

## IMPACTS OF INTERNAL AND EXTERNAL FACTORS ON PROFITABILITY OF BANKS IN NIGERIA

**Shuaib Ndagi Sayedi**

Department of Business Administration, Faculty of Management and Social Sciences,  
Ibrahim Badamasi Babangida University, P.M.B II, Lapai – Niger State, Nigeria

**CITATION:** Sayedi, S. N. (2014). Impacts of internal and external factors on profitability of banks in Nigeria. *International Journal of Social Sciences and Entrepreneurship*, 1 (9), 1-21.

### ABSTRACT

The profitability of banks is measured by internal and external factors. The former is bank-specific (controllable) and the latter is industrial/macroeconomic (uncontrollable) factors. The objectives of the study were to examine the impacts of liquidity, market power and interest rate on the profitability of banks in Nigeria. The population of study is fifteen (15) quoted Deposit Money Banks in the Nigerian Stock Exchange (NSE). Data are collected from secondary source of the quoted banks' annual reports (2006 – 2011). Linear regression is used as tool of the analysis of the study. The empirical results of model one show that market power has significant positive impact on profitability (ROA). Liquidity has insignificant positive impact on profitability (ROA) while interest rate has insignificant negative impact on profitability (ROA). The model two results indicate that market power has insignificant positive impact on profitability (ROE). liquidity has significant positive impact on profitability (ROE) while interest rate has insignificant negative impact on profitability (ROE). The study recommends that banks managements should increase and maintain their market share known as market power. The reason is that, a rise in market power has impact on profitability despite insignificant positive impact of market power on banks profitability (ROE). Secondly, maintain and increase liquidity level because a rise in liquidity has impact on profitability despite insignificant positive impact of liquidity on banks profitability (ROA). Lastly, adequately anticipate interest rates fluctuations. This is because stable and increase interest rates add value to profitability despite significant negative impact of interest rate on the profitability of banks in Nigeria.

**Key Words:** *Liquidity, Market Power, Interest Rate, ROA and ROE*

### Introduction

Banks are part and parcel of financial intermediaries that mobilize savings from surplus economic units to deficit economic units. They are also considered to be special financial intermediaries that mobilize funds between depositors and borrowers participating in an economy (Heffernan, 1996 in Yuqi, 2008). How well they perform this intermediary function has direct linkage with banks profitability and economic health of a nation. Profitability of banks has effects on growth and

development of an economy. Because of this reason, banking regulatory authorities in many nations worldwide came up with various banking reforms agenda with specific emphasis on variables determining banks profitability.

Banking industries had experienced major reforms worldwide for over three decades now in their operating environments. United Kingdom responded to its banking crisis which spanned between 1973 and 1976 through the consolidation of banking industry and conversion of building societies into banks; United States of America responded to its banking crisis which spanned between 1982 and 1990 by consolidation through mergers and acquisitions; Spain responded to its banking crisis by establishment of the bank hospital known as the Guarantee fund; and Malaysia responded to its banking crisis by major banking consolidation exercises in 1999 with gradual removal of the barrier to the entry of foreign banks (Dogarawa, 2006, Karwai, 2006 and Yuqi, 2008).

Nigerian banking industry is not exempted from the reforms agenda. This is because, since the establishment of the Central Bank of Nigeria (CBN) in 1958 which commenced its banking business in 1959, the Nigeria banking industry had been affected by major economic and banking reforms. These reforms include the financial system reforms (1986 - 1993), re-introduction of banking sector regulation (1993-1998), universal banking (2001-2004) and the banking reform of 2004 to date (Sanusi, 2010 and Egwurube, 2012).

The Nigerian banking reform of 2004 had listed thirteen items to transform the industry. Banking capitalization, mergers and acquisitions are among items of the reform agenda in order to boost capital adequacy and profitability of banks operating in Nigeria environment (Soludo 2004). The profitability of banks may be determined by Return on Assets (ROA), Return on Equity (ROE) and Net Interest Margin (NIM). Capital adequacy makes banks to be liquid and profitable. This capital adequacy is not the only proxy that may improve the profitability of banks, other proxies such as liquidity, market power and interest rate are equally important. These proxies are classified into internal and external factors. The internal factors (controllable) are bank specific while external factors (uncontrollable) are industrial/macroeconomic factors.

### Research Questions

1. To what extent does liquidity has impact on the profitability of banks in Nigeria?
2. To what extent does market power has effect on the profitability of banks in Nigeria?
3. To what extent does interest rate has influence on the profitability of banks in Nigeria?

### Research Objective

The main objective of this study is to determine the impacts of internal and external factors on the profitability of banks in Nigeria. Specifically, the study intends to determine the effect of:

1. Liquidity on the profitability of banks in Nigeria.
2. Market power on the profitability of banks in Nigeria.
3. Interest rate on the profitability of banks in Nigeria.

## Research Hypothesis

HO<sub>1</sub>: Liquidity has no significant impact on the profitability of banks in Nigeria.

HO<sub>2</sub>: Market power has no significant impact on the profitability of banks in Nigeria.

HO<sub>3</sub>: Interest rate has no significant impact on the profitability of banks in Nigeria.

## Literature Review

### Liquidity

Liquidity is ability to provide money on demand. Bank liquidity is ability to meet customers demand and provide advances in the forms of loans and overdrafts. Liquidity is also banks' cash and cash equivalent such as commercial paper, treasury bills, etc. Anyanwu (1993) sees liquidity as assets readily convertible to cash without loss and ability to pay depositors on demand. Shim and Siegel (2007) define liquidity as a company's ability to meet its maturing short-term obligations and if liquidity is insufficient serious financial difficulty may occur. Poor liquidity is analogous to a person having a fever; it is a symptom of a fundamental problem. Golin (2001) in Yuqi (2008) states that liquidity is a risk not having sufficient current assets (cash and quickly saleable securities) to satisfy current obligations of depositors especially during the time of economic stress. Therefore, without required liquidity and funding to meet obligations, a bank may fail. Pandey (2010) posits that liquidity is current assets which should be managed efficiently to safeguard the firm against the risk of illiquid. Lack of liquidity in extreme situations can lead to the firm's insolvency. He further state that conflict exists between liquidity and profitability. If the firm does not invest sufficient fund in current assets, it may become illiquid which is risky. It may lose profitability if some idle current assets do not earn anything. Hence, insufficient liquidity is one of the major reasons of bank failure. Liquidity is necessary to enable banks providing funds on demand and credits needed by customers which are associated with the default risk.

### Market Power

Market power known as market share is how a bank is leading an industry. Market power is defined as how much profit a bank earns in relation to other banks operating in an industry. It is also profit of individual bank over profits of banks operating in an industry. Flamini *et al.* (2009) view market power as individual bank's loan over banking industry loan to domestic private sector.

### Interest Rate

Interest is the excess money received or paid on money lent or borrowed. Interest can also be defined as money paid above the principal either on simple system or compounding system. Interest rate is the minimum or maximum deposit/lending rates by the end of the year in apex bank financial statement (Yuqi, 2008 & Ramlall 2009).

