RISK, ASSET MANAGEMENT AND BANK PERFORMANCE IN NIGERIA

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Abstract

The primary aim of this investigation is to establish the impact of asset and risk management on bank performance in Nigeria. The scope of this research is narrowed to ten (10) Nigeria deposit money banks which are: Diamond Bank Plc, FCMB Plc, Fidelity Bank Plc, First Bank of Nigeria, Plc, GTB Plc, Skye Bank Plc, UBA Plc, Union Bank Plc, Wema Bank Plc and Zenith Bank Plc within the period 2004-2019 (15 years). Secondary data obtained from banks' annual reports under study were used. The technique of analysis was linear regression using SPSS 22.0 version. Hypotheses were tested using 0.05 level of significance, and if the level of significance/p-value of the t-statistics is bigger than 0.05 level of significance, the null hypothesis is accepted. The results showed that returns on equity and loans and advances was statistically significant on Nigeria deposit money banks' profitability because the p-value was greater than 95% confidence level but less than 5% significant level, while returns on asset was not statistically significant on profitability of Nigerian deposit money banks since the p-value was smaller than 95% confidence level but greater than 5% significant level. Therefore, we recommend that Directors and board members should advise shareholders to continue to increase their level of equity investment so as to enable the bank have a large fund that it can trade with to generate increasing revenue, they can also encourage investors by issuing right issue and bonus shares. Finally, deposit money banks should consider other ways to enhance the quality of its assets so that it can improve bank performance.

Key Words: Asset and Risk Management, Bank Performance, Returns on Equity, Loans and Advances, Returns on Asset

Introduction

Nigeria banking industry is an organization embodied with the sole responsibility of managing financial assets, therefore, it is imperative for the industry to be accurately regulated; control and manage financial assets for efficient performance. Luy, (2013), Asset management view held that amount and land of deposit a depository institution held and the volume of other borrowed funds it was able to attract were largely determined by its customers. Under this view points, the public or customers determines the relative amount of deposit and other sources of funds available to the institution. The management of financial asset is associated with risk; hence there is need for quality control, risk minimization and proper financial management.

Ajekigbe (2019) noted that risk is, therefore, the probability of a loss or other adverse event that has the potentials to interfere with an organizations ability to fulfill its objective, goal or mandate. The banking business is a risky one and in providing financial services, they come across various financial risks. In order for banks to effectively manage assets proper steps must be taken to minimize the risk element that is associated with its management.

Return on equity (ROE) is the net income return as a proportion of shareholders equity. ROE measures bank's profits by showing how much profit the bank makes with shareholders money. ROE is articulated as the ratio of net income to shareholders' equity. The ROE is useful for comparing the profitability of a company to that of other firms in the same industry, (Al-Khouri, 2015; Barbie, 2016).

Profit

Profitability is the primary goal of all business ventures. Without profitability the business will not survive in the long run. So measuring current and past profitability and projecting future profitability is very important, (Nnanna, 2013; Luy 2013). Profit is the difference between total revenue and total cost. For instance, if livestock are produced at a given cost and sold at a price, income is generated and the profit can be calculated thereof. Nevertheless, money borrowed for the purpose of business is not regarded as income. This is simply a cash transaction between the business and the lender. Operating expense is the cost of variable input or liquid assets consumed in the production process. For an illustration, seed corn is an expense to the farmer because it is consumed in the farming precesses.

It is not an expense when we repay the loan of a resource such as a machine used for production activities; it is simply a cash transfer between business outfit and a lender.

A major intent of banking business is risk. The degree of success of a bank is a function of management's ability to make sure that the application of asset and risk management moderates the impact of risk such that excess income is robust and takes care of stakeholders' interest and integrity of the bank, (Babie, 2016).

Objective of the Study

The main aim of the research work is to access the impact of asset and risk

management on banks' performance. We shall achieve our goals with the following specific objectives:

- a) To examine the statistical relationship between return on equity and Nigeria deposit money banks' profitability.
- b) To investigate the statistical relationship between total loans and advances Nigeria deposit money banks' profitability.
- c) To examine the statistical relationship between return on asset (ROA) and Nigeria deposit money banks' profitability.

