

The Effects of Assets and Liability Management on Financial Performance of Some Selected Nigerian Banks.

Ajibola, Joseph Olusegun, Ph.D., FCIB, FICA, FERP, ACTI, LLB, BL

Department of Economics,
Babcock University, Ilishan-Remo,
Ogun State, Nigeria

joeoluajibola@yahoo.co.uk, abiola100417@gmail.com

ABSTRACT

This research work was embarked upon due to challenges observed to be facing financial institution; The impact of changes in the regulatory environment on banks is that banks are receiving less hands-on assessment by the regulators, less time spent with each institution, and the potential for more problems slipping through the cracks, potentially resulting in an overall increase in bank failures. This study identifies the best possible strategy to manage the composition of financial institutions', assets and liability management by controlling the various types of business strategies to maximize profitability and increase performance. Annual statistical bulletin and audited financial statement of selected Nigerian Deposit Money Banks were used for the analysis which consist of time-series and cross sectional data were analyzed using descriptive statistics and a panel data regression analysis were used to explore the relationship between AML and Financial performance, R^2 , and t-statistics were computed. Findings showed that loans and advances are positively related to return on equity especially when profitability is measured as proxy of financial performance, while the liability variables are negatively related to the measure of bank performance adopted in this study. It was concluded that asset management has significant effect on financial performance of Nigerian deposit money banks. Recommendation was made that poor management of loans and advances should be avoided by banks as much as possible as this will see to it that the profitability of Deposits Money Bank in Nigeria increase given them competitive edge. Also, high cost of operations which has significant effects on profitability of Deposits Money Bank in Nigeria as found out in the study should be mitigated by banks as this will see to it that the issue of untimely death by banks is avoided.

Keywords: Asset Management, Deposits Money Bank, Demand Deposit, Loans and advances, and Financial performance

INTRODUCTION

Deposit Money Banks have always played major roles in the economic development and their operations are always affected by macroeconomic conditions (CBN news bulletin 2011).

A sound, progressive and dynamic banking system is a fundamental requirement for economic development. As an important segment of the tertiary sector of an economy, Deposit Money Banks act as the backbone of economic growth and prosperity by acting as a catalyst in the process of development. They inculcate the habit of saving and mobilize funds from numerous small households and business firms spread over a wide geographical area. The funds so

mobilized are used for productive purposes in agriculture, oil and gas, industry and trade (Vossen, 2010) cited by Davis (2012). The stability of Deposit Money Banks as whole in the economy depends on proper asset liability management structures. Better asset liability management has the tendency to manage risks and shocks that Deposit Money Banks can face. Moreover, asset liability management is the prerequisite condition for the efficiency and growth of Deposit Money Banks. Asset liability management in Deposit Money Banks is determined by the ability of the banks to retain capital, absorb loan losses, support future growth of assets and provide return to investors. The largest source of income to the bank is interest income from lending activity less interest paid on deposits and debt. But it should be noted that banks cannot give out loans without deposit and banks primarily makes their profit through loan creation. This was affirmed by Obrimah and Ebere (2014). They were of the opinion that bank cannot make profit without credit administration, and there cannot be credit administration without deposit. For a bank to attain the same objectives then it has to ensure proper asset liability management, including liquidity risk management, interest rate risk management and credit risk management (Francis, 2007).

It is often argued that macroeconomic variables affect banks profitability (Sufian and Chong 2008). Profitability of a firm or an industry is very important as it shows the results achieved over a time period. The determinants of bank profitability are different in banks because of difference in operation, internal external factors and structural affiliation among others influences bank profitability Adenusi, Kolapo & Aluko (2014). Disregarding the profitability measures, most of the banking studies have noticed that the capital ratio, loan-loss provisions and expense control are important factors in achieving high profitability which are the internal factors. The focus on the determinants of profitability for the Deposit Money Banks is understood by the fact that Nigeria has a bank-based financial system. Because of the nature of her financial system, the success of these banks measured in terms of their profitability determines the level of financial development, which is a major prerequisite for economic growth.

A comprehensive Asset Liability Management policy framework focuses on bank profitability and long term viability by targeting the net interest margin (NIM) ratio, return on equity and Net Economic Value (NEV), subject to balance sheet constraints. Significant among these constraints are maintaining credit quality, meeting liquidity needs and obtaining sufficient capital. The function of ALM is not just protection from risk. The safety achieved through ALM also opens up opportunities for enhancing net worth. Interest rate risk (IRR) largely poses a problem to a bank's net interest income and hence bank performance. Changes in interest rates can significantly alter a bank's net interest income (NII), depending on the extent of mismatch between the asset and liability interest rate. Changes in interest rates also affect the market value or return on a bank's equity.

As the service sector continues to expand in today's economy, the financial services sub-sector also experiences rapid growth accompanied by a heightened demand for good asset and liability portfolios. As asset portfolio's performance normally affects the profitability of a firm so as the expansion of the rises calls for more challenges to the financial sector. Therefore, growth in banking industries may be accompanied by increased risks. The volume and timing of assets and liabilities and the relationship between them may be of critical concern in profit maximization. Moreso, expansion in financial market activities may result in the value of a firm's liabilities exceeding the value of its assets. This phenomenon may indicate increased

levels of risks associated with these portfolios which may be greatly magnified by unstable financial market activities and changes in interest rates.

The imperative that result from the simultaneous unstable financial markets and changes in interest rates make asset and liability essential in prudent portfolio management. The preceding development therefore put operators in the industry under considerable pressure to improve upon their net interest margin (NII) by finding effective strategies for managing their asset and liability portfolios.

This study sought to examine some best practices in the management of asset -liability and their influence on performance of banks taking into account the unique attributes of the Nigeria economy.

The banking industry is a highly regulated industry with detailed and focused regulators. While banks struggle to keep up with the changes in the regulatory environment, regulators struggle to manage their workload and effectively regulate their banks. The impact of these changes is that banks are receiving less hands-on assessment by the regulators, less time spent with each institution, and the potential for more problems slipping through the cracks, potentially resulting in an overall increase in bank failures.

Prior research was mostly on the loan management and the performance of Nigerian banks. Given the importance of an understanding of the performance effects of correlations between assets and liabilities positions, and complexities inherent in the structure or nature of assets, liabilities and off-balance sheet positions, this study will contribute to the knowledge of the relationship that exist between asset liability management and performance of financial institutions.

Also, weakness in Nigeria banking system is becoming apparent in the relative controlled and fragmented financial system in Nigeria. This can be attributed to differences in regulations governing banking and non- banking financial intermediaries, lack of autonomy and weak supervisory capacities carried out by the Central Banks surveillance in enforcing banking regulations. In a turbulent financial environment, bank performance provides information for the investors and depositors to either retain or withdraw their investment from the bank. Managers are constantly challenged to improve their deposit or loan activities in order to enhance the profitability performance of their organization (Kabiru et al, 2012).