### Related Empirical Literatures on Banks Profitability

Literatures on variables determining the profitability of banks are not far fetched. In Asia, Sufian (2011) also investigated the profitability of 251 Korean banks from 1992 to 2003. The study used panel data, multiple regression models and econometric statistical package. The regression results indicate that liquidity and inflation have significant positive effects on profitability. Bank size and capital have insignificant positive effects on profitability while credit risk and GDP have insignificant negative effects on profitability measured by Return on Equity (ROE). Ali, Akhtar and Ahmed (2011) examined the bank specific and macroeconomic indicators of 22 public and private sector commercial banks profitability in Pakistan from 2006 to 2009. The research made use of multiple regression models and panel data estimation with the help of SPSS statistical package. The findings show that bank size, operating efficiency, asset management and GDP have positive effect on banks' profitability. However, capital and credit risk have negative effect on banks profitability in Pakistan. The study recommended that the results will be of value to both academics and policy makers. Gul, Irshad and Zaman (2011) studied the factors affecting samples of 15 commercial banks profitability in Pakistan from 2005 to 2009. The investigation utilized a regression model, panel data estimation and Pooled Ordinary Least Square (POLS) method of computation with the aid of an econometric package. The econometric result indicates that bank size and capital adequacy have significant negative influences on profitability while capital and GDP have significant positive influences on profitability measured by Return on Equity (ROE).

Furthermore, Gilchris (2013) examined the influence of bank specific and macroeconomic factors on samples of 25 commercial banks profitability from 2007 to 2011 in Pakistan. The regression results indicate that bank size, net interest margin, and industry production growth rate have significant positive impact on the profitability (ROA and ROE). Non-performing loan to total advances and inflation have significant negative impact on ROA while GDP has positive impact on ROA. Capital ratio has positive significant impact on ROE. Saidu and Tumin (2011) investigated the performance and financial ratios on samples of four Malaysian and nine Chinese commercial banks from 2001 to 2007. The research made use of panel data and the regression results show that credit, capital and operating ratios have influence on the performance of banks in China which is not true for Malaysia. Liquidity and size of the banks do not influence the performance of the banks in both countries. Hasan, Shaari, Palanimally and Haji-Mohamed. (2013) studied impact of macroeconomic and bank specific components on the Return on Equity (ROE) of a Malaysian bank from 2004 to 2012. The estimation result shows that the operating efficiency ratio, liquidity ratio, consumer price index and financial crisis are inversely affecting the bank profitability in Malaysia.

In Middle East, Srairi (2009) examined factors influencing the profitability of Conventional and Islamic commercial banks in Gulf Cooperation Council (GCC) countries of Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and United Arab Emirates (UME). The study was conducted on samples of 66 commercial banks (48 conventional and 18 Islamic) for period ranging from 1999 to 2006. The study utilized regression model and panel data inputted in SPSS package. The

empirical results indicate that liquidity and credit risk have a significant positive impact on Conventional banks' profitability. But, liquidity and credit risk have insignificant negative impact on Islamic banks' profitability. Moreover, Capital adequacy, bank concentration, money supply and banking sector GDP have significant positive influence on both Conventional and Islamic commercial banks' profitability. Inflation has insignificant influence on the profitability of all banks operating in GCC countries. King Fahd University (2010) also studied profitability of 44 Islamic banks operating in GCC region from 2000 to 2009. The regression results show liquidity has insignificant positive impact on banks' profitability but inflation and GDP have significant positive impact on Islamic banks profitability in GCC countries. Khrawish, Siam and Khrawish (2011) investigated the determinants on samples of three Jordan Islamic banks profitability from 2005 and 2009. The multiple linear regression results show that bank size and exchange rate have significant positive relationships with profitability. But, capital, credit risk, GDP and inflation have significant negative relationships with profitability measured by ROE. Almumani (2013) studied Impact of managerial factors on samples of 13 commercial bank profitability from 2005 to 2011 in Jordan. The study uses endogenous factors such as cost efficiency, liquidity, credit composition, credit risk, capital adequacy and bank size in determining bank profitability. The descriptive statistics, Pearson correlation and regression results indicate that the cost income ratio is the major endogenous factors significantly determine bank profitability. However, liquidity, credit composition, credit risk, capital adequacy and bank size significantly do not determine bank profitability in Jordan.

In Europe, Yuqi (2008) examined the determinants of 123 United Kingdom (UK) banks profitability and its implication on risk management from 1999 to 2006. The study utilized multiple regression models and panel data estimation inputted in STATA econometric package. The econometric results indicate capital adequacy has significant positive impacts on profitability but inflation has insignificant positive impact on profitability. Liquidity and credit risk have significant negative impacts on profitability though; GDP and interest rate have insignificant negative impacts on the profitability of banks in UK. Coffinet, Lin and Martins (2010) studied stress in testing banks profitability in France from 1993 to 2008. The study utilized multivariate regression model and dynamic panel estimation using econometric statistical package. The result shows GDP, inflation, non-interest income and capital have positive effect on banks' profitability. Though, banks size and credit risk have negative effect on banks' profitability in France. Antonina (2011) investigated the determinant on samples of largest 10 banks (Domestic and foreign ownership) profitability in Ukraine from 2005 to 2009. The study used panel data estimation with the aid of STATA statistical package. The econometric results reveal that capital and bank size have significant positive effects on bank profitability but exchange rate has insignificant positive effect on profitability. Credit risk, inflation and foreign ownership of banks have significant negative effects on banks profitability while administrative expenses, liquidity and GDP have insignificant negative effects on the profitability of banks in Ukraine. Poposka and Trpkoski (2013) examined Macedonian banking sector profitability from 2001 to 2012. Econometric model and secondary data were utilized. The

multiple regression results show that adequacy ratio, capital and reserves/total assets, highly liquid assets/total assets, non-performing loans/total loans, net-interest income/gross income and personnel costs/non-interest expenses are significant in determining the profitability banks. Though, GDP growth rate, loans to population/gross loans and business loans/gross loans are statistically insignificant in determining the profitability (ROA and ROE) of banks in Macedonia.

In America, Tregenna (2009) investigated fat years of the structure and profitability of USA bank sector in the pre-crisis period from 1994 to 2005. The investigation used linear regression model, panel data estimation technique and Generalized Method of Moment (GMM) technique with the aid of econometric package. The regression result indicates that bank concentration, market power and bank size increase banks' profitability. However, operational efficiency is not a strong determinant of banks' profitability in USA. Graham and Bordeleau (2010) also study impact of liquidity on 55 sampled USA and 10 Canadian banks from 1997 to 2009. The regression result shows profitability of some banks that hold liquid asset improved. However, there was a point at holding further liquid assets diminish the banks' profitability.