Concept of Risk Management

According to the Longman Dictionary of the English Language (2005), risk is the possibility of loss, injury, damage or peril and the Nigeria deposit money banks operates in such an uncertain environment. Umoh (2018), defined financial risk as the chance or probability that some unfavorable event will occur such that the financial position or cash flow stream of an organization is adversely affected. One way of identifying the financial risks of an organization is to recognize the sources of such risks. Another way is to see the risks as either those the corporation can control or those that cannot. While carrying out their everyday work, the Nigeria deposit money banks take financial risks. Santomero, (2017) opined that it was sufficient to say that various types of risks confronts Nigeria deposit money banks as market participants seek the services of these financial institutions because of the ability to provide market transaction knowledge, efficiency and funding capacity.

Classification of Risks

Financial Risks:

Financial risks are further disaggregated into pure and speculative risks. Pure risks which include liquidity, credit and solvency risks can result in a loss for bank when not properly managed. Speculative risks, based on financial arbitrage, can result in a profit if the arbitrage is positive or a loss, if it is negative. The main categories of speculative risks are interest rate, currency and market price risks, (Kargi, 2012).

Operational Risks:

Operational risks are related to a bank's overall organization and functioning of internal systems, including: computer related and other technologies, compliance with bank policies and procedure and measures against management and fraud, (Bode, 2013).

Business Risks

Chen and Pan (2017) noted that business risks are associated with a bank business environment including macroeconomic and policy concerns, legal and regulatory factors and the overall financial sector infrastructure and payment system.

Event Risks:

Event risks are any type of externally attracted risks which jeopardizes a bank's businesses by undermining its capital adequacy and operational policies.

Asset Management Corporation (AMCs) Private AMCs:

These are AMCs that are established by private persons like debts factoring companies with the objective of acquiring NPL s of banks. Large privately-owned AMCs are rare in practice because of the difficulty in finding private investors willing to assume ownership, without requiring far reaching state guarantees covering the future value of the asset portfolio, especially where a substantial amount of bad loans and assets are involved, (Isaac, 2018).

Government-owned AMCs

These are AMCs that are established, wholly funded and run by government or its agencies. Government may be in a more favourable position to own AMCs since it has the capacity to fund and put in place adequate machinery for the smooth operation of an AMC, (Pan, 2017).

Jointly-Owned AMCs

An AMC under this category could bring in stakeholders from the non-bank private sector, government, banking sector and regulatory/supervisory authorities. It could engage competent and qualified professionals and permit the consolidation of skills and resources as well as improved prospects for orderly and sustainable macroeconomic growth and development. This type of AMC can be given special legal powers to expedite loan recovery and bank restructuring, (Isaac, 2018).

AMCs Options for Asset Transfer

These include:

- i. One-time transfer of targeted assets;
- ii. A defined number of transfers in tranches; or
- iii. Transfers within a given time-frame.

Individual loans which are transferred to AMC should not go above 5% of the capital base of AMC. The aggregate portfolio of assets of a particular bank should not go beyond 25% of the AMC's capital, at any point in time. The AMC will purchase outright, loans that have adequate underwriting documentation and collateral, while other categories of loans would be purchased with recourse. In the case of banks that meet the new capital base requirement, the AMC would act in an agency capacity to recover the NPLs for a fee. In view of the fact that a significant proportion of the proposed assets to be purchased by the AMC will be NPLs, which were created by the affected banks, the AMC would need to acquire such assets at market values, (Isaac, 2018).

Design and Selection of Risk Management Strategies

Three basic strategies commonly employed in dealing with risks are: loss control, loss financing and internal risk reduction. Loss control and internal risk reduction involve decisions by firm to carefully invest (or forego investing) their resources and boost business worth. They are conceptually equivalent to other decisions made by firms. For instance, under loss control, the two basic methods are loss prevention and loss reduction. A commercial bank involved in Agriculture financing can only bring its loss exposure to zero by refusing to grant loans to farmers. This is called risk avoidance, the main cost being foregone benefits from agriculture financing. Loss reduction is whereby banks seek to reduce the magnitude of losses from financing risks. The goal here is to reduce the frequency and severity of losses from delinquencies and defaults, (Bode, 2013).

