earnings per share, return on equity amongst others) is to minimize risk, failure and uncertainties with regards to non-performing loan and also stay ahead of competitors. Ozurumba (2016), believed that bad debts are familiar words to bankers; and people wonder occasionally why bad debts occur despite all the rules and regulations guiding banks. Yet the best way to avoid bad debt is to make zero lending, but banks cannot afford zero lending since greater proportion of their earnings come from interest earned on loan and advances. Despite the above methods of evaluating credit in the banking industry in Nigeria a lot of its advance and loans end up as NPLs.

Notwithstanding the immense benefit of use of accounting information, it is generally acknowledged that most unqualified accountants generate inaccurate information and so result in failure of organizations to achieve desired goal. It is only through accounting information that managers and external users get a picture of the organization as a total entity. Managers who fail to realize this do not appreciate an accountant's analysis in respect of financial accounting information generated. This may lead to poor decision being taken, poor valuation of a business entity and may affect the profitability & performance of the organization. Thus, this study seeks to show how accounting information (Earnings per Share (EPS), Return on Equity (ROE), Non-performing loan (NPL)), can be derived from corporate financial reports and their usefulness for lending decisions. On the other hand, help investors to determine the expected returns on their investment and variations if any, from one accounting period to another. To address this gap, this research seeks insight into ways of standardizing accounting information using variables from audited financial statement. The study formulates the following hypothesis in the null form which include:

**Ho<sub>1</sub>:** Earnings per Share (EPS) have no significant effect on Non-Performing Loan of quoted deposit money banks in Nigeria.

**Ho<sub>2</sub>:** Return on Equity has no significant effect on Non-Performing Loan of quoted deposit money banks in Nigeria.

This study focused on the fifteen (15) Deposit Money Banks listed on the Nigeria Stock Exchange. A ten-year period data from year 2008 to 2017 was analyzed. The choice of the ten-year period was informed by the quest to have a robust result. The year 2008 is considered as the base year because it marked the year the global financial crisis began, which started in the United States and eventually entangled the Nigerian financial sector.

## 2. REVIEW OF RELATED LITERATURE

### 2.1 Conceptual Review

#### Accounting Information

Merriam Webster dictionary defined accounting as the system of recording and summarizing business and financial transactions and analyzing, verifying and reporting the results. American dictionary defined accounting information as an electronic system containing all documents that a company uses to prepare financial statements and that one may use to defend against an audit. Dey 2007, defined accounting information as a unified structure within an entity, such as a business firm, that employs physical

resources and other components to transform economic data into accounting information, with the purpose of satisfying the information needs of a variety of users.

Beisland (2009), opined that one of the major objectives of financial reporting is to provide equity investors with information relevant for estimating company value.

Loan can be defined in its general term as a written or oral agreement for a temporary transfer of a property (usually cash) from its owner (the lender) to a borrower who promises to return it according to the terms of the agreement, usually with interest for its use.

Accounting plays a significant role within the concept of generating and communicating wealth of the companies. Financial statements still remain the most important source of externally feasible information on companies. Accounting Information is information which describes an account for a utility. It processes financial transactions to provide external reporting to outside parties such as to stockholders, investors, creditors, and government agencies et cetera. Non accounting information is information which cannot be measured in monetary terms to make investment decisions by the investors. This type of investment is called ethical investment. Financial information is essential in making sound investment decisions and it will reduce the informational asymmetry problem between the firm's managers and the investors (Hossain, Khan & Yasmin, 2014). Though the investors use non- financial information in order to make investment decisions, still conventional investors give more weight to financial information.

For financial reporting to be effective, accounting information must be relevant, complete and reliable. The primary purpose of the financial statements is to provide information about a company in order to make better decisions for users particularly the investors (Germon & Meek, 2011). It should also increase the knowledge of the users and give a decision maker the capacity to predict future actions.

#### **Earnings per Share (EPS)**

According to Ryan (2017), Earnings per share are generally considered to be the single most important variable in determining a share's price. It is also a major component used to calculate the price-to-earnings valuation ratio. It can also be seen as the portion of a company's profit allocated to each outstanding share of common stock. Earnings per share serve as an indicator of a company's profitability.