The operational flexibility given to banks in pricing most of the assets and liabilities imply the need for the financial system to hedge the interest rate risk. Interest rate risk is the risk where changes in market interest rates might adversely affect a bank financial condition. The immediate impact of changes in interest rates is on bank's returns (i.e. reported profits) by changing its Net Interest Income (NII). A long-term impact of changing interest rates is on banks Market Value of Equity (MVE) or Net Worth as the economic value of the assets, liabilities and off-balance sheet positions get affected due to variation in market interest rates.

Therefore, this study sought to examine the influence of assets management on financial performance of some selected Nigeria Deposit Money Banks.

Research Question

In order to facilitate the achievement of the above research objectives, the following question had to be answered:

1. Is there a relationship between demand deposit and performance of financial institution?

2. Does an increase in loans & advances induce a decrease in financial performance of banks?

Review of Literature

Kosmidou (2008) applied a linear regression model on Greece 23 Commercial Banks data for 1990-2002 using ROA and the ratio of loan loss reserve to gross loans to proxy profitability and asset quality respectively. The results showed a negative significant impact of asset quality to bank profitability. But could the ratio of loan loss reserve to gross loans actually capture profitability and overall bank performances, even do it is a good variable to measure asset quality. In view of this, study as adopted ROE and NIM as a measure of bank performance in 10 Nigeria Deposit Money Banks data of 2009-2014.

Mihal (2009) did a study on how asset liability management in banks for the 2004 -2011 periods, using a panel of over 30 banks across Europe. The study concluded that in order to be effective in banks, the management of assets and liabilities must take into consideration the Earnings, liquidity, profit and the level of loans & deposits.

Altunbaset (2000) on bank capital augmentation in Spain, specified a panel regression model for growth in bank capital as a function of expected rate of return on capital, portfolio risk (measure as ratio of public sector securities to total assets), liquidity, deposit growth rate, interest sensitivity gap, ratio of non- performance loan, ratio of off-balance sheet to total asset (as a measure of innovation), and operating efficiency of a bank (measured as ratio of total cost to total income).

Suzuki (2011) focused on financial reform, ownership and performance in banking industry: the case of India. The study was undertaken to investigate the performance of Commercial Banks after the implementation of significant financial reform. The results generated by regression models indicate that foreign ownership has a statistically significant positive impact on bank performance. It also found that private ownership has favorable impact on income efficiency, return on assets and non- performing loans, whereas, negative impact on cost efficiency.

Ziah, Zubi and Hani (2012) investigated the effects of Human Resource Policies on Organization's performance; and empirical study on Commercial Banks operating in Jordan. The results showed strong support for the model, indicating that human resource policies are positively related to organizational performance and have a statistically strong significance on it; R square was (70.2%). It has been conclude from the research results that the most important effect of human resource policy on organizational performance is the employees' participation in decision making. Nevertheless, this policy is not widely implemented. This could be attributed to a cultural attitude that discourages employees' participation in decision making or because of the nature of banking jobs that seem to be critical, risky, and systematic. Thus, it is worthwhile to give more attention to the participation of employees in decision making.

Developing Nation

Tamiru (2012) examined the effect of ALM on Deposits Money Banks profitability in the Ethiopian, he asserted that all assets except fixed assets, mainly loans and advances affect return on asset (ROA) positively while all liabilities mainly savings & fixed deposits and other liabilities and bank credit balances have a significant and negative effect on Deposits Money Banks ROA. However, in a Nigeria setting, where the economic policy might be different with CBN/NDIC statutory regulation, government intervention, geographical background, will the

application of the above identified variables be significant on bank performance in Nigeria adopting ROE as a measure of profitability rather than ROA and NIM as another measure of bank performance.

Husni, (2011) examined the determinants of Commercial Banks performance: evidence from Jordan. The study model was tested on time series cross sectional bank level data in the context of Jordan over the 2000-2011. The empirical specification focuses on the reported determinants of Commercial Banks performance which is assumed to be a function of a set of bank characteristics. To control for the effect of internal and external factors on Commercial Banks performance, he used Pooled Ordinary Least Square. The analysis revealed that there is significant and positive relationship between return on asset and bank size, Total Liabilities/Total Asset, Total Equity/Total Asset, Net interest Margin and Exchange Rate of the commercial banks and there are significant and negative relationship between Return on Asset and Annual Growth Rate for Gross Domestic Product and Inflation Rate of the Deposits Money Banks . The study also found that there are significant and positive relationship between Return on Equity and the Bank Size, Total Liabilities/Total Assets, Net Interest Margin, Exchange Rate and Loan/Total Assets, and there are significant and negative relationship between Return on Equity and Annual Growth Rate for Gross domestic product, and Inflation Rate of the Deposit Money Banks.

Ali (2014) in his work the effect of liquidity management on profitability in the Jordanian Commercial Bank, improves on some of the existing researches, in that it uses a variety of liquidity and profitability indices in measuring the effects of liquidity management on profitability in the Jordanian Commercial Banks making use of different types of banks selected as his case study for the work. First Bank Nigeria Plc is the only selected sample for this work which was derived using the judgmental sampling techniques from the population for this study is the banking industry in Nigeria which is made up of the 25 financial institutions.

Kamau (2010) examined Commercial Banks in Kenya; his result revealed that capital adequacy affects profitability in the banking sector. He found out that the capital structure of banks is highly regulated. This is because capital played a crucial role in reducing the number of bank failures and losses to depositors when a bank fails as highly leveraged firms are likely to take excessive risk in order to maximize shareholder value at the expense of finance providers. To this extent, he concluded that banks with enough capital were more profitable than banks which were struggling to maintain the statutory capital adequacy requirement. While (Sujian and Ghong 2008) using the same proxy with (Kamau 2010) found a positive relationship between total non-interest income divide by total assets, a proxy for income diversification and bank profitability support the idea that banks involved in diversification activities expect some benefits.

Gyekyi (2011) used the goal programming method to study the effects of asset liability management on profitability of National Investment Bank in the New Juabeng Municipality in Ghana. His the major findings of the study were; the value of assets and liabilities of the bank had a direct effect on the profitability of the bank, decrease in assets value leads to increase in banking profitability. Increased or decreased in liability had direct effect on company's profitability, inflation rate has the direct effect on profitability, and Increase in inflation leads to increase in profitability and decreased in inflation, decreases the profit margin of the firm, Bank of Ghana base rate affects the strategic decisions of the banks, changes in the base rate have direct effect on the banking profitability and Bank of Ghana policies normally affect the decisions of the bankers.