Portfolio Risk Analysis Management

A portfolio is not simply a group of dissimilar assets but a circumspectly unified asset combination within a cohesive support. What constitutes a portfolio would depend on whose perspective from which you are looking at it. For an investor in the stock market, the portfolio will be a collection of shareholdings in different companies. For a real estate investor, his portfolio will be a collection of buildings. To a financial manager from the industrial sector, his portfolio will be a collection of real capital projects, (Santomero, 2017).

The process of making and carrying out a decision to invest in securities is called portfolio management. Proper portfolio management reduces investment risks. Portfolio management is an occupation for delivery of investment counseling and management services. Management of a portfolio of significant size is a timeconsuming and painstaking job. Historically, portfolio management progressed from conventional to contemporary approach. Institutional investment policies are often a combination of the conventional and contemporary approaches portfolio to management.

Conventional portfolio management expressed investment risk and its relationship to returns in qualitative rather than in quantitative terms. Under the approach, past returns could not be compared through the use of generally accepted common denominator of risk. The uncertainty of expected return could not be expressed with any degree of quantitative assurance. Contemporary portfolio theory treats risk in quantitative terms. It focuses attention beyond the regular meticulous analysis and assessment of individual securities to the problems of overall portfolio composition predicated on explicit risk return parameters and on the identification and quantification of client objective, (Hudson-Wilson, 2019).

Modern Portfolio Theory

Harry Markowitz published a paper on Modern Portfolio Theory in 1952. Markowitz proved that age-old adage "Don't put all your eggs in one basket" is true. Markowitz was therefore the first person to prove mathematically, that it was a question of how many eggs to put into which basket. All the involved mathematical calculations are ways to structure and discipline one's judgment as a portfolio manager – a way to reduce risk and improve overall return (Hudson-Wilson, 2019). He states, that the more advanced our thinking can become about the characteristics of each real estate investment and how it resembles and differs from others, the better the return we will be able to achieve. Portfolio Theory assumes an investor is both rational and risk averse and as such has a number of choices of investments to construct a portfolio. All investment opportunities involve risk and reward, an efficient frontier can be constructed where combinations of investments will have a defined risk point and return and at the efficient frontier will be the best possible risk reward combination.

Capital Asset Pricing Approach (CAPA)

This is an extension of Markowitz mean-variance theory. CAPA is developed from MPT but with three major additional concepts. The first concept is of a risk-free investment, secondly a notion of market portfolio is used and thirdly an efficient Market is assumed to exist. It was built up by Treynor, Sharpe, Lintner and Mossin in the early 1960's and was refined further after a few years. Generally the model predicts the relationship between risk and equilibrium expected returns on assets. The CAPA also relates the required rate of return for a security to its risk as measured by beta (Bode, 2013). Beta measures the contribution of a single asset to the risk of a diversified portfolio. Systematic risk is nondiversifiable risk; therefore, beta is effectively measuring the systematic risk of a specific asset.

Empirical Review

Kargi (2012) investigated the impact of asset risk on banks' profitability. For bank

performance and asset risk, various financial ratios were obtained from the annual reports and accounts of selected deposit money banks from 2005-2010 and analyzed using descriptive, correlation and regression techniques. He observed that asset and risk management was significant on profitability of Nigeria deposit money banks. He noted that profitability of Nigeria deposit money banks was inversely predisposed to loans and advances, non-performing loans, assets and deposits, which attract great risks of loss of working capital and misery.

Epure and Lafuente (2013), Kithinji (2015) examined the effect of asset and risk management on banks' Profits in Nigeria. The results showed that larger chunk of the profits of Nigeria deposit money banks were not manipulated by total of credit and nonperforming loans, consequently, they suggested profitability of Nigeria deposit money banks was not impacted by credit and non-performing.

Lewis (2017), Chen and Pan (2017) examined the asset risk efficiency of 34 Taiwanese commercial banks over the period 2005-2015. Asset risk parameters were asset risk technical efficiency (AR-TE), asset risk allocative efficiency (AR-AE), and asset risk cost efficiency (AR-CE). The results showed that a single bank was resourceful under the reviewed period.

Isaac, (2018), Dubben and Sayce (2017), Ahmad, and Ariff (2017), in their various studies found that loan loss provision has a significant positive influence on nonperforming loans. Consequently, an enhanced loss of loan shows an increase in credit risk and worsening the quality of loans and bank performance.