In Africa, Flamini, McDonald and Schumacher (2009) studied the determinants of 389 commercial banks profitability in 41 Sub-Saharan Africa (SSA) countries from 1989 to 2006. The investigation utilized linear regression model, unbalanced panel data and Granger causality test between the data of dependent and independent variables. The results show that apart from credit risk, higher return on assets (profits) are associated with large bank size, activity diversification, and private ownership. Furthermore, banks' profits are affected by macroeconomic variables or determinants such as inflation. The study supported macroeconomic policies that promote low inflation and stable output growth which boost credit expansion. Buyinza (2010) was on samples of 23 commercial banks profitability in Sub Sahara Africa countries from 1999 to 2006. The study utilized panel data and the regression results reveal that capital, efficient expenses management, bank size, credit risk, diversified earning ability of the banks, per capital GDP, growth rate and inflation have significant and positive impact on banks' profitability. Rachdi (2013) examined what determines the profitability of banks during and before the international financial crisis. The study samples 10 Tunisian banks from 2000 to 2010. The regression results indicate that, before the US subprime crisis, capital adequacy, liquidity, bank size and yearly real GDP growth affect positively the performance (ROA, ROE and NIM) of Banks. However, cost-income ratio, yearly growth of deposits and inflation rate are negatively correlated across all measures of bank profitability. In crisis period, bank profitability is mainly explained by operational efficiency, yearly growth of deposits, GDP growth and inflation.

In Nigeria, Sabo (2007) investigated the determinants on samples of 10 commercial banks profitability from 1996 to 2005. The study utilized panel data of primary source and descriptive statistic for analysis. The investigation found that the volume of operations more than any other factor determined the operating profits. Moreover, market capitalization, peer group ranking and combination of other important factors such as macroeconomics environment determined commercial banks' profitability in Nigeria. The investigation calls for more commitment to



training and model development based on the internal peculiarities of banks on study. However, the study was conducted using primary data prior to 2004 banking reform on samples of 10 commercial banks in Nigeria. Ani, Ugwunta, Ezeudu and Ugwuanyi, (2012) studied internal determinants on samples of 15 bank profitability from 2001 to 2010 in Nigeria. The regression result shows that bank size has insignificant negative relationship with profitability and capital has significant negative relationship with profitability. Besides, bank composition has significant positive relationship with profitability in Nigeria. This study used data before and after bank recapitalization policy of 2004. After recapitalization policy, banks assets were more than double and it is on just to include data before the year 2005 in determining banks profitability in Nigeria. Likewise, John and Oke (2013) investigated capital adequacy before and after banks recapitalization policy of 2004 in Nigeria. The study sampled 6 banks covering the period of 2003 to 2007. The ordinary least squares (OLS) estimation technique result indicates that capital adequacy influences bank performance (EPS and PAT). The study recommends that CBN should not rely solely on the capitalization of banks as a determinant of bank performance but also should concentrate on efficient and effective bank supervision and risk management. But, the study used pre and post consolidation data ranging from 2003 to 2007, and data of defunct banks (Intercontinental Bank and Oceanic bank) in Nigeria. In addition, bank industrial specific characteristics and macroeconomic factors are not used as variables of the study. Bosede, Olusegun and Olubukunola (2013) examined Return on Investment (ROI) of 24 DMBs from 1977 to 2010 in Nigeria. The econometric model and Eviews software results indicate that returns and profitability of commercial banks are significantly affected by macroeconomic variables (inflation, output growth, lending rate) and other bank characteristic factors such liquidity. Nevertheless, the study utilized pre and post consolidation data ranging from 1977 to 2010, and all sampled banks are not quoted in NSE. Aremu, Ekpo, and Mustapha (2013) studied determinants of a bank profitability in a developing economy from 1980 to 2010 in Nigeria. The results of the econometric model indicate that liquidity, credit risk and capital adequacy are significant drivers of bank profitability. But bank size and cost efficiency are insignificant factors that determine banks profitability. On macroeconomics factors, money supply growth rate significantly determine bank profitability while GDP and inflation insignificantly determine bank profitability in Nigeria. Though, the study used pre and post consolidation data ranging from 1980 to 2010, and only First Bank was sampled for the study. Soyemi *at al.* (2013) investigated the determinants on samples of 10 DMBs profitability (ROA and NIM) from 2006 to 2010 in Nigeria. The linear regression result indicate that bank size and capital adequacy have significant negative relationship with banks profitability while management expenses and deposits have insignificant positive relationship with banks profitability. In addition, external determinants such as GDP growth rate, inflation, interest rate and market capitalization have insignificant positive relationship with banks profitability in Nigeria. But, the study sampled only 10 banks out of 15 quoted DMBs in Nigeria. Aminu (2013) examined determinants on samples of 7 banks profitability from 2005 to 2011 in Nigeria. The regression result reveals that only management efficiency is the driving force determining bank profitability (ROA and ROE). Liquidity has

insignificant positive impact on profitability while capital adequacy and asset quality have insignificant negative impact on profitability. Macroeconomic factor such as GDP growth rate has significant negative impact on profitability but inflation has insignificant negative impact on profitability of banks in Nigeria. However, the study sampled only 7 banks out of 15 quoted DMBs in Nigeria.

These are the loop holes discovered in the previous researches in determining the profitability of banks in Nigeria. These loop holes are gaps in the field of academic discourse. Therefore, this study intends to fill the existing gaps in order to advance the frontiers of knowledge. Further studies should include more of industrial specific variables like bank concentration, bank regulation, market capitalization and bank ownership in combination with other variables that determine profitability of banks. This is because industrial characteristics are common to banks operating in an economy of a given nation.

### Research Methodology

This research study adopts ex post facto type of research design in which data are collected from secondary source (Annual reports and statement of accounts) only. The data consist of variables of quoted Deposit Money Banks (DMBs) and Central Bank of Nigeria (CBN). The independent variables are liquidity, market power and interest rate that are internal and external factors while dependent variable is profitability (ROA and ROE) of quoted banks. Precisely, the internal factor is liquidity which is bank specific factor. But, the external factors are market power and Interest rate which are industrial/macro-economic factors. Linear regression models and Pearson Product Moment Correlation coefficients are used in the analysis of data with the help of Statistical Package for Social Sciences (SPSS) – version 16.

The population of the study is 15 quoted Deposit Money Banks (DMBs) in Nigeria Stock exchange. This study only uses the population of the quoted banks because their activities are public and data relating to variables under study are directly or indirectly stated in the banks' annual reports.

The census population of fifteen (15) quoted DMBs is utilized. This is because the population is small and data relating to variables under study are available in annual reports of the quoted banks and CBN bulletin. So, no sample size and sampling techniques were adopted for this study.