Calculated as:

$$= \frac{\text{Net Income} - \text{Dividends on Preferred Stock}}{\text{Average Outstanding Shares}}$$

When calculating, it is more accurate to use a weighted average number of shares outstanding over the reporting term, because the number of shares outstanding can change over time. However, data sources sometimes simplify the calculation by using the number of shares outstanding at the end of the period. Therefore, relevance accounting information can be described as an essential pre requisite for stock market growth (Oyerinde, 2009).

#### **Return on Equity (ROE)**

Return on equity (ROE) is a ratio that provides investors with insight into how efficiently a company (or more specifically, its management team) is managing the equity that shareholders have contributed to the company. It is sometimes called "return on net worth." The formula for ROE is:

$$\frac{\text{Net Income}}{\text{Shareholders' Equity}}$$

The numerator is net income, which is the bottom-line profit reported on a firm's income statement. Free cash flow (FCF) is another form of profitability and can be used in lieu of net income. The denominator shareholders' equity measures as assets minus liabilities on a firm's balance sheet and is the accounting value that is left for shareholders should a company settles its liabilities with its reported assets (Ryan, 2017).

#### **Non-Performing Loan**

The Central Bank of Nigeria through its Prudential Guideline (2010) mandated all licensed banks in Nigeria to review their credit portfolio continuously (at least once in a quarter) with a view to recognizing any deterioration in credit quality. According to the Guideline, Credit facilities (which include loans, advances, overdrafts, Commercial Papers, Bankers Acceptances, bills discounted, leases, guarantees, and other loss contingencies connected with a bank's credit risks) should be classified as either "performing" or "nonperforming" as defined below: Performing: According to the Guideline, a credit facility is deemed to be performing if payments of both principal and interest are up-to-date in accordance with the agreed terms.

A non-performing loan (NPL) is a sum of borrowed money upon which the debtor has not made the scheduled payments for a period of usually at least 90 days for deposit money bank loans and 180 days for consumer loans. Non-payment means there have been zero interest or principal payments made on the loan within a specified period. Banks normally set aside money to cover potential losses on loans (loan loss provisions) and write off bad debt in their profit and loss account. In some countries, banks that have accumulated too many NPLs are able to sell them on - at a discount - to specially established asset management companies (AMCs), which attempt to recover at least some of the money owed. Bank loans are regarded as risk assets. They are regarded as such because the monies advanced as loans by the banks belong to depositors and the risk arises in the sense that in case of massive defaults, depositors' monies may not be available on demand.

### Accounting Information and Lending Decisions

Accounting information is usually categorized under two groups: information that that facilitate decision making process and mostly used for coordination within an organization (Podpiera & Laurent, 2018). Peek and Eric (2015) argued that integration of accounting information leads to coordination in organisation, which in turn, increases the quality of the decision. Škarica, (2014) stated that accounting information should systematically provide effective information which has potential effects on decision making process and serve the requirements of the system users. Some researchers in accounting (Rauh & Amir, 2010; Salas & Saurina, 2012; Shih, 2014) show that the effectiveness of accounting information system depends upon the quality of the output of the information system that can satisfy the users' needs.

Evidence showed that both large as well as small banks use financial statement variables in making lending decisions (Columba, Chan-Lau & Torsten, 2012). However, though many researchers have been able to prove that use of financial statements is important in making lending decisions, the studies done have not validated financial statement importance by measuring whether use or non-use of financial statements has impact on Non-Performing Loans (NPLs). Majority of the studies done have been on the global determinants of NPLs which have been studied by different countries by different scholars such as Caballero, Takeo and Anil (2016), Bushman & Christopher (2012), Bloem and Gorter (2011). Studies carried out previously have indicated that information from financial statements play an important role in making lending decisions among banks in developed countries. Beck, Petr and Anamaria (2013) attribute the credit crunch in Mexico after the 1995 crisis partially to the bad loans. Since banks are more likely to be exposed to moral hazard and adverse selection when advancing loans to borrowers, credit assessment of loan is inevitable. This should be done with a clear mind that there is great potential that most borrowers default.