Model Specification

The function is given as: PAT = f (ROE, ROA, TLA) Thus, the econometric equation of the model is presented as,

 $PAT = a_0 + a_1 ROE + a_2 ROA + a_3 TLA + U_t$

Where:

PTA = Profit after Tax, ROE = Return on equity, ROA = Return on Asset, TLA = Total loan and Advance

Data Presentation

The following data presented below were gotten from Annual reports of the banks under study. The data is presented below:

| Table1: Nigeria Deposit Money Banks Aggreg | ate Data for Profit after Tax, Returns on Equity, |
|--|---|
| Loans And Advances And Returns On Asset | |

| | Dependent Variable | Independent Variables | | | | |
|------|-----------------------|-----------------------|-------------|--------|--|--|
| YEAR | Profit After Tax¥'000 | ROE % | LOA ¥'000 | ROA % | | |
| 2004 | 2100229.1 | 31.83 | 5116022.3 | 0.0295 | | |
| 2005 | 2201921.9 | 33.54 | 6239902.8 | 0.0251 | | |
| 2006 | 2402910.3 | 31.09 | 7916931.3 | 0.0239 | | |
| 2007 | 2521019.1 | 26.58 | 10638554.8 | 0.0238 | | |
| 2008 | 2541554.8 | 22.49 | 15339149.7 | 0.0265 | | |
| 2009 | 194558.6 | 17.23 | 30014991.2 | 0.0258 | | |
| 2010 | 4098556 | 17.75 | 47302016.8 | 0.0252 | | |
| 2011 | 925899 | 16.15 | 127097856.4 | 0.0218 | | |
| 2012 | 10398633.9 | 22.34 | 117326231.1 | 0.0173 | | |
| 2013 | 11101561.9 | 7.02 | 115700379.2 | 4.0476 | | |
| 2014 | 11233466.4 | 8.74 | 123903629.8 | 0.0126 | | |
| 2015 | 17861738.3 | 10.61 | 141291371.2 | 0.0233 | | |
| 2016 | 12489503.9 | 14.65 | 169366708.9 | 0.0217 | | |
| 2017 | 14948508.1 | 12.79 | 206666833.8 | 0.0234 | | |
| 2018 | 150378063.4 | 8.54 | 229072048.6 | 0.0221 | | |
| 2019 | 163474139.6 | 8.60 | 239129302.1 | 0.0162 | | |

Source: Annual report and Accounts of the banks under study 2019

Discussion of Data

Profit after Tax (PAT)

This is simply gross profit minus tax. It is often a better assessment of what a business is really earning. 2009-2011 recorded a low Profit, and further increased from 2012 - 2019.

Returns on Equity

This is not just gauge for profit; it is an indication of competence. An increase in ROE implies enough financial muscles for deposit money bank to experience a smooth operation in its ability to generate profit. It is observed that deposit money banks recorded a high ROE from year 2004-2006 while from 2007-2018, it was appreciating and depreciating until and got to 8.6% in 2019.

Loans and Advances

Table 1 shows an increase in deposit money banks issued loans and advances overtime

Returns on Asset

ROA shows management efficiency in income generation by employing her assets. It is the ratio of firm's total profit to its total assets. The table 1 above revealed a low percentage of efficient management regards a firm's asset.

Test of Hypotheses

Decision Rule: Accept null hypothesis (Ho) if the P-value of the t-statistics is greater than P-value tabulated at 0.05 level of significant which is less than 95% degree of confidence, otherwise Reject H_0 and accept H_1 .

Test of Hypothesis One:

H₀₁: There is no significant relationship between returns on equity and banks profitability