A research done by Stephen and Edith (2012) carried out a study of the practice of the learning organization and its relationship to performance among Kenya Commercial Banks. The study found out that most of the Kenyan Commercial Banks had to a large extent adopted the practice of a learning organization. The practices adopted by the majority were: development of information systems designed to inform and empower, formative accounting and control, learning approach to strategy, participative policy making, reward flexibility and supportive leadership. On the other hand, the least adopted practices were: creating a learning climate, boundary workers as environmental scanners and development of enabling structures. Findings also indicate that some practices are viewed as more important towards improving overall organizational performance, especially in the short term. Findings also indicate that leadership within the commercial banking sector reinforces learning by demonstrating willingly to entertain alternative views. Leader also realizes the importance of spending time on problem identification, knowledge transfer and reflection, and finally engaging in active questioning and listening.

A study by Houssein and Ines (2011) investigated the relationship between board characteristics, performance and risk taking behaviors in Tunisian Banks. The empirical analysis was based on a sample of 11 large Tunisian Commercial Banks during 1997- 2006. They find that a small bank board is associated with more performance and with more bank risk taking, the presence of independent directors within the board of directors affects negatively the performance, but has no significant effect on the risk taking, a lower CEO ownership is associated with lower performance in Tunisian banks, banks with high charter value are associated with lower return on asset and return on equity and more bank risk and the small size banks institutions appear to assume lower risks. They concluded that bank board characteristics and structure play a crucial role in bank performance and bank risk taking.

Akindele (2011) finds that the saving and fixed deposits and other liabilities and credit balances variables significantly cost the profitability of 5 Nigerian Commercial Banks from 2005 to 2010. The significance of the cost of saving and fixed deposits relates to its greater amount in the Commercial Banks portfolio as a source of fund, therefore the performance of Commercial Banks relates to its ability to attract more deposits from individual, government and corporate depositors.

Junaidu and Aminu (2012) in their work 'An evaluation of the impact of liquidity the profitability of Deposits Money Banks ' data was mainly collected from secondary sources which was used for the analysis. The data utilized in their study is extracted from the income statements and balance sheets of the sample banking firms attained from the annual report of Deposit Money Banks. In addition to this scholarly articles from academic journals and relevant textbooks were also used. On the other hand, for the purpose of my work primary and secondary data was used. Primary data by administering questionnaire to the selected sample population and the secondary data was collected from annual reports of the selected sample, newspaper, journals, CBN circulars.

Ayodele (2012) used a similar index to Kamau (2010) & Sujian and Ghong (2008) for bank performance and found that, activity diversification tends to reduce performance compared to bank that are more focused in their activities. Would these benefits captured and still have a positive/negative relationship between the total non-interest income divided by total assets in the case of Nigerian Commercial Banks where there's government policy, economic policy and social cultural difference? In view of this, study as adopted total Net Income Interest divided by Total assets as a measure for bank performance.

Mahammed (2012) considered the impact of corporate governance on Banks Performance in Nigeria. The study made use of secondary data obtained from the financial reports of nine (9) banks for a period of ten (10) years (2001-2010). Data were analyzed using multiple regression analysis. The study supported the hypotheses that corporate governance positively affects performance of banks. In conclusion, the study shows that poor asset quality (defined as the ratio of non-performing loan to credit) and loan deposit ratios negatively affect financial performance and vice visa.

A study by Akinola (2009) examined the quality control of services in the Nigerian Banking Industry. The study discovered among others that reliability, responsiveness, inexpensive waiting time, competence, courtesy, credibility and communication are major determinants of service quality. The study also showed that epileptic power supply, unstable economic policies, in conducive working environment, and network servers' failures constituted the major problems facing good quality services in the bank industry. The study recommended improvement on performances of servers, provision of standby generators and consistent on-the-job training for workers to ameliorate the problems. It concluded that appropriate economic and social policies are required to ensure good quality control services as well as provision of adequate protection for banking customers and clients are required to ensure good quality control services.

A research conducted by Ogbulu and Emeni (2012) examined corporate governance and bank performance in Nigeria. The result in the study showed that there is a negative correlation between Board composition and performance. It was also discovered in the study that there is a negative correlation between ownership structure and bank performance. Based on the findings of the study, it was recommended that, since board composition has no positive correlation with firm performance, board size should be limited in order to improve firm performance through cost reduction. Likewise, Okereke and Anyanwu (2011) examined the relationship between corporate governance practices in Nigeria Deposit Money Banks. The regression result indicated a significant relationship and positive correlation between corporate governance and banks' performance.

Ugwunta, Ani, Ugwuanyi and Ugwu (2012), examined the structure of the Nigerian Banking Sector and its impacts on Bank performance. A time-series regression analysis was applied to a ten-year data period (2001-2010) to evaluate the relationship and the impact of banking sector structure, other explanatory variables on bank performance. Significant findings include that the Nigerian banking sector is oligopolistic in structure and that market concentration positively and significantly impacts on bank performance. These results suggest that market concentration is a major determinant of bank profitability in Nigerian.

A study by Ologunde and Agboola (2012), focused on business strategy as a measure of organization performance. The study revealed that the bank's mission was to invest in the best people, technology and environment to be able to achieve customer enthusiasm. The bank's major strategies are in the area of financing, marketing, human resources and information technology. The study concluded that the bank should continuously analysis its strength, weakness, opportunities and threats for an enduring adaptation to its dynamic environment characterized by political instability, government interference, corruption, sharp practice's and failing public infrastructures.

However, Davis (2014) study on how asset liability management affect performance of Ghana Deposits Money Banks 2000-2013, concluded that effective management of ALM on banks improves profitability and performance using a different proxy for his study. In view of this,

study as adopted demand deposit, loans and advances, savings & fixed deposits as a proxy for ALM on bank performances in Nigerian and check if the relationship will still remain the same in Nigeria.

Chibuzoh, Tella and Akingunola (2011), investigated the relationship between Regulation and Performance of Nigerian Commercial Banks. There was no significant relationship between regulation and banks' performance when the entire period, 1986-2004 was considered. In the period of increased regulation, 1996-2004, and in the period of deregulation, 1986-1995, however, the level of regulation depended on the level of banks' performance. This was attributable to the transactions based supervision used by the bank regulators in the period, which was done post mortem and based on the feedback system. They advised banks to be proactive rather than reactive which could be achieved using the risk based examination approach which predicts banks risks and devices means of mitigating them.

A study by Appah and John (2011) focused on Mergers and acquisitions in the Nigerian Banking Industry: An explorative investigation. The findings revealed that the consolidation (mergers and acquisitions) activities in Nigeria did not meet the desired objectives of liquidity, capital adequacy and corporate governance which have resulted to more troubled banks after the consolidation.

According to Gabriel (2005) Focused on The Impact of Liquidity Management on Commercial Bank Profitability a case study of oceanic bank international plc. Effurun, Delta State. This study revealed that Commercial Banks are faced with two conflicting objectives namely: liquidity optimization and profitability optimization to contend with. The researcher also showed that the problem of these two conflicting objectives became too complex in modern banking subsector which is characterized by competition. The result gotten from the study reveal the level of attachment of the Deposits Money Banks to the monetary policies (liquidity ratios) established by the government and these will help the government to set appropriate liquidity ratio's and cash ratio's that will not be harmful to the operation and survival of the Deposits Money Banks.