To test the relationship/impact of internal and external factors on the profitability of banks described earlier, this study adopts linear regression models as follows:

#### Model 1:

$$\text{Profitability (ROA)} = \alpha + B_1\text{LIQ} + B_2\text{MKTpower} + B_3\text{INTEREST} + e \dots\dots\dots i$$

#### Model 2:

$$\text{Profitability (ROE)} = \alpha + B_1\text{LIQ} + B_2\text{MKTpower} + B_3\text{INTEREST} + e \dots\dots\dots ii$$



Where:

ROA	=	Return on Assets
ROE	=	Return on Equity
$\alpha$	=	Constant or intercept
$B_1 \dots B_3$	=	Régression coefficients
LIQ	=	Liquidity
MKTpower	=	Market Power.
INTEREST	=	Interest Rate
e	=	Error term.

Return on Assets (ROA) and Return on Equity (ROE) are used as measurements of banking profitability because both represent the Return on Investment (ROI). ROA indicates how efficiency management uses available resources (Total assets) to generate income. While, ROE indicates how efficiency management uses available owners' resources (Shareholders' equity) to generate income. Measurement using ROE coincides with one of the objectives of establishing business enterprises that is to maximize returns on the shareholders' funds (Pandey, 2010).

In this study, ROA is measured by loss/profit after tax or net income over total assets. But, ROE is measured by loss/profit after tax or net income over total shareholders' equity. This is because many previous studies such as Ramllah (2009), Flamini *et al.* (2009), Gul *et al.* (2011) and Khrawish *et al.* (2011) use net income over total assets to measure ROA. But, few studies such as Srairi (2009) and Sufian (2011) use net income over average total assets to measure ROA. This also goes the same with the measurement of ROE. In addition, newly established banks that are preparing their financial statements for the first time in their second year in business may not have previous year(s) financial statements to measure banking profitability using average total assets or average total shareholders' equity. Moreover, there is no significant difference between using net income over total assets and net income over average total assets in measuring ROA (Shim & Siegel, 2007 and Pandey, 2010).

The independent variables such as liquidity, market power and interest rate that have impacts on banks profitability are measured as: Liquidity is cash and cash equivalents over total deposits and borrowings. Market power is per annual Individual bank's net income over banking industry net income while interest rate is maximum lending rates extracted from CBN annual reports.

Furthermore, Pearson Product Moment correction coefficient ( $-1 \leq r \leq 1$ ) is utilized to test the strength/significance of relationships while the regression is used to test the effect/significance of relationships among the study variables. The significance level ranges from 0.000 – 0.005 (1% level of significance), 0.006 – 0.010 (5% level of significance) and 0.011 – 0.099 (10% level of significance) which one percent level of significance is considered stronger than others (Khrawish *et al.*, 2011).

In order to test the hypotheses, we accept the null hypotheses if the results of this study are the same with the stated hypotheses ( $HO_1$ ,  $HO_2$  and  $HO_3$ ) at one percent, five percent and ten percent

level of significance; otherwise we reject the null hypotheses. This will enable the researcher to test the impacts of both internal and external factors on the profitability of banks in Nigeria.

### Data Presentation and Analysis

This section presents data of variables and summary results of the study in tables. These tables include descriptive statistics, correlation coefficient matrixes and regression results. The data analyses are done with the aid of SPSS using regression models to test the hypotheses.

**Table 1: Descriptive Statistics**

Variable	N	Range	Minimum	Maximum	Mean	Median	Std. Deviation
Return on Assets	90	58.76	-44.80	13.96	.7696	1.685	5.73202
Return on Equity	90	263.87	-86.84	177.03	8.9913	10.0300	26.99414
Liquidity	90	97.27	10.30	107.57	51.3369	6.2461	20.91672
Market Power	90	455.07	-304.67	150.40	6.6667	5.76	52.24527
Interest	90	5.30	18.20	23.50	21.1350	21.55	2.08642
Valid N (listwise)	90						

*Source:* Author Computation using SPSS, 2013.

Table 1. shows descriptive statistics of the variables used to measure 15 quoted banks profitability for six years. Return on Asset (ROA) is relatively low with mean, median and standard deviation of 0.7696, 1.685 and 5.73202 percent respectively. The minimum value of ROA is -44.8 percent and maximum value is 13.96 percent. This reveals that there is variation of 58.76 percent in the data set of ROA among the quoted banks. The implication is that the profitability of banks is not normally distributed throughout the period of study which affects investors of some banks negatively. This is because ROA is a measure of Return on Investment (ROI) and it indicates how efficient managements use banks' total assets.

Return on Equity (ROE) is also low with mean, median and standard deviation of 8.9913, 10.0300 and 26.99414 percent respectively. The minimum value of ROE is -86.84 percent and maximum value is 177.03 percent. This means that there is variation of 263.87 percent in the data set of ROE among the banks. The implication is that the profitability of banks is highly skewed to one size affecting shareholders' equity of some banks.

In addition, liquidity is also low with mean, median and standard deviation of 51.3369, 52.52 and 20.91672 percent respectively. The minimum value of liquidity data set is 10.30 percent and maximum value is 107.57 percent. There is variation of 97.27 percent in the data set of the quoted banks. The reason for low liquidity level might be banks have invested their money in liquid assets or extending credit facilities to customers.

Nevertheless, market power is high with mean, median and standard deviation of 6.67, 5.76 and 52.25 percent respectively. The minimum value of data set for market power is -304.67 percent and the maximum value is 150.40 percent. This shows that market power has variation of 455.06

percent in the data set. It implies that market power known as market share of some banks are high. This market share enables a bank to be a leader in terms of monopolizing the profit of an industry while others become followers and niches.

Lastly, interest rate is low with mean, median and standard deviation 21.1350, 21.55 and 2.08642 percent respectively. The minimum value of interest rate is 18.20 percent and maximum value is 23.50 percent. The variation in interest rate is 5.30 percent. This is because interest rates are regulated by the apex bank of Nigeria.

### Correlation Matrixes

The matrixes are two, providing information on the degree of relationship between dependent and independents variables using one (1) tail test of Pearson Product Moment correlation coefficient (see table 2 & 3 below).

**Table 2: Correlation Matrix between the Study Variables and Profitability (ROA) of Banks**

Variable		Return on Assets	Liquidity	Market Power	Interest
Return on Assets	Pearson Correlation	1			
	Sig. (2-tailed)				
	N	90			
Liquidity	Pearson Correlation	0.206*	1		
	Sig. (2-tailed)	0.051			
	N	90	90		
Market Power	Pearson Correlation	0.269**	0.060	1	
	Sig. (2-tailed)	0.010	0.572		
	N	90	90	90	
Interest	Pearson Correlation	-0.116	-0.600***	0.000	1
	Sig. (2-tailed)	0.278	0.000	1.000	
	N	90	90	90	90

\*. Correlation is significant at the 0.10 level (2-tailed).

\*\*. Correlation is significant at the 0.05 level (2-tailed).

\*\*\*. Correlation is significant at the 0.01 level (2-tailed).

Significance Level: One percent (\*\*\*), Five percent (\*\*), Ten percent (\*)

Source: Author Computation using SPSS, 2013.