## 2.2 Theoretical Review

### 2.2.1 Theory of Market Value Relevance

Jianwei & Chunjiao, (2007) defined the concept of the value relevance of accounting information as the ability of accounting numbers to summarize the information underlying the stock prices, thus the value relevance is indicated by a statistical association between financial information and returns. Beisland (2009) opined that one of the major objectives of financial reporting is to provide equity investors with information relevant for estimating company value.

Non-Performing loans arises from the extension of credit facilities to customers (Inekwe, 2010). This exposes banks constantly to credit risk due to the possibility that the borrower will default. Usually banks try to avoid or minimize credit risk in their portfolio. Onyia and Oleka (2010), using Canons of good lending suggests various ways of evaluating the credit worthiness of a borrower, one of which is the 5Cs of credit; Character, Capacity, Capital, Collateral and Conditions. Also, Aremu, Suberu and Oke (2010) described three basic principles of evaluating credit as Safety, Suitability and Profitability. First, they maintained that the safety of any advance or loan is of utmost importance. Under this principle, the character, amount generated from cash flow and acceptable securities were equally emphasized. Secondly, they contended that the purpose of the loan must be legal and not conflicting with the economic and monetary policies of the government, Central Bank of Nigeria (CBN) guidelines and Banks and Other Financial Institutions Act (BOFIA). Finally, that profitability is a guiding force to any operation of the bank. They argue that as profit oriented institutions, banks usually expect their facilities to yield certain level of profit. For financial information to be value relevant, it is a condition that accounting numbers should be related to current company value because if there is no association between accounting numbers and company value, accounting information cannot be termed value relevant as financial reports are unable to fulfill their primary objectives (Barth, Beaver and Landsman, 2011).

This study is underpinned by the theory of market value relevance because it is pertinent to note that financial statements will only be employed by an investor when evaluating banking success or failures on the Stock Exchange Market. This can only be achieved if it provides useful information to investors. For this purpose, accounting information must certainly encompass the primordial features of relevance and reliability; to be acceptable and useful to investors. To this end, accounting information obtained from the financial statement will be redundant if either or none of the two qualitative features exist.

## 2.3 Empirical Studies

Osundina, Jayeoba, and Olayinka (2016) examined the impact of accounting information on stock price volatility on selected quoted manufacturing companies in Nigeria for a period of ten years (2005-2014). The study adopted an ex-post facto research

design as it relied on secondary source of data extracted from the annual reports of five quoted manufacturing companies and daily stock prices for these companies were sourced from the Nigerian Stock Exchange for the stated period. The data collected for the study were analyzed using Ordinary Least Square method of data estimation with the help of econometric views (E-views) software. The results of cross section fixed effect model show that accounting information has a strong positive significant impact on stock price volatility. It was therefore concluded that since accounting information has been found as one of the causes of stock price volatility, it is therefore the responsibility of management to ensure proper preparation and presentation of accounting information to enable potential investors make economic and investment decisions, as this will lead to less volatile stock price. The study recommends that proper regulation of accounting information should be put into place as accounting information has the ability to cause either an increase or decrease in the stock price of a company.

Epure and Lafuente (2012) examined bank performance in the presence of risk for Costa-Rican banking industry during 1998-2007. The results showed that performance improvements follow regulatory changes and that risk explains differences in banks and non-performing loans negatively affect efficiency and return on assets while the capital adequacy ratio has a positive impact on the net interest margin.

Ahmad and Ariff (2013) examined the key determinants of credit risk of Deposit Money Banks on emerging economy banking systems compared with the developed economies. The study found that regulation is important for banking systems that offer multi-products and services; management quality is critical in the cases of loan-dominant banks in emerging economies. An increase in loan loss provision is also considered to be a significant determinant of potential credit risk. The study further highlighted that credit risk in emerging economy banks is higher than that in developed economies.