Dickson (2012) studied Risk Management and Project Appraisal in Nigerian Banking industry. It was observed from the findings that Nigerian banks make use of risk analytical techniques in their investment appraisal. It was also discovered that some risk analytical techniques are more popular in use than others among the users and that effective evaluation of risk plays a major role in enhancing investment performance. It is therefore recommended among others that: workers at management level should be educated on the importance of risk evaluation techniques in order to maximize returns on their shareholders investment. Also to be more dynamic in the use of various risk analytical methods depending upon the conditions so as to guarantee high returns.

Aworemi, Odeyemi and Oyedokun (2012), carried out a study on efficacy of products marketing strategy on the performance of United Bank of Africa, Plc in the South Western Nigeria. The findings of the study revealed that there was a positive relationship between the product marketing strategy of UBA and UBA deposit profile, further findings revealed that the product marketing strategy has significant effect on the deposit base UBA. Following the findings of the study it was concluded that, UBA Products Marketing strategy was found to have significant relationship with the bank deposit base; asset finance package has the highest significant positive effect on the bank deposit base whilst, executive loan package, though significant had a low contribution on the bank deposit profile and the entire product market strategy were found to have accounted 84.8% variation on the bank deposit base.

Akinwale (2011) reveals in Nigeria within the same financial data set of years 2005-2009, the results shows that there is positive relationship between loans deposits and cashflows which may be significant and positive to bank performance. In view of this study, as adopted loans to deposits as a measure of ROE & NIM on 10 Nigerian Deposits Money Banks 2009-2014, will the expected results still be the same.

2.4 Gap in Literature

Most of the empirical studies covering countries like Ethiopia, Ghana, Greece, India, Jordan, Malaysia, and Russia, reviewed dealt largely on the strategic measures on bank profitability. While some examined the effect of risk management variables on bank performance, others employed other variables such as credit balance, deposit in other banks, and increase in bank risks, liquidity level, and cash flows. Empirical literature revealed that, limited research has been done in Nigeria in terms of examining the influence of asset liability management on bank financial performance. However, Ayodele (2012), ‘found a negative relationship between total non-interest income divide by total assets, a proxy for ALM and bank profitability’. Ugwunta, Ani, Ugwuanyi and Ugwu (2012), ‘findings include that the Nigerian banking sector is oligopolistic in structure and that market concentration positively and significantly impacts on bank performance. These results suggest that market concentration is a major determinant of bank profitability in Nigerian’; Akindele (2011), ‘the findings shows that, the performance of Deposit Money Banks is related to its ability to attract individual depositors and how significantly affect negatively on the performance of Nigerian banks’; Gabriel (2005), ‘The result gotten from the study reveal the level of attachment of the Deposit Money Banks to the monetary policies (liquidity ratios) established by the government will help the government to set appropriate liquidity ratio’s and cash ratio’s that will not be harmful to the operation and survival of the Deposits Money Banks’. Oribmah and Ebere (2014), they were of the opinion that bank cannot make profit without credit administration, and there cannot be credit administration without deposit. In all the studies, none examined the effect of loans and advances, savings & fixed deposits, demand deposit and deposit in other banks as a determinant of ALM on ROE in Nigerian Deposit Money Banks.

It is envisaged that this studies on completion will add to existing literature and therefore enriching knowledge by enabling scholars to understand that effective AML process within Deposit Money Banks that are closely monitor, equalize both the assets and liabilities management, since asset liability management is the prerequisite condition for the efficiency and growth of Deposits Money Banks.

Methodology

Model Specification

The model was adapted from Asiri (2007) for the study. The model below is used for empirical analysis and investigation of the relationship between the variables.

Bank Performance= f (Asset Liability Management)

Functional Form:

ROE = F (LA, DD, SFD)

Econometric Model

Transforming the above function to a model equation gives:

$$ROE_{it} = \beta_0 + \beta_1 LA_{it} + \beta_2 DD_{it} + \beta_3 SFD_{it} + \mu \dots\dots\dots i$$

Where:

ROE= Return on Equity

LA = Loans and Advances

DD= Demand Deposit

SFD= Savings & Fixed Deposit

i= ith subject

t = time period for variables

μ = error term

In the above equation β_0 is constant and β is coefficient of variables while μ_{it} is the residual error of the regression.

The economic priori criteria refer to the sign and size of the parameters and the economic relationship between the variables. The apriori expression of this regression model is that $\beta_1 > 0$, $\beta_2 > 0$, $\beta_3 > 0$; a positive sign is expected from the coefficient of the relationship between loans and advances with ROE in that risk – return should be positive while demand deposit, savings and fixed deposit should be positive with ROE.

Model Estimation and Evaluation Technique

There are two several estimation techniques to address panel data regression model, this are:

- Fixed effects model (FEM) and
- The Random effects model or error components model (ECM)

How to decide when it's Random Effects or Fixed Effects

The Hausman test was used to decide between fixed effects model and random effects model. Hausman test for the Erogenicity of the Unobserved Error Component. The multiple regression models were employed to obtain numerical values of the model coefficient. The student t-test with P-values was used to evaluate the estimated numerical values of the coefficient for statistical significance at 5% level. The f – stat. will be used to evaluate aggregate effect of the predictor variables on the dependent variables.

DATA ANALYSIS, RESULTS AND DISCUSSION OF FINDINGS

This section dealt with the presentation, analysis, interpretation of data, and discussion of findings. The chapter in essence deals with detailed econometric analysis of the relationship between asset liability management and financial performance of some selected Nigerian Deposit Money Banks based on the survey of 10 banks from 21 banks listed by the central bank of Nigeria (2013). These banks were selected using purposive sampling techniques based on banks with the required available information.

4.1 Descriptive Analysis

This section of the analysis provides an overview on the data set while attempt is also made to describe the main features of the data. The study tries to evaluate the influence of asset and liability management on financial performance of some selected Nigerian Deposit Money Banks. The description of the data series are based on mean, maximum, minimum and standard deviation of ratios of asset and liability management compared to ratio of financial performance of Nigerian Deposit Money Banks. The summary statistics of pooled series of the asset and liability management and financial performance are shown in the table below:

4.1 Descriptive Analysis

	LA	DD	SFD	ROE
Mean	.4321208	.4434508	.3863707	.3280200
Median	.40007553	.25509301	.289111.0	.0895500
Maximum	.7112780	.7502309	.5867308	.5654327
Minimum	.0609000	.0776500	.00803421	.1216574
Std. Dev.	.0206708	.0297806	.0177622	.0212843
Skewness	1.0002334	0.303345	0.801069	0.962892
Kurtosis	.3798341	.6056064	.2971015	.1026664
Jarque-Bera	.1855412	.5697502	.1481468	.2120415
Probability	.0000094	.000000	.000607	.000000
Observations	60	60	60	60