The Table 2 indicates correlation matrix between liquidity, market power, interest rate and profitability (ROA) of quoted banks in Nigeria. Market power has the highest significant positive correlation coefficient value of 0.269. Therefore, market power has relatively weak positive relationship with profitability. This means market power will significantly rise with banks profitability which is significant at 5% level. Liquidity has significant positive correlation coefficient value of 0.206. Thus, liquidity has weak positive relationship with profitability. This discloses that liquidity will significantly rise with banks profitability.

However, interest rate has insignificant negative correlation coefficient value of -1.116. Interest rate also has weak negative relationship with profitability. This reveals that interest rate will insignificantly decline with banks profitability. From the above analysis, market power and liquidity have significant positive relationship with profitability while interest rate has insignificant negative relationship with profitability of banks in Nigeria. There is no problems multi collinearity since none of the correlation coefficients are more than 0.75 (Sufian, 2011).

**Table 3: Correlation Matrix between the Study Variables and Profitability (ROE) of Banks**

Variable		Return on Equity	Liquidity	Market Power	Interest
Return on Equity	Pearson Correlation	1			
	Sig. (2-tailed)				
	N	90			
Liquidity	Pearson Correlation	0.349**	1		
	Sig. (2-tailed)	0.001			
	N	90	90		
Market Power	Pearson Correlation	0.180	0.060	1	
	Sig. (2-tailed)	0.089	0.572		
	N	90	90	90	
Interest	Pearson Correlation	-0.220*	-0.600**	0.000	1
	Sig. (2-tailed)	0.037	0.000	1.000	
	N	90	90	90	90

\*. Correlation is significant at the 0.10 level (2-tailed).

\*\*. Correlation is significant at the 0.05 level (2-tailed).

\*\*\*. Correlation is significant at the 0.01 level (2-tailed).

Significance Level: One percent (\*\*\*), Five percent (\*\*), Ten percent (\*)

Source: Author Computation using SPSS, 2013.

Table 3 indicates correlation matrix between liquidity, market power, interest rate and profitability (ROE) of banks in Nigeria. Market power has the highest significant positive correlation coefficient value of 0.180. Therefore, market power has relatively weak positive relationship with profitability. This means market power will significantly rise with banks profitability which is significant at 10% level.

Liquidity has significant positive correlation coefficient value of 0.349. Thus, liquidity has weak positive relationship with profitability. This discloses that liquidity will significantly rise with banks profitability which is significant at 1% level.

However, interest rate has significant negative correlation coefficient value of -0.220. It also has weak negative relationship with profitability. This reveals that interest rate will significantly decline with banks profitability which is significant at 10% level.

The above analysis reveals that market power and liquidity have significant positive relationship with profitability while interest rate has significant negative relationship with profitability of banks in Nigeria. There is no problems multi collinearity since none of the correlation coefficients are more than 0.75 (Sufian, 2011).

### Results of the Models

The models provide information on impact, relationship and significance that exist between dependent and independent variables (explanatory variables) as shown in table 3.1 and 3.2 below:

**Table 4: Summary of Regression Result (Model one)**

Model 1	Coefficients			
	$\beta$	Standard Error	T	Significance Level
Constant ( $\alpha$ )	-1.989	8.616	-0.231	0.818
Liquidity	0.052	0.035	1.486	0.141
Market Power	0.028*	0.011	2.519 -	0.014
Interest Rate	-0.005	0.350	-0.013	0.989
R	0.329			
R <sup>2</sup>	0.108			
Adjusted R <sup>2</sup>	0.077			
F Statistics	3.486*			
Significance of F	→	→	→	0.019
Durbin Watson	1.904			

Dependent variable: Return on Asset (Profitability).

Significance Level: One percent (\*\*\*), Five percent (\*\*), Ten percent (\*)

Source: Author Computation using SPSS, 2013.

Table 4 indicates the values of estimated linear regression coefficients of liquidity, market power and interest rate with constant  $\beta$  value of -1.989. Liquidity has insignificant positive coefficient  $\beta$  value of 0.052 with standard error of 0.035, t - value of 1.486 and significance level of 0.141. Thus, liquidity has insignificant positive impact on the profitability. This result is similar with

hypothesis  $HO_1$  stating that liquidity has no significant impact on the profitability of banks in Nigeria. Antonina (2011) and Saidu and Tamin (2011), Hasan *et al.* (2013) found liquidity has no influence on banks profitability. But, Srairi (2009), Aremu *et al.* (2013) and Aminu (2013) observed significant positive effect of liquidity on banks profitability in GCC Countries.

Market power has significant positive coefficient  $\beta$  value of 0.028 with standard error of 0.011, t-value of 2.519 and significance level of 0.014 (significant at 10% level). Therefore, market power has significant positive impact on the profitability of banks. This result is different from hypothesis  $HO_2$  stating that market power has no significant impact on the profitability of banks in Nigeria. Relatively, the result is similar with the finding of Tregenna (2009) that observed market power has increasing influence on the profitability of banks in USA.

However, interest rate has insignificant negative coefficient  $\beta$  value of -0.005 with standard error of 0.350, t-value of -0.013 and significance level of 0.989. Therefore, interest rate has insignificant positive impact on the profitability of banks. This result is similar with hypothesis  $HO_3$  stating that interest rate has no significant impact on the profitability of banks in Nigeria. Naceur (2003) in Ramlall (2009) indicates a negative relationship between interest rates and banks profitability. Demirguc-kunt and Huizinza (2001) in Ramlall (2009) indicated a positive relationship between interest rates and banks profitability while Guru *et al.* (2002) in Sufian (2011) and Soyemi (2013) indicated that high interest ratio is associated with low bank profitability.

On diagnose test of the model one (1), the values of R,  $R^2$  and adjusted  $R^2$  are 0.329, 0.108 and 0.077 respectively. The value of  $R^2$  is the coefficient of correlation that explains the relationship between the dependent and independent variables (which is a weak positive relationship). On the other hand, the value of adjusted  $R^2$  explains that 7.7 percent of the variation in the dependent variable (ROA) is explained by the independent variables of the model. The value of F statistic is 3.486 with significance level of 0.019 (significant at 10% level). Therefore, the model is not fit for this study going by F statistic rule of fitness, because if F statistic is significant at one percent (0.000-0.005), the model is considered to be fit (Srairi, 2009). But, the value of Durbin Watson (DW) is 1.904 which is an evidence of relative serial correlation. If the value of DW is less than one (1) as rough rule of thumb, there may be cause for alarm (Khrawish *et al.*, 2011). This means there are dual standards of measuring the model fitness. Looking at the model fitness, the model one is fit for this study going by DW standard of measurement.

So, we accept the hypotheses  $HO_1$  and  $HO_3$  stating that liquidity and interest rate have no significant impacts on the profitability of banks in Nigeria. But, we reject hypothesis  $HO_2$  stating that market power has no significant impact on the profitability of banks in Nigeria.