Muhammad and Kashif (2016) examined the relationship between accounting information and share price. In order to achieve this, a model that includes specific accounting ratios (earning per share, book value per share, capital employed per share and operating cash flow per share) and shares a price is developed. The data were collected from the companies listed in KSE-30 index. The time frame spans from 2006 to 2013 and OLS regression models were used to examine the relationships. The resulting evidence suggests that accounting information parameters have significant influence on share price and they have joint explanatory power in determining stock prices.

Ijeoma (2015) examined the value relevance of accounting information in Nigeria in order to ascertain whether certain accounting variables affect share prices on the Nigerian capital market. The population of the study comprises of 200 firms but due to non-availability of data of all listed firms, a sample of 120 listed firms was used during the period 2001-2013. Data of share, book value per share, earnings per share and return on equity were sourced from the Nigerian Stock Exchange fact book and the Ordinary Least Square estimation technique was used in analyzing the data obtained from the Nigerian Stock Exchange fact book with the aid of Statistical Package for Social Sciences. The study indicated a significant relationship between earnings, book value, returns on equity and share prices of listed firms on the Nigerian Stock Exchange. The implication of the findings is that certain variables of accounting play a significant role in share price in the capital market, thus accounting information is value-relevant in Nigeria. Based on the findings, it was recommended amongst others that listed firms on the Nigerian Stock Exchange should prepare Simplified Investors' Summary Accounts (SISA) with emphasis on the most widely used accounting information along with the mandatory detailed financial statements to suit Nigerian peculiarities. In addition, the National accounting standard setters and preparers of accounting information should gear effort towards improving the quality of "earnings information" in financial statements. This could be done by properly defining and reducing earnings management so as to avert room for creative accounting where managers engage in the practice of manipulative earnings.

Fadia and Mohammad (2015) examined whether developments in financial reporting environment following the adoption of IFRS resulted in more relevant financial information over time. This study uses a quantitative methodology in addressing the research questions. The relevance of fair value has been tested by studying the effect of fair value measurement applications for investment properties on the financial performance of Jordanian firms, its share prices and market values, the study also examined the effect of unrealized gains and losses on financial statements. Ohlson (1995) theoretical frameworks have been used to examine this relationship. A sample of Jordanian firms (consisting of 41 real estate companies) listed in the Amman stock exchange during the 2008–2011time period has been used. The findings, based on the results of multiple regression analysis showed that financial performance of Jordanian real estate companies is significantly positively related to investment properties valued at fair values. Furthermore, the book value incremental information content is greater than information content of the net income and the unrealized gain & losses inclusion in owners' equity increases the explanatory power of the firm's market value model of real estate companies. The study concludes that fair value accounting measurements for Jordanian real estate companies have been value relevant during all the period of the study.

Udayan, Bhavik and Shailja (2014) empirically analyzed the relationship between accounting information and stock price with a few accounting information indexes. The results, based on 25 listed Oil and Gas companies in National Stock Exchange for 2013-2014, reveal: (1) positive relationship exists between accounting information and stock price, but the significant degree varies; (2)

earnings per share has the most significant correlation. Evidence from research on these topics is likely to be helpful in capital market investment decisions, accounting standard setting, and corporate financial disclosure decisions.

Kargi (2011), evaluated the impact of credit risk on the profitability of Nigerian banks. Financial ratios as measures of bank performance and credit risk were collected from the annual reports and accounts of sampled banks from 2004-2008 and analyzed using descriptive, correlation and regression techniques. The findings revealed that credit risk management has a significant impact on the profitability of Nigerian banks. It concluded that banks' profitability is inversely influenced by the levels of loans and advances, non-performing loans and deposits thereby exposing them to great risk of illiquidity and distress.

Glezakos, Mylonakis, and Kafouros (2012) studied the influence of certain accounting information on the path of shares price. They examined the relationship of profit per share and book-value and shares value. The sample size was 38 listed companies in the Athens Stock Market amid the 1996-2008 periods. They concluded that the EPS and book-value significantly influence on the share price. The investors of Athens are more focused on financial data of companies.