Source: “Researchers Survey” 2015

From Table 4.1 the mean value in percentage (%) of all sampled 10 banks for loan and advance (LA), demand deposit (DD), and saving & fixed deposit (SFD), stood at 43.2%, 44.3% and 38.6% respectively. These figures are high compared with the regulators requirement of the Central Bank of Nigeria. This therefore means that the Nigerian banking industry remained strong despite the challenges that bedeviled the sub-sector as a result of the global meltdown. However, the standard deviation of LA, DD and SFD are 20.7%, 20.8% and 10.8% which shows a high significant contribution to the profitability between the various Deposit Money Banks. Conclusively, the minimum value derived for ROE is 12.1% while for SFD, DD and LA are 0.08%, 0.78% and 0.61% respectively. ROE which is the measure of the amount of net income returned as a percentage of shareholders equity. The ROE had a mean of 32.8% with an average dispersion of 02.1% represented by the standard deviation. This means that depositors and investors money are secured as only as 32.8% of banks total assets. It shows how much profit a bank generates with the money shareholders have invested.

Kurtosis: it measures the flatness of the distribution of the series. For kurtosis, the normal distribution is 3, but if it exceeds this value, the distribution is assumed to be peaked (leptokurtic) relative to normal, but if it is less than 3, the distribution is flat (platykurtic) relative to the normal. The kurtosis value of the variables are below the thresh hold of 3, implying that they are platykurtic i.e relative to normal.

Jarque-Bera: this is a text statistics for normal distribution. The null hypothesis for the text is that the series is normal not that there are three conventional levels of statistical significance in econometrics namely 1%, (0.01), 5%, (0.05) and 10% (0.10).

Therefore, if the computed probability value for the text is greater than 10%, (0.10), we do not regret the null hypothesis otherwise we reject it. The Jarque-Bera value of the variables and the corresponding p-values makes for the rejection of the null hypothesis that the residual is normal while the alternative hypothesis that the residual is not normal is accepted.

In summary the descriptive analysis of all the analyzed banks gives relatively similar results

4.2 Empirical Analysis

Table 4.2.1. Panel regression result

$$ROE_{it} = \beta_0 + \beta_1 LA_{it} + \beta_2 DD_{it} + \beta_3 SFD_{it} + \mu \dots\dots\dots (1)$$

Dependent Variable: ROE

Method: Panel Least Squares

Date: 16/09/15 Time: 09:30

Sample: 2009-2014
 Periods included: 6
 Cross-sections included: 10
 Total panel (balanced) observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	3.538060	2.008303	1.761716	0.0046
LA	4.987608	2.581508	1.932052	0.0098
DD	-3.824308	1.982408	-1.929122	0.0002
SFD	-2.702508	3.085308	-0.875928	0.0052

Source: "Researchers Survey" 2015

R – Squared = 0.359247

Adjusted R – Squared= 0.18376

Prob (F-statistics) = 0.027613

F-statistics =3.17792

Durbin Watson = 2.963980

The table 4.2.1 present, the result of regression with their Durbin- Watson statistics. The result Durbin Watson statistics would be used for interpretation because it gives the best result for this model.

$$ROE_{it} = \beta_0 + \beta_1 LA_{it} + \beta_2 DD_{it} + \beta_3 SFD_{it} + \mu$$

$$ROE_{it} = 3.538060 + 4.987608 - 3.824308 DD - 2.702508 SFD$$

The panel regression of the above estimates showed that return on equity (ROE) is positively impacted by loans and advances and negatively impacted by demand deposit and saving & fixed deposit for the sampled banks. The loans and advances have a positive correlation (4.987608) to the ROE especially when performance is measure as return on equity.

LA are derivatives of DD and SFD given out to borrowers at agreed interest rates and other charges. LA constitutes the single most important earning asset in the books of banks. A priori expectation is that there will be a positive relationship between ROE, LA, DD and SFD, meaning that 1% increase in demand deposit and saving and fixed deposit will give rise to an increase in return on equity (ROE). However, based on the result of this research, the relationship between them is negative. This negative relationship is traceable to the fact that deposits are cost generating items in the books of banks. Such expenses as interest cost, insurance costs, holding charges on liquidity/ cash reserves requirements impact negatively on bank performance.

Test of the Results

The model has R-squared 35.9% in variations of ROE attributable to the independent variables which is 63.1% variations in ROE of the sampled banks were caused by other factors not included in the model.

The F-statistic p-value showed 0.027613%. This means that the panel regression result is statistically significant at the 5% level because it is lower than 5%. The coefficients showed that one unit change in asset liability management ratio will cause a negative unit changes in financial performance ratio. This indicates that saving and fixed deposits, demand deposits, loans and advances all have a significant effect on bank performance as defined.

The Durbin Watson value of 2.96 showing that there is an evidence of positive serial correlation. The Durbin Watson statistics indicates the presence of serial correlation of the residuals in the model, and an adjusted R-square of 18.4% meaning that variability in asset management and financial performance is coming from other factors not observed in this model.

Decision

Therefore, from the above panel regression estimates, bank financial performance is positively affected by loans and advances while demand deposit and saving & fixed deposit have a significant negative effect on bank financial performance. Thus, the null hypothesis is rejected, research question one and two are answered, and research objective one and two achieved.

4.3 Discussion of Findings

The dependent variable (ROE) is a proxy of financial performance. Model corresponds to cross-section fixed effects. The model is estimated using a panel of 60 observations for the period 2009-2014 derived from 10 Nigerian Deposit Money Banks. The estimated coefficients are also assigned for the banks with the aim of capturing the influence of specific characteristics of each individual bank. The regression result shown in the table above reveals that while the coefficients of DD and SFD, representing asset liability management ratio are significant at 1%, the coefficient of DD, which represents demand deposit, an indicator of asset management, is significant at 5%.

The regression result reveals negative and significant relationship between bank financial performance ratio and asset management ratio with a coefficient -3.824308% and -2.702508%. This means that, 1% increase in assets management ratios of a bank (holding other variables constant), bank financial performance will decrease by either 38.2% or 27% respectively. This result provides the basis for us to fail to accept the first statement of hypothesis which states that there is no significant relationship on increase in SFD or DD inducing a decrease in bank financial performance. The results of this analysis supports the findings of Tamiru (2012) who examined the effect of ALM on Deposits Money Banks profitability in Ethiopia, he asserted that all assets except fixed assets, mainly loans and advances affect return on asset (ROA) positively while all liabilities mainly savings & fixed deposits and other liabilities and bank credit balances have a significant and negative effect on Deposits Money Banks ROA.