**Table 5: Summary of Regression Result (Model two)**

Model 2	Coefficients			
	$\beta$	Standard Error	T	Significance Level
Constant ( $\alpha$ )	-6.064	39.680	-0.153	0.879
Liquidity	0.418*	0.161	2.593	0.011
Market Power	0.083	0.052	1.609	0.111
Interest Rate	-0.329*	1.612	-0.204	0.839
R	0.384			
R <sup>2</sup>	0.147			
Adjusted R <sup>2</sup>	0.118			
F Statistics	4.956*			
Significance of F	→	→	→	0.003
Durbin Watson	2.143			

Dependent variable: Return on Equity (Profitability).

Significance Level: One percent (\*\*\*), Five percent (\*\*), Ten percent (\*)

Source: Author Computation using SPSS, 2013.

Table 5 indicates the values of estimated linear regression coefficients of liquidity, market power and interest rate with constant  $\beta$  value of -6.064. Liquidity has significant positive coefficient  $\beta$  value of 0.418 with standard error of 0.161, t - value of 2.593 and significance level of 0.011 (significant at 10%). Thus, liquidity has significant positive impact on the profitability (ROE). This result is different from hypothesis  $HO_1$  stating that liquidity has no significant impact on the profitability of banks in Nigeria. Antonina (2011) and Saidu and Tamin (2011) Hasan *at el.* (2013) say liquidity has no influence on banks profitability. But, Srairi (2009) Aremu *at al.* (2013) and Aminu (2013) observed significant positive effect of liquidity on banks profitability in GCC Countries.

Market power has insignificant positive coefficient  $\beta$  value of 0.083 with standard error of 0.052, t - value of 1.609 and significance level of 0.111. Therefore, market power has insignificant positive impact on the profitability (ROE). This result is similar with hypothesis  $HO_2$  stating that market power has no significant impact on the profitability of banks in Nigeria. The result is similar with the finding of Tregenna (2009) that observed market power has increasing influence on the profitability of banks in USA.

Though, interest rate has insignificant negative coefficient  $\beta$  value of -0.329 with standard error of 1.612, t-value of -0.204 and significance level of 0.839. Therefore, interest rate has insignificant positive impact on the profitability (ROE). This result is similar with hypothesis  $HO_3$  stating that interest rate has no significant impact on the profitability of banks in Nigeria. Naceur (2003) in Ramlall (2009) indicates a negative relationship between interest rates and banks profitability. Demirguc-kunt and Huizinza (2001) in Ramlall (2009) indicated a positive relationship between interest rates and banks profitability while Guru *et al.* (2002) in Sufian (2011) and Soyemi (2013) indicated that high interest ratio is associated with low bank profitability.

On diagnose test of the model, the values of R,  $R^2$  and adjusted  $R^2$  are 0.384, 0.147 and 0.118 respectively. The value of  $R^2$  is the coefficient of correlation that explains the relationship between the dependent and independent variables (which is a weak positive relationship). On the other hand, the value of adjusted  $R^2$  explains that 11.8 percent of the variation in the dependent variable (ROE) is explained by the independent variables of the model. The value of F statistic is 4.956 with significance level of 0.003 (significant at 1% level). Therefore, the model two is fit for this study going by F statistic rule of fitness, because if F statistic is significant at 1 percent (0.000-0.005), the model is considered to be fit (Srairi, 2009). Affirmatively, the value of Durbin Watson (DW) is 2.143 which is an evidence of relative serial correlation. If the value of DW is less than one (1) as rough rule of thumb, there may be cause for alarm (Khravish *et al.*, 2011). This means there are dual standards of measuring the model fitness. Looking at the model fitness, the model is fit for this study going by F statistics and DW standard of measurements. Hence, we accept the hypotheses  $HO_2$  and  $HO_3$  stating that market power and interest rate have no significant impacts on the profitability of banks in Nigeria. But, we reject hypothesis  $HO_1$  stating that liquidity has no significant impact on the profitability of banks in Nigeria.

## Results and Discussion

**Table 6: Summary of Pearson Correlation and Regression Results**

S/ N	Independent Variable	Dependent Variable	Correlation		Regression		Decision Criteria
			Coefficient Value	Significance Level	Coefficient Value	Significance Level	Accept or Reject ( $H_0$ )
i.	Liquidity	Profitability (ROA)	0.206	0.051	0.052	0.141	Accept
		Profitability (ROE)	0.349	0.001	0.418	0.011	Reject
ii.	Market Power	Profitability (ROA)	0.269	0.010	0.028	0.014	Reject
		Profitability (ROE)	0.180	0.089	0.083	0.111	Accept
iii.	Interest Rate	Profitability (ROA)	-1.116	0.278	-0.005	0.989	Accept
		Profitability (ROE)	-0.220	0.037	-0.329	0.839	Accept

Significance Level: One percent (\*\*\*), Five percent (\*\*), Ten percent (\*).

Tail Test: Two (2)

Source: Author Computation using SPSS, 2013.

Table 6 shows summary of correlation and regression results as follow below:

1. Looking at profitability (ROA), the correlation result tells us that liquidity has significant positive relationship with profitability. The regression result tells us that liquidity has insignificant positive impact on profitability. We therefore, accept the hull hypothesis because the result is the same with hypothesis  $HO_1$  stating that liquidity has no significant impact on the profitability of banks in Nigeria. This means liquidity will insignificantly rise with the profitability (ROA). The insignificant rise in liquidity has positive impact on profitability of banks in Nigeria. Looking at the profitability (ROE), the correlation result tells us that liquidity has significant positive relationship with profitability. The regression result also tells us that liquidity has significant positive impact on profitability. We therefore, reject the hull hypothesis because the result is different from hypothesis  $HO_1$  stating that liquidity has no significant impact on the profitability of banks in Nigeria. That means liquidity will significantly rise with the profitability (ROE). The insignificant rise in liquidity has positive impact on profitability of banks in Nigeria.
2. A glance at the profitability (ROA), the correlation result reveals that market power has significant positive relationship with profitability. The regression result also reveals that market power has significant positive impact on profitability. So, we reject the hull hypothesis because the result is different from hypothesis  $HO_2$  stating that market power has no significant impact on the profitability of banks in Nigeria. That means market power will significantly rise with the profitability of banks. The significant rise in market power has positive impact on the profitability of banks in Nigeria. Glancing at the profitability (ROE), the correlation result reveals that market power has significant positive relationship with profitability. The regression result reveals that market power has insignificant positive impact on profitability. So, we accept the hull hypothesis because the result is the same with hypothesis  $HO_2$  stating that market power has no significant impact on the profitability of banks in Nigeria. That means market power will significantly rise with the profitability of banks. The significant rise in market power has positive impact on the profitability of banks in Nigeria.
3. Observing the profitability (ROA), the correlation result explains that interest rate has insignificant negative relationship with profitability. The regression result also affirms that interest rate has insignificant negative impact on profitability. Thus, we accept the hull hypothesis because the result is the same with hypothesis  $HO_3$  stating that interest rate has no significant impact on the profitability of banks in Nigeria. This means interest rate will insignificantly rise with the profitability (ROA) of banks. The insignificant rise in interest rate has positive impact on the profitability of banks in Nigeria. Observing the profitability (ROE), the correlation result explains that interest rate has significant negative relationship with profitability. The regression result explains that interest rate has insignificant negative impact on profitability. Thus, we reject the hull hypothesis because the result is different from hypothesis  $HO_3$  stating that interest rate has no significant impact on the profitability of banks in Nigeria. This means interest rate will insignificantly

decline with the profitability (ROE) of banks. The insignificant decline in interest rate has negative impact on the profitability of banks in Nigeria.