Pushpa and Sumangala (2012) studied the use of accounting information for equity valuation. A number of accounting variables have been used to explain equity value and equity return. Earning is an important variable affecting the market value of equity share. Once a successful company starts building up reserves it will also look for expanding its scale of operations and thus increase its earnings. Once a company starts earning attractive sum, the equity share will have more and more demand which will result in increase in market value of the equity. The study examined the impact of Earnings per share (EPS) on the market value of an equity share in the Indian context. The study is based on data of 50 companies over a period of 5 years. The 50 companies that have been selected are the first 50 companies in the list of India's most valuable companies as per the Business Today Survey of 2010. Based on our research, we conclude that EPS impacts the market value of an equity share in the Indian context.

### 3. DESIGN AND METHODOLOGY

The study adopted ex-post facto research design in conducting the research. Ex-post facto involves a systematic empirical inquiry, in which an observer has no direct control of independent variables because their manifestations have already occurred or because they are inherently not manipulated.

The population for this study consists of the fifteen (15) deposit money banks listed on the Nigerian Stock Exchange as at 31<sup>st</sup> December, 2017. The study relied on panel data obtained from published financial statement of fifteen (15) deposit money banks for the studied period 2008 to 2017.

The data were analyzed using Pearson correlation and simple regression technique with the aid of Stata 13 to ascertain the direction and strength of the relationship between the variables of the study.

#### 3.1 Model Specification

In the empirical models, non-performing loan is a linear function of earnings per share and return on equity. Three simple linear regression models are developed. Significant (positive or negative) estimates of regression co-efficient for the accounting variables indicate the relationship between the variables. The equations are as follows:

$$NPL_{it} = \beta_0 + \beta_1 EPS_{it} + \xi_{it} \quad \text{equ (1)}$$

$$NPL_{it} = \beta_0 + \beta_3 ROE_{it} + \xi_{it} \quad \text{equ (2)}$$

Where:

$NPL_{it}$  = non-performing loan for firm  $i$  at the end year  $t$

$EPS_{it}$  = earnings per share for firm  $i$  at the end of year  $t$

$ROE_{it}$  = return on equity for firm  $i$  at the end of year  $t$

$\xi$  = error term (part of the non-performing loan which is not interpreted by the model)

$\beta_0$  = the intercept

$\beta_1$  is coefficient of earning per share (EPS)

$\beta_2$  is coefficient of return on equity (ROE)

**Table 1: Description of Research Variables**

Variables	Definition	Measurements
<b>Dependent Variables</b>		
NPL	Non-performing loan	NPL ratio is to divide the NPL total by the total amount of outstanding loans in the bank's portfolio.
<b>Explanatory Variables</b>		
EPS	Earnings Per Share	Earnings per share measured as

		earning divided by outstanding ordinary Shares
ROE	Return on Equity	Return on Equity is measured as Net Income Shareholder Equity multiply by 100

**4. Data Presentation and Results**

**4.1 Descriptive Statistics**

**Table 2 Pearson Correlation Matrix**

\*(6 variables, 150 observations pasted into data editor)

. correlate npl eps roe

(obs=150)

```

      |   npl   eps   roe
-----+-----
npl | 1.0000
eps | 0.0879 -0.0051 1.0000
roe | 0.0202 -0.0796 0.1293 1.0000
    
```

Source: E-Views 9.0 Correlation Output, 2018

Table 2 indicates that there is a positive relationship between EPS (0.0879), ROE (0.0202) and NPL.

**4.2 Test of Hypotheses**

**4.2.1 Test of Hypothesis I**

**H<sub>0</sub>1:** Earnings per Share (EPS) has no significant effect on Non-Performing Loan of quoted deposit money banks in Nigeria.

**H<sub>1</sub>1:** Earnings per Share (EPS) has significant effect on Non-Performing Loan of quoted deposit money banks in Nigeria.