Similarly, there is a negative significant relationship between DD, SFD and ROE in that every 1% increase in demand deposit increased ROE ratio by -2.027608 and -1.934560 indicates that loans and advances are positively related to return on equity (ROE). While the liability variables are negatively related to the ROE adopted in these study. These results provide empirical evidence consistent with the view that, the better managed the asset and liability is, the better the financial performance. This is also in line with the opinion that banks which fail to monitor their deposit tend to be less profitable than those which pay particular attention to assets quality.

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary

This study investigated the effects of Assets and liability Management on Financial performance of some selected Nigerian banks. Much work has been done on the effect of capital adequacy on the performance of banks while less research has been done on effect/ influence of ALM on Financial Performance on banking sector in Nigeria. This was observed as one of the

gap of the study. Thus, this work's uniqueness is its ability to examine the effects of Assets and liability Management variables and variables of Financial Performance in Nigerian banks.

This study was structured into five chapters. Chapter one looked into the background of the study identified the problems of the study, objectives of the study were defined, appropriate research questions and hypotheses to guide the investigation were formulated. The chapter also highlighted the justification and significance of the study, described its scope as well as identified and operationalized the study variables based on their contextual use in the work. In summary the chapter serves as introduction to the study.

The chapter two dealt with three basic components of the study. There are: the conceptual literature which emphasized on the, components of asset liability management, objectives of ALM, bank financial performance indicator; the theoretical literature emphasising on the Loan Pricing theory, Commercial Loan theory, Market Power theory, Deposit Insurance Theory, Portfolio regulation theory, Expense theory. The empirical review, summary of empirical review and gaps in literature concluded the chapter.

Chapter three presented the methodology for the study. The population is described; an appropriate sample was determined and selected using purposive sampling method. The chapter equally described the type and sources of data and techniques for data analysis

In chapter four, the data were analysed in three parts, demographic characteristics of the sampled financial statements, descriptive and empirical analysis using multiple regression. The descriptive analysis examined the mean, standard deviation, maximum, minimum, and skewness of ratios of capital adequacy and risk management. The empirical analysis made attempts to establish the effect of ALM on financial performance in Nigerian banks using the multiple regression models. The numerical values of the model's coefficients and intercepts were obtained through the linear regression models that were evaluated for the validation of the aprior expectation and establishment of statistical significance of the effect of ALM on financial performance in Nigerian banks and the acceptance and rejection of the hypotheses.

The empirical findings of this study provide evidence that the profitability of Deposit Money Banks in Nigeria is positively affected by assets management. Specifically, loans and advances have significant effect on the profitability of Deposit Money Banks when profitability is measured as the return on equity.

From the liability variables, the saving and fixed deposits and demand deposit significantly cost the profitability of Deposit Money Banks. The significance of the cost is related to its greater amount in the Deposit Money Banks books as source of funds, making them to be highly liquid, whereby it should have been converted to income generating asset. But it will be worthy to note that the performance of Deposit Money Banks is still related to its ability to attract individual, government and corporate depositors, to effectively perform their role as financial intermediaries.

In general, assets management, mainly loans and advances, contributes positively for the profitability of Deposit Money Banks. While liability management, particularly saving and fixed deposits and other liabilities and credit balances, cost negatively the profitability of Deposit Money Banks. Therefore, in the Nigerian financial market, assets management positively impacts shareholder wealth and liability management negatively impact shareholder wealth maximization.

This chapter five gives the summary of the study as well as findings and their implication, conclusions were drawn and recommendation made. Finally, the chapter highlighted the

limitations of the study, the study's contribution to knowledge and suggestion for further research.

5.2 Conclusion

The study examined the effect of asset liability management on financial performance of some selected Nigerian Deposit Money Banks. It also looked at the effects between the variables of asset liability management with variables performance. The results indicate that loans and advances are positively related to return on equity (ROE). While the liability variables are negatively related to the measure of bank performance of (ROE) adopted in these study. These results provide empirical evidence consistent with the view that, the better managed the asset and liability is, the better the financial performance. This is also in line with the opinion that banks which fail to monitor their deposit tend to be less profitable than those which pay particular attention to assets quality. The results explain the objective of the effect of management strategy on performance indicates that any time the company decreases its assets value; the profit margin increases and this indicate that decreases asset value increases profitability. Also, that anytime the company increases its assets, the liability of the company also increases as the profit margin reduces and this analyze the objective of the coordination between asset and liability and its effect on performance and profitability as a whole. The result of this study is consistent with Asiri (2007) who also found out that assets management positively and liability management negatively relate to the profitability of Deposit Money Banks.

5.3 Recommendations

- i. Poor management of loans and advances should be avoided by banks as much as possible as this will see to it that the profitability of Deposit Money Banks in Nigeria increase given them competitive edge.
- ii. High cost of operations which has significant effects on profitability of Deposit Money Banks in Nigeria as found out in the study should be mitigated by banks as this will see to it that the issue of untimely death by banks is avoided.
- iii. Investing in unprofitable projects which leads to large outflow of liquidity that is prone to have effect on the profitability in Deposit Money Banks in Nigeria should be checkmated as this will see to it that banks increase its profitability rate and financial base.
- iv. Finally, since it has been found that there is negative effect of demand deposit and saving & fixed deposit on financial performance in Deposits Money Banks in Nigeria, Deposits Money Banks should work CBN letting them know the reason for effective monetary policy enactment and how it can strengthen or improve their financial performance.

5.4 Contribution to Knowledge

This study is believed to have made the following contributions to knowledge:

1. The study will help Individuals or investors to use the knowledge derived from the findings of this study and personally start taking care of their retirement through equity investing. Recognizing the drivers of ROE will help new investors analyze financial statements and make informed equity investment decisions.

2. This study will be of help to CEOs and finance managers of banks in Nigeria as the output of this study will serve as a useful database and resource material in the area of ALM and profitability and performance as a whole.
3. The study has contributed to existing literature by focusing on a developing country like Nigeria, in examining the effect of asset management on financial performance of some selected Nigerian commercial bank.