From the above analysis, we accept the hypothesis  $HO_3$  stating that interest rate has no significant impact on the profitability (ROA & ROE) of banks in Nigeria. In addition, we accept the hypothesis  $HO_1$  stating that liquidity has no significant impact on the profitability (ROA) of banks and hypothesis  $HO_2$  stating that manpower has no significant impact on the profitability (ROE) of banks in Nigeria. However, we may reject the hypotheses  $HO_1$  stating that liquidity has no significant impact on the profitability (ROE) of banks in Nigeria and  $HO_2$  stating that manpower has no significant impact on the profitability (ROA) of banks in Nigeria.

### Conclusions and Recommendations

Banks as any other business enterprises focus on profit objectives to the interest of its stakeholders. All banks operations and activities are in line with profitability objective. Managements have to formulate policies on factors that have impact on the profit making objective. The policies are on liquidity, market power and interest rate which are internal (controllable) and external (uncontrollable) factors known as bank specific and industrial/macroeconomic factors. Thus, this research study recommends that managements should continue to:

1. Maintain and increase liquidity level because a rise in liquidity has impact on profitability despite insignificant positive impact of liquidity on banks profitability measured ROA,
2. Increase and maintain their market share known as market power. The reason is that, a rise in market power has impact on profitability despite insignificant positive impact of market power on banks profitability measured by ROE.
3. Adequately anticipate interest rates fluctuations because stable and increase interest rates add value to the profitability of banks in Nigeria.

### References

- Ali, K.; Akhtar, M.F. and Ahmed, H.Z. (2011). Bank specific and Macroeconomic Indicators of Profitability- Empirical Evidence from the Commercial Banks of Pakistan. *International Journal of Business and social sciences*, Volume 2(6): 237-241, April. Retrieved July12, 2011, from [joc.hcc.edu.pk/./24.pdf](http://joc.hcc.edu.pk/./24.pdf)
- Almumani, M.A. (2013). Impact of Managerial Factors on Commercial Bank Profitability: Empirical Evidence from Jordan. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, Vol. 3. No.3, July, 2013, pp.298-310. Retried November 3, 2013, from [http://hrmars.com/hrmars\\_papers/Article\\_34\\_Impact\\_of\\_Managerial\\_Factors\\_on\\_Commercial\\_Bank.pdf](http://hrmars.com/hrmars_papers/Article_34_Impact_of_Managerial_Factors_on_Commercial_Bank.pdf)
- Aminu, B.A. (2013). The Determinants of Bank's Profitability in Nigeria. Thesis submitted to the Institute of Graduate Studies and Research in Partial fulfillment of the Requirements for the Degree of Master of Science in Banking and Finance Eastern Mediterranean University January, 2013 Gazimağusa, North Cyprus.

- Retrieved November 7, 2013, from <http://i-rep.emu.edu.tr:8080/jspui/bitstream/11129/641/1/Aminu.pdf>
- Antonina, D. (2011). Determinants of Bank Profitability in Ukraine. *Undergraduate Economic Review Journal*, Volume 7, issue1 : Article 2. Retrieved June 06, 2011, from <http://digitalcommons.iwu.edu/uer/vol7/iss1/2>.
- Ani, W. U., Ugwunta, D. O., Ezeudu, I. J. and Ugwuanyi, G. O. (2012). An empirical assessment of the determinants of bank profitability in Nigeria: Bank characteristics panel evidence. *Journal of Accounting and Taxation*, Vol. 4. No 3, pp. 38-43, December, 2012. Retrieved November 7, 2013, from [http://academicjournals.org/article/article1379422336\\_Ani%20et%20al.pdf](http://academicjournals.org/article/article1379422336_Ani%20et%20al.pdf)
- Anyanwu, J.C. (1993). *Monetary Economics. Theory, Policy and Institutions*, 1<sup>st</sup> edition, Hybrid publishers Limited, Onitsha-Nigeria. p.p. 214.
- Aremu, A.M.; Ekpo, I. C. and Mustapha A. M. (2013). Determinants of Bank Profitability in a Developing Economy: Evidence from Nigeria Banking Industry. *Interdisciplinary Journal of Contemporary Research in Business*, Vol. 4 No 9, January 2013. Retrieved November 3, 2013, from <http://journal-archievs27.webs.com/155-181.pdf>
- Bosede, A. F.; Olusegun, O. and Olubukunola, U. (2013). Return on investment of DMBs in Nigeria. *Journal of Applied Finance & Banking*, Vol. 3, No. 3, May, 2013, 195-206. Retrieved October 6, 2013, from [http://www.sciencpress.com/Upload/JAFB/Vol%203\\_3\\_14.pdf](http://www.sciencpress.com/Upload/JAFB/Vol%203_3_14.pdf)
- Buyinza, F. (2010). Determinants of Profitability of Commercial Banks in Sub-Sahara Africa Countries. Unpublished Work of the Department of Economics, Johanassen Kepler University, Linz – Austria. Retrieved June 24, 2011, from [www.econ.jku.at/.../buyinza.pdf](http://www.econ.jku.at/.../buyinza.pdf).
- Coffinet, J.; Lin, S. and Matins, C. (2010) Stress Testing Banks Profitability: Evidence from France. French Bank Commission. Retrieved July 06, 2011, from [gdre-mbf-2010.u.bordeaux4.fr/sites...](http://gdre-mbf-2010.u.bordeaux4.fr/sites...)
- Dogarawa, A.B. (2006). Challenges of Banking Consolidation to the Central Bank of Nigeria: A Descriptive Analysis. *Journal of Business Administration, Ahmadu Bello University Zaria*, Volume 1(2): 7-13.
- Egwurube, O.A. (2012). Reform of Banking Sector and Issue of Economic Development in Nigeria: A lesson from Sub-Saharan Africa Countries. *International Journal of Business and Management Tomorrow*. Retrieved December 22, 2012, from [www.ijbmt.com](http://www.ijbmt.com).
- Flamini, V.; Mc Donald, C. and Schumacher, L. (2009). The Determinants of Commercial Bank Profitability in Sub-Saharan Africa. IMF Working Paper (WP/09/15). Retrieved June 17, 2011, from [www.imf.org/..wp0915.pdf](http://www.imf.org/..wp0915.pdf).
- Gilchris, M.(2013). Influence of Bank Specific and Macroeconomic Factors on the Profitability of 25 Commercial Banks in Pakistan during the Time Period 2007 -2011. *American Journal of Business and Finance*, Vol.3, No.2, 2013. Retrieved October 30, 2013, from [www.congresspress.com/Journals/index.php/AJBF/article/.../262/262](http://www.congresspress.com/Journals/index.php/AJBF/article/.../262/262)
- Graham, C. and Bordeleau, E.(2010). The Impact of Liquidity on Bank Profitability. Bank Canada Working Papers. Retrieved August 10, 2011, from [www.banque-france.Fr/fondation/ fr/t...](http://www.banque-france.Fr/fondation/ fr/t...)