**Table 3 Simple Linear Regression Analysis showing the effect of Earnings per Share on Non-Performing Loan**

. regress npl eps

```

Source |   SS   df    MS       Number of obs =   150
-----+-----
Model | .017307238   1 .017307238   F( 1, 148) =   6.15
Residual | 2.22272212  148 .015018393   Prob > F   =  0.0076
-----+-----
Total | 2.24002936  149 .015033754   R-squared   =  0.3047
                                           Adj R-squared =  0.2710
                                           Root MSE   =  .12255

-----+-----
npl |   Coef.  Std. Err.   t   P>|t|   [95% Conf. Interval]
-----+-----
eps | .0407044 .0379175   3.07  0.008   .1156339   .0342251
_cons | .0796187 .0227101   3.51  0.001   .0347407   .1244967
    
```

**Interpretation of Regression Result**

The value of the R-squared in table 3 showed that 30% of the total variation in dependent variable is explained by independent variable to the determination of non-performing loans while the remaining 70% is caused by other explanatory factors outside this model and this is captured by the error term. The overall performance of the model is satisfactory as shown by Prob(F-statistics) = 0.0076. From the above analysis, there is a positive relationship between non-performing loan and earnings per share.

**4.2.2 Test of Hypothesis II**

**Ho<sub>3</sub>:** Return on Equity has no significant effect on Non-Performing Loan of quoted deposit money banks in Nigeria.

**H<sub>3</sub>:** Return on Equity has significant effect on Non-Performing Loan of quoted deposit money banks in Nigeria.

**Table 4 Simple Linear Regression Analysis showing the effect of Return on Equity on Non-Performing Loan**

. regress npl roe

Source	SS	df	MS	Number of obs = 150		
-----+-----				F( 1, 148) = 9.06		
Model	.000912861	1	.000912861	Prob > F = 0.0000		
Residual	2.2391165	148	.015129166	R-squared = 0.3404		
-----+-----				Adj R-squared = 0.3163		
Total	2.24002936	149	.015033754	Root MSE = .123		
-----						
npl	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
-----+-----						
roe	.000027	.0001097	4.25	0.000	.0001899	.0002438
_cons	.0574169	.0101253	5.67	0.000	.0374081	.0774256
-----						

Source: Researcher’s computation using STATA 13, 2018

**Interpretation of Regression Result**

The value of the R-squared in table 4 showed that 34% of the total variation in dependent variable is explained by independent variable to the determination of non-performing loans while the remaining 66% is caused by other explanatory factors outside this model and this is captured by the error term. The overall performance of the model is satisfactory as shown by Prob(F-statistics) = 0.0000. From the above factual information, it is clearly obvious that there is a positive relationship between non-performing loan and return on equity.

**Decision:**

This research concludes that return on equity has a significant positive effect on non-performing loans of quoted deposit money banks in Nigeria at 5% level of significance.

**4.4 Discussion of Findings**

The results of the empirical analysis in tables 2, 3 and 4 evidenced that accounting information has a significant positive effect on lending decisions at 5% level of significance. This study showed that there is strong evidence that lending decisions (measured by nonperforming loan) are influenced by EPS and ROE. The results of this study are coherent with the corresponding results of many relevant empirical studies, which were carried out in several stock markets of developed and developing countries. In line

with the findings of this study is the study conducted by Osundina, Jayeoba and Olayinka (2016) on the impact of accounting information on non-performing loan on selected quoted manufacturing companies in Nigeria for a period of ten years (2005-2014). Also, Glezakos, Mylonakis, and Kafouros (2012) in their study- the influence of certain accounting information on the path of shares price found positive result. Pushpa and Sumangala (2012) found positive result in the study- the use of accounting information for equity valuation. The study recommends that proper regulation of accounting information should be put into place as accounting information has the ability to cause either an increase or decrease in the stock price of a company.

## CONCLUSION AND RECOMMENDATIONS

Since non-performing loans are influenced by earnings per share and return on Equity of deposit money banks in Nigeria, banks should adopt ethical standards in the preparation and presentation of their accounting information in order to increase their accounting earnings, they should also collect and perfect all collaterals which are used for obtaining loans. The collateral should be more than the value of loan approved, in case of default. More so, there is need for the Central Bank of Nigeria(CBN) and other regulatory bodies to strengthen supervision of banks to prevent a sharp buildup of NPLs in the future. They should also maintain high surveillance on banks' credit operations.