REFERENCES

- Abayomi, O.O., & Shalem J. F. (2001) "Asset liability management in Nigerian Banks" *The journal of the Nigerian institute of Bankers* 74(1).
- Alashi, S. O. (2002) "Banking crisis: Causes, Early warning signals and Resolutions" *NDIC Quarterly review journals volume 12 page 36*.
- Abreu, M. & Mendes, V. (2002) "Commercial Bank Interest Margins and Profitability: Evidence from E.U Countries". *Porto Working Paper Series, volume 16 page 1-10*.
- Aburime, T. U. (2008). "Determinants of Banks of Bank Profitability": Macroeconomic Evidence from Nigeria. *Social Science Research Network.Deakin University*.
- Aburine, T. U. (2008). "Determinants of Bank Profitability": Company-Level Evidence from Nigeria: University of Nigeria, Enugu Campus.
- Achampong, F. K. (2010). "Integrating risk management and strategic planning" Retrieved from www.eric.ed.gov on 23rd September, 2015.
- Adegbie, F.F, (2011). "Financial Strategy as Support Determinant for the Avoidance and Resolution of Distress in the Nigerian Banking Industry" *Ota, Nigeria*.
- Adeyele, J. S., & Maiturare, M. N. (2012). "Repositioning the Nigerian insurance industry for sustainable development": Risk management perspective. *European Journal of Business and Management, 5(4), 22-30*.
- Agbada A. C.C. Osuji.(2013) "The efficiency of liquidity management and banking Performance in Nigeria." *International review of management and business research journal vol 2, march, 2013*
- Akinola, G.O. (2012). "Effect of globalization on performance in the Nigerian banking industry". *International journal of management and marketing research, 1(5), 79-94*.
- Akinola, G. O. (2009). "Quality control of services in the Nigerian banking industry". *African research review journal, 3(3), 181-203*.
- Alashi,S.O.(2002) "Banking Crisis: Causes,Early Warning Signals and Resolutions"
- Anthony, M.S. (1997). "Commercial bank risk management: An analysis of the process. Retrieved from www.goggle.com on 10th July, 2015.
- Anyanwu , J.C. (1993). "Monetary Economics: Theory, Policy and Institutions. *Benin City. Hybrid Professional Publishers*.
- Appah, E., & John, M.S. (2011). "Mergers and acquisitions in the Nigerian banking industry: an explorative investigation". *The social sciences, 6(3), 213-220*.
- Aworemi, J.R., Odeyemi, J. T., & Oyedokun, J.A. (2012). "Efficacy of products marketing strategy on the performance of united bank of African, Plc in South-Western Nigeria". *International journal of business and social science, 10(3), 319-324*.
- Ayodele, T. D. (2012). "Risk management and project appraisal in Nigerian banking industry: theory versus reality". *Journal of Emerging Trends in Economics and Management Sciences, 3(4), 375-379*.

- Baltagi, B. H. (2001). *Econometric analysis of panel data* (2nd ed.). New York: John Wiley & Sons.
- Basel Committee on banking Supervision (2001): “*Risk Management Practices and Regulatory Capital: Cross-sectional Comparison*”. Basel Committee on Banking Supervision, www.bis.org
- Basel Committee, (1999): “*Principles for management of credit risk*”, Basel Committee on Banking Supervision.
- Beck, T. and Levine, R. (2004). “Stock market, banks and growth: Panel evidence”. *Journal of Banking and Finance*, 28, 423-442.
- Brooks, L., Atkinson, C., and Wainwright, D. (2010). “Adapting Structuration theory to understand the role of reflexivity: problematisation, clinical audit and information systems”. *Information systems journal*, 2(7), 133-151.
- Benson GJ, Eisenbeis R, Horvitz P, Kane EJ, Kaufman G (1986): *Perspectives on Safe and Sound Banking: Past, Present, Future*, MIT Press, Cambridge, MA.
- Berger A (1995b). “The Relationship between Capital and Earnings in Banking,” *J. Money Credit Bank*. 27:404-431.
- Berger AN (1994). “The Relationship between Capital and Earnings in Banking,” *Financ.Econ.Discussion Series No.* 94-92.
- Berger AN, Udell GF (1994). “Did Risk-Based Capital Allocate Bank Credit and Cause a “Credit Crunch” in the United States? *J. Money Credit Bank*. 26:585-628.
- Bobakova IV (2003). “Raising the Profitability of Deposits Money Banks ,” *BIATEC* 11:21-25, Retrieved on April 8, 2005 from http://www.nbs.sk/BIATEC/BIA04_03/21_25.PDF.
- Bourke P (1989): Concentration and other Determinants of Bank Profitability in Europe, North America and Australia,” *J. Bank.Financ.* 13:65-79.
- Boyd JH, Runkle DE (1993). “Size and Performance of Banking Firms. Testing the Predictions of Theory,” *J. Monet. Econ.* 31:47-67.
- Calem PS, Rob R (1996). “The Impact of Capital-Based Regulation on Bank Risk-Taking: A Dynamic Model, Board of Governors of the Federal Reserve System,” *Finance and Economics Discussion Series* 96/12 (February), 36.
- Central Bank of Nigeria (1996) *Central Bank of Nigeria, Research Department* CBN of Nigeria Lagos.
- Central Bank of Nigeria (2004). *A case study of Distressed Banks in Nigeria*. Research and Statistics Department, Central Bank of Nigeria, Abuja.
- Chibuzo, O.A., Tella, S., & Akingunola, R. (2011). “Relationship between regulation and performance of Nigerian Deposits Money Banks”. *European Journal of Economics, Finance and Administrative sciences*, 33(1), 215-221.
- Dash, M. Venkatesh, K. A., & Bhargara, B. D. (2011). An analysis of Asset liability management in Indian banks, www.ssrn.com retrieved on 18th October, 2015.
- Demirguc-Kunt, A. and Huizinga, H. (1999). Determinants of commercial bank interest margins and profitability: Some international evidence, *World Bank Economic Review*, 13, 379-408.
- Dodds, J. Colin, (1982) "The Term Structure of Interest Rates: a Survey of the Theories and Empirical evidence." *Management finance*, vol 8 Iss: 2, pp 22-31 (1982)
- Donwa, P. R., Odia, J. (2011). “Effects of the consolidation of the banking industry on the Nigerian capital market”. *Journal of Economics*, 2(1), 57-65.