- GUL, S.; Irshad, K. and Zaman,K. (2011). Factors Affecting Bank Profitability in Pakistan. *The Romanian Economics Journal*, Volume XIV (39): 61- 87 March. Retrieved June 24, 2011, from [www.rejournal.eu/portals/o/Achiva/G...](http://www.rejournal.eu/portals/o/Achiva/G...)
- Hasan, N.A., Shaari,N.A.; Palanimally,Y.R & Haji- Mohamed, R.K. M. (2013). The Impact of Macroeconomic and Bank Specific Components on the Return of Equity in Malaysia. *Interdisciplinary Journal of Contemporary Research in Business*, Vol. 5, No 2, June 2013, Retrieved October 6, 2013, from <http://journal-archieves33.webs.com/106-126.pdf>
- Karwai, S.A. (2006). Assessment of the Efficacy of the Failure Resolution Options in the Nigerian Banking Industry. *Journal of Business Administration, Ahmadu Bello University, Zaria*, Volume 1 (2):27-36.
- Khrawish<sup>a</sup>, H.A; Siam, W.Z. and Khrawish<sup>b</sup>, A.H. (2011). Determinants of Islamic Banks Profitability: Evidence from Jordan. *Middle Eastern Finance and Economics Journal*, Issue 13: 42 – 57. Retrieved July 12, 2011, from [eurojournals.com/MEFE-13-04-pdf](http://eurojournals.com/MEFE-13-04-pdf).
- King Fahd University (2010). Profitability of Islamic Banks in the GCC Region. Department of Finance Finance and Economics, College of Industrial, King Fahd University of Petroleum and Minerals, Dhahran, Saudi Arabia. Retrieved July 20, 2011, from [www.wbicopro.com/615-Houcem.pdf](http://www.wbicopro.com/615-Houcem.pdf).
- Pandey, I.M. (2010). *Financial Management*, Tenth Edition, Vikas Publishing House PVT LTD, New Delhi, India, pp.5,179, 594-597& 807.
- Poposka, K. and Trpkoski, M. (2013). Secondary Model for Bank Profitability Management – Test on the Case of Macedonian Banking Sector. *Research Journal of Finance and Accounting*, Vol.4, No.6, 2013. Retrieved October 7, 2013, from [www.iiste.org/Journals/index.php/RJFA/article/download/5666/5778](http://www.iiste.org/Journals/index.php/RJFA/article/download/5666/5778)
- Ramlall, I. (2009). Bank specific, Industrial Specific and Macroeconomic Determinants of Profitability in Taiwanese' Banking System: Under Panel Data Estimation, *International Research Journals of Finance and Economics*, ISSN 160-167,issue 34.Retrieved August 03,2011, from <http://www.eurojournals.com/finance.htm>.
- Sabo, B. (2007). An Assessment of the Determinants of the Nigeria Banking Industry Profitability. Using Panel Evidence from Nigeria Commercial Banks. *Information Manager Journal*, Volume 7 (2) : 14 – 20. Retrieved August 20, 2011, from [www.ajol.info/.../27197](http://www.ajol.info/.../27197).
- Saidu, R.M. and Tumin, M.H. (2011). Performance and Financial Ratios of Commercial Banks in Malaysia and China. *International Review of Business Research Paper*, Volume 7 (2): 157 – 169. Retrieved July 5, 2011, from [www.Bizresearchpapers.Com/11.Rasid](http://www.Bizresearchpapers.Com/11.Rasid).
- Sanusi, L.S. (2010). Global Financial Meltdown and the Reforms in Nigeria. Being the Public Lecture Delivered by CBN, Governor at Convocation Square, Abubakar Tafawa Balewa University, Bauchi. Retrieved August 18, 2011, form [www.cenbank.org/out/speeches/2010/g...](http://www.cenbank.org/out/speeches/2010/g...)
- Shim, J.K. and Siegel, J.G. (2007). *Financial Management*, Third Edition, Mc Graw – Hill Companies,Inc, New York – USA,pp.22, 28-31 & 106.
- Soludo, C.C. (2004). Consolidating the Nigeria Banking Industry to Meet the Developmental Challenges of the 21 Century. Being an Address Delivered to the Special Meeting of the Bankers' Committee Held on July 6, at the CBN Headquarters, Abuja.



- Retrieved August 06, 2011, from [www.cenbank.org/out/speeches/2004/govadde-6jul.pdf](http://www.cenbank.org/out/speeches/2004/govadde-6jul.pdf).
- Soyemi, K.A.; Akinpelu, L. and Ogunleye, J.O. (2013). The Determinant of Profitability Among DMBs in Nigeria Post Consolidation. *Global Advanced Research Journal of Economics, Accounting and Finance* Vol. 2. No.5 pp. 93-103, August, 2013. Retrieved October 30, 2013, from <http://garj.org/garjeaf/pdf/2013/August/Soyemi%20et%20al.pdf>
- Srairi, S.A. (2009). Factors Influencing the Profitability of Conventional and Islamic Commercial Banks in GCC Countries. *Journal of Islamic Economics*, Volume 13(1):5-30. Retrieved August 6, 2011, from [iaie.net/.../DImage.aspx?.../...](http://iaie.net/.../DImage.aspx?.../...)
- Sufian, F. (2011). Profitability of the Korean Banking Sector: Panel Evidence on Bank Specific, Industrial Specific and Macroeconomic Determinants. *Journal of Economics and Management*, Volume 7(1): 43 – 72. Retrieved July, 10, 2011, from [www.jem.or.tw/.../03.pdf](http://www.jem.or.tw/.../03.pdf).
- Tregenna, F. (2009). The Fat Years: The Structure and Profitability of the US Banking Sector on the Pre-crisis Period. *Oxford Journal of Economics*, Volume 33, issue 4:609 – 632. Retrieved June 03, 2011, from [cje.oxfordjournal.org/.../609.Full](http://cje.oxfordjournal.org/.../609.Full).
- Yuqi, L. (2008). Determinants of Banks' Profitability and its Implication on Risk Management Practices: Panel Evidence from the UK in the period 1999 – 2006. Unpublished Dissertation, University of Nottingham, UK. Retrieved June 22, 2011, from [edissertation.nottingham.ac.uk/137](http://edissertation.nottingham.ac.uk/137).