## REFERENCES

- Aremu, O. S., Suberu, O. J. & Oke, J. A. (2010). Effective Credit Processing and Administration as a Panacea for Non-Performing Assets in the Nigerian Banking System. *Journal of Economics*, 1 (1): 53- 56.
- Barth, M.E., Beaver, W.H., & Landsman, W.R. (2011). The relevance of the value relevance literature for financial accounting standard setting: another view. *Journal of Accounting and Economics*, 31.
- Beck, R., Petr, J., & Anamaria, P. (2013). Non-performing loans: What matters in addition to the economic cycle? *ECB Working Paper Series* (2013).
- Beisland, L.A. (2009). A review of the value relevance literature. *The Open Business Journal*, 2(1), 76-89.
- Beisland, L.A. (2009). A review of the value relevance literature. *The Open Business Journal*, 2.
- Bloem, A.M., & Gorter. C. (2011). The treatment of nonperforming loans in macroeconomic statistics. *IMF Working Paper No. 1/209* (2011).
- Bushman, R.M., & Christopher, D.W. (2012). Accounting discretion, loan loss provisioning, and discipline of banks' risk-taking. *Journal of Accounting and Economics*, 54(1), 1-18.
- Caballero, R.J., Takeo, H., & Anil, K.K. (2016). Zombie lending and depressed restructuring in Japan. *National Bureau of Economic Research* (2006) 1943-1977.
- CBN (2010). Prudential Guidelines for Deposit Money Banks, Central Bank of Nigeria.
- Columba, F., Chan-Lau, J.A., & Torsten, W. (2012). Dynamic loan loss provisioning: Simulations on effectiveness and guide to implementation. *IMF Working Paper WP/12/110*.
- Dey (2007); Measuring Stock market volatility in an emerging economy. *International Research Journal of Finance & Economics* 8,126-133.
- Epure, M. and Lafuente, I. (2012). Monitoring Bank Performance in the Presence of Risk, Barcelona GSE Working Paper Series No.61.
- Fadia B., Ahmad, A., & Mohammad S. A. (2015). The effect of fair value accounting on Jordanian investment properties. *International Journal of Financial Research* 6(4), 1-13.
- Francis J., Schipper, K. (2017). Have financial statements lost their relevance. *Journal of Accounting Research*, 37, 319-352.
- Germon, H., & Meek, G. (2011). *Accounting: An international perspective*. McGraw Hill.
- Glezakos, M., Mylonakis, J., & Kafouros, C. (2012). The impact of accounting information on stock prices: Evidence from the Athens Stock Exchange. *International Journal of Economics and Finance*, 4(2), 21-41.
- Hossain, D. M., Khan, A., & Yasmin, I. (2014). The nature of voluntary disclosures on human resource in the annual reports of Bangladeshi companies. *Journal of Business Studies*, 25(1), 221-231.
- Ijeoma N. B. (2015). Value relevance of accounting information on share prices of listed firms. *Social and Basic Sciences Research Review*, 3(10), 328-344.
-