- Ebhodaghe JU (1994). "Boardroom/Management Practices and Distress in the Banking System", NDIC Q. 4(2):15-25.
- Eljelly, A. (2004) "Liquidity-Profitability Tradeoff: An Empirical Investigation in an Emerging Market." *International Journal of Commerce & Management*. Vol. 14, No 2, pp. 48-61.
- Explorable.com (2009), Multiple Regression Analysis <http://explorable.com/>
- Ebong, B. B. (2005). The banking industry and the Nigerian economy post consolidation. Retrieved from www.google.com on October, 16, 2015.
- Gardner, M. J. & Milla, D. L. (1991). Managing Financial institutions: An asset liability Approach, 2nd Ed., the Dryden press, Chicago.
- Gastineau G. L.(1992): *Dictionary of Financial Risk Management*, Swiss Bank Corporation, Chicago.
- George, E.A.J. (1994). The Pursuit of Financial Stability Bank of England Quarterly Bulletin, 34, 60-66.
- Gieseche, K., (2004),: 'Credit risk Modelling and valuation: an introduction', *Cornell University, Credit Risk: Models and Management, Vol. 2, London*
- Goddard J, Molyneux P, Wilson JOS (2004). "Dynamics of Growth and Profitability in Banking", *J. Money Credit Bank*. 36:1069-1090.
- Greuning H AND Sonja B (2003) "Analyzing and Managing Banking Risk" The World Bank Washington.
- Hanke, S.H. (2013). Basel's Capital Curse. *Financial Nigeria: Development and Finance Journal*. 5(54), 34-37
- Heffernan, S., (1996), *Modern banking in theory and practice*, John Wiley and Sons, Chichester
- Junaidu M. K. & Aminu. A (2014), "An evaluation of the impact of liquidity on the profitability of Nigeria Banks".
- Heggstad A (1977). "Market Structure, Risk and Profitability in Commercial Banking", *The Journal of Finance* 32:1207-1216.
- Jain, J. L. (1996). "Strategic planning for asset liability management". *The journal of the Indian institute of Bankers*, 67(4).
- Jeremy, B., & Eileen Z. T. (2011). Structuration theory and information system development: Frameworks for practice. Retrieved from www.google.com on 4th March, 2015.
- Kabiru, J. R., Mohd, R. R., & Norlena, H. (2012). "The moderating effect of IT capability on the relationship between business process re-engineering factors and organizational performance of banks". *Journal of internet banking and commerce*, 2(17), 2-21.
- Kamal, J. O. & Adeyemi, V. O. (2012). "Relevance & important of asset liability management in banks". *The journal of the Nigerian institute of bankers* 67(5).
- Kamau, A. W. (2011). "Intermediation efficiency and productivity of the banking sector in Kenya. *Interdisciplinary Journal of Research in Business*, 1(9): 12-26.
- Kargi, H. S. (2011), "Credit risk and the Performance of Nigeria banks" Ahmadu Bello University Zaria.
- kolapo, T. F, Ayeni R. K. and Oke, O. (2012), "Credit Risk Management and Banks Performance" *Australian Journal of Business and Management Research*.
- Lai, F., Samad, M. F. A., & Azizan, N. A. (2010). Enterprise risk management framework and the empirical determinants of its implementation. *International conference on business and economics research*, 1(1), 340-344.

- Lai, F., Samad, M. F. A., & Azizan, N. A. (2010). Multi-factor model of risk and return through Enterprise risk management Framework. *International conference on information and Financial Engineering*, 1(12), 555-559.
- Macaulay, F.R. Some Theoretical Problems Suggested by the Movements of Interest Rates, Bond Yields, and Stock Prices in the United States since 1856. National Bureau of Economic Research General Series No. 33, Columbia University Press, 1938.
- Markowitz, H.M. Portfolio Selection: Efficient Diversification of Investments. New York: Wiley, 1959, 1971.
- Mohammed, F. (2012). Impact of corporate governance on banks performance in Nigeria. *Journal of Emerging Trends in Economics and Management Sciences*, 3(3), 257-260.
- Molyneux P, Thornton J (1992). "Determinants of European Bank Profitability: A Note," *J. Bank.Financ.* 16:1173-1178.
- Monnie. M. Biety(2000). "An introduction to Liquidity and Asset- Liability Management". *Journal NDIC Quarterly* Volume 12.
- Myrna, R. B. (2012). "The relationship between bank credit risk and profitability and liquidity". *The international journal of business and finance research*, 3(7), 105-118.
- Naceur BS (2003). "Bank Capitalization and Performance in Tunisia", *Universite.Libre de Tunis, Avenue Khereddine Pacha, 1002 Tunis sbennaceur@eudoramail.com* pp. 1-10.
- Naceur SB, Goaid M (2001). "The Determinants of the Tunisian Deposit Banks' Performance," *Appl. Financ.Econ.* 11:317-319. Evidence," Paper Retrieved on April 8, 2005 from [http://www.academicdb.com/risk-management case study](http://www.academicdb.com/risk-management_case_study).
- Njogo, B.O. (2012) 'Risk Management in the Nigerian Banking Industry'. *Kuwait Chapter of Arabian Journal of Business and Management Review.Vol.1 (10)*.
- Nwagwu O.I (2011). The Importance of Liquidity Management in the Banking Industry
- Nwankwo U. (1992). *Economic Agenda for Nigeria*. Centralist Production Ltd. Lagos Nigeria.
- Obadara, B. (2007). *Essentials of research methodology*. New Age Publishers, Lagos Nigeria of business research.
- Obrimah, A. O. & Ebere, C. E. (2014). "Consolidation within the banking sector and savings deposits: effect on liquidity, output and profitability within the Nigerian economy. Programme on policy conflict and strategies studies 2014 conference. Retrieved from <http://ssrn.com/abstract=2480115>.
- Olajide, O. (2007), *Introduction to Research Methodology*. Ibadan: Niyak publications
- Olaitan T (2004). "Managing Liquidity and Profitability in Banking", *The Nigerian Banker CIBN, Lagos, July- December* pp.9-10.
- Owojori A. A., Akintoye I. R. And Adidu F. A. (2011): "The challenge of risk management in Nigerian banks in the post consolidation era", *Journal of Accounting and Taxation Vol. 3(2), pp. 23-31*
- Owolabi S.A & Obida S.S (2012). Liquidity management and corporate profitability. *Business management dynamic vol 2, August, 2012, pp. 10-25*
- Oyetan JA (1997). "Packaging Banks for Successful Recapitalization," *The Nigerian Banker* Jan-June, pp.21-24.
- Robert I. O Igben (2009) *Financial Accounting Made Simple*.
- Samuelson, P.A. "The Effect of Interest Rate Increase On the Banking System." *American Economic Review*, 35(1), 1943.
- Sanusi, L. (2002): "Central Bank and the Macroeconomic Environment in Nigeria", *Quarterly Review, Vol. 03, No. 3 December*.

- Sanusi, L. (2010). "The Nigerian banking industry: What went wrong and the way forward. Being the full text of a convocation lecture delivered at the convocation square, Bayero University, Kano, on Friday 26th February, 2010. Retrieved from www.cenbank.org on 16th September, 2015.
- Sanusi, L. (2012). "Banking reform and its impact on the Nigerian economy. A lecture delivered at the University of Warwick's economic summit, UK. 17th February, 2012. Retrieved from www.cenbank.org on 19th September 2015.
- Sanni, M. R., Ebo, B. O., & Adereti, A. S. (2012). "Post consolidation profitability ranking of Nigerian banks". *European Journal of Humanities and social sciences*, 1(12), 554-572.
- Sharma, O. P. & Sharma, K. K. (2009). "Merger and acquisitions of Deposits Money Banks". *Journal of Accounting & Finance*, 27(8): 217-253.
- Uche CU (1998). "Bank Share Capital Regulation in Nigeria", *Journal of International Banking Law* 13(1):30-34.
- Yin, C. (1994). "Research Strategies in Social Science". *Journal of Business Research*.
- Zygmunt, J. (2013). "Does Liquidity impact on profitability?" *Conference of Informatics and Management Science, March 25-29, 2013*
- Ziad, S.A., Zubi, M.F.A., Hani, A., Muhammad, A., & Read, M. (2013). "Investigating the effects of human resource policies on organizational performance: An empirical study on Deposits Money Banks operating in Jordan". *European Journal of Economics, Finance and Administrative Sciences*. 51(1), 45-64.