- Jianwei, L., & Chunjiao. (2007). Testing value relevance of accounting earnings in emerging markets. *Journal of International Accounting Research*, 6(2), 121-129.
- Jinbu, Z., & Yutao, W. (2016). Accounting information quality, governance efficiency and capital investment choice. *China Journal of Accounting Research* 9, 251–266.
- Junjie W., Gang F., & Chao L. (2013). Accounting information and stock price reaction of listed companies: Empirical evidence from 60 listed companies in Shanghai Stock Exchange. *Journal of Business & Management* 2(2), 11-21.
- Kargi, S. (2011). Credit Risk and the Performance of Nigerian Banks. Ahmadu Bello University, Zaria, Nigeria.
- Mazhar H. & Arshad H. (2010). Accounting information and abnormal returns: An empirical evidence of Pakistani Stock Market. *International Journal of Arts and Commerce*. 1(2), 23-36.
- Meyer, C. (2007). Shareholder value accounting-the value relevance of financial statements data and the determinants of accounting methods choices. <http://www.research.unizh.ch>. (06.03.2010).
- Mgbame, C.O., & Ikhatua, J.I. (2013). Accounting information and stock price volatility in the Nigerian capital market: A garch analysis approach. *International Review of Management and Business Research*, 2(1).
- Muhammad, A. & Kashif, A. (2016); Impact of accounting information on share price: Empirical Evidence from Pakistan Stock Exchange. *International Finance and Banking*, 3(1), 124-135.
- Okafor, C.A., & Mgbame, C.O. (2011). Dividend policy and share price volatility in Nigeria. *Journal of Research in National Development*, 9(1).
- Olugbenga, A.A., & Atanda, O.A. (2014). Value relevance of financial accounting information of quoted companies in Nigeria: A trend analysis. *Research Journal of Finance and Accounting*, 5(8), 65-72.
- Osundina, J. A., Jayeoba, O.O., & Olayinka, I.M. (2016). Impact of accounting information on stock price volatility (a study of selected quoted manufacturing companies in Nigeria). *International Journal of Business and Management Invention*, 5(11), 41-54.
- Oyerinde, D.T. (2009). Value relevance of accounting information in emerging stock market in Nigeria. *Proceedings of the 10th Annual International Conference. International Academy of African Business and Development (IAABD)*, Uganda.
- Ozurumba B. A. (2016). Impact of Non-Performing Loans on the Performance of Selected Commercial Banks in Nigeria: *Research Journal of Finance and Accounting*, 7(16).
- Paul, A.A., & Juliana, M. (2015). Relationship between accounting information and stock market returns on the Nigerian Stock Exchange. *Management and Administrative Sciences Review*, 4(1), 45-67.
- Peek, J., & Eric, R. (2015). Bank regulation and the credit crunch. *Journal of Banking & Finance* 19(3) 679-692.
- Podpiera, J., & Laurent, W. (2018). Bad luck or bad management? Emerging banking market experience. *Journal of Financial Stability* 4(2), 135-148.
- Pushpa B. & Sumangala J.K. (2012). Impact of earnings per share on market value of an equity share: An empirical study in Indian capital market. *Journal of Finance, Accounting and Management*, 3(2), 1-14.
- Rauh, J.D., & Amir, S. (2010). Capital structure and debt structure. *Review of Financial Studies* 095 (10), 324-344.
- Ryan C.F. (2017). *How do you calculate return on equity (ROE)? Investopedia* <http://www.investopedia.com/ask/answers/070914/how-do-you-calculate-return-equity-roe.asp#ixzz4eir3tKi1>. Retrieved 24/3/2017.
- Salas, V., & Saurina, J. (2012). Credit risk in two institutional regimes: Spanish commercial and savings banks. *Journal of Financial Services Research* 22(3), 203-224.
- Seetharaman, A., & Raj, J.R. (2011). An empirical study on the impact of earnings per share on stock prices of a listed bank in Malaysia. *The International Journal of Applied Economics and Finance*, 5(3), 102-114.
- Shih, V. (2014). Dealing with non-performing loans: Political constraints and financial policies in China. *The China Quarterly* 180 (4), 922-944.
- Škarica, B. (2014). Determinants of non-performing loans in Central and Eastern European countries. *Financial Theory and Practice*, 1(1), 37-59.
-

- Udayan, S.K., Bhavik U.S., & Shailja C.T. (2014). Accounting information and stock price reaction of listed companies: Empirical evidence from all listed companies from NSE in oil and gas sector. *International Journal of Research & Development in Technology and Management Science*, 21 (5), 1-11.
- Vishnani S., & Shah B.K. (2018). Value relevance of published financial statements- with special emphasis on impact of cash flow reporting, *International Research Journal of Finance and Economics*, 17, 84-90.
- Zhu, W. X. (2013). The information of stock price in response to the volume of circulating common stocks. *China Soft Science*, 2003(2), 44-47.