Table 2a: PAT AND ROE

Model Summary^b

| Mode l | R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin- Watson |
|-----------|-------|----------|----------------------|----------------------------|-------------------|
| 1 | .723ª | .674 | .522 | 5634642.563 69 | 1.995 |

a. Predictors: (Constant), RETURNS ON EQUITY

b. Dependent Variable: PROFIT AFTER TAX Source: SPSS Output 22.0

Table 2b

Coefficients^a

| | | | Unstandardized Coefficients | | Standardized Coefficients | | |
|------|--------------------|----|--------------------------------|-----------------|------------------------------|--------|------|
| Mode | Model B Std. Error | | Beta | т | Sig. | | |
| 1 | (Constant) | | 13895598.69 4 | 3269522.11 6 | | 4.250 | .001 |
| | RETURNS EQUITY | ON | -374055.233 | 162814.277 | 523 | -2.297 | .038 |

a. Dependent Variable: PROFIT AFTER TAX Source: SPSS Output 22.0 Table 2a shows an affirmative association between the independent variable returns on equity and the dependent variable Profit after tax (PAT) as the table revealed that the overall coefficient of correlation (R) is 0.723 which indicates a positive link between returns on equity and profit after tax. The coefficient of determination R^2 is 0.674 which shows that the model is accurate and fit for prediction at 67%. The Adj R^2 is 0.522 which means that about 52% of the explained variable was accounted for by returns on equity and the remaining 48% is not accounted for due to some financial errors. The DW is 2.095 shows no serial correlation.

Table 2b which is the Coefficient table showsthe level of significance for returns onequity. The p-value of the t-statistics forreturns on equity is 0.038 which is smallerthan5% level of significance.

Test of Hypothesis Two:

H₀₂: There is no significant relationship among total loans & advances and banks profitability **Table 3a: PAT AND LOA**

| Model Summary ^b | | | | | | | |
|----------------------------|-------------------|----------|------------|-------------------|---------|--|--|
| Mode | | | Adjusted R | Std. Error of | Durbin- | | |
| I | R | R Square | Square | the Estimate | Watson | | |
| 1 | .780 ^ª | .608 | .580 | 4137888.850 37 | 2.350 | | |

a. Predictors: (Constant), LOANS AND ADVANCES

b. Dependent Variable: PROFIT AFTER TAX

Source: SPSS Output 22.0

Table 3b

Coefficients^a

| | | | Unstandardized Coefficients | | Standardized Coefficients | | |
|------|-------------------|-----|--------------------------------|-----------------|------------------------------|-------|------|
| Mode | I | | В | Std. Error | Beta | т | Sig. |
| 1 | (Constant) | | 1187350.63 6 | 1639188.01 7 | | .724 | .481 |
| | LOANS ADVANCES | AND | .060 | .013 | .780 | 4.663 | .000 |

a. Dependent Variable: PROFIT AFTER TAX Source: SPSS Output 22.0

Table 3a shows an affirmative correlation between the independent variable loans & advances and the dependent variable Profit after tax (PAT) as the table revealed that the overall coefficient of correlation (R) is 0.780 which indicates a positive link among loans & advances and profit after tax. The coefficient of determination R^2 is 0.608 which shows that the model is accurate and fit for prediction at only 61%. The Adj R^2 is

0.580 which means that about 58% of the explained variable was accounted for by loans & advances and the remaining 42% is not accounted for due to some financial errors. The DW is 2.350 shows no serial correlation.

Table 3b which is the Coefficient table shows the level of significance for loans &

advances. The p-value of the t-statistics for loans & advances is 0.000 which is smaller than 5% level of significance.

Test of Hypothesis Three:

H₀₃: There is no significant relationship between returns on asset and banks profitability.

Table 4a: PAT AND ROA

Model Summary^b

| Mode I | R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin- Watson |
|-----------|-------------------|----------|----------------------|----------------------------|-------------------|
| 1 | .628 ^ª | .416 | 254 | 6557600.673 01 | 1.922 |

a. Predictors: (Constant), RETURNS ON ASSET

b. Dependent Variable: PROFIT AFTER TAX

Source: SPSS Output 22.0

Table 4b

Coefficients^a

| | | Unstandardized Coefficients | | Standardized Coefficients | | |
|-------|------------------|--------------------------------|-----------------|------------------------------|-------|------|
| Model | | В | Std. Error | Beta | Т | Sig. |
| 1 | (Constant) | 7339853.95 2 | 1703044.73 6 | | 4.310 | .001 |
| | RETURNS ON ASSET | -812941.523 | 1682611.90 4 | 128 | 483 | .636 |

a. Dependent Variable: PROFIT AFTER TAX Source: SPSS Output 22.0

Table 4a shows a confirmatory relationship between independent variable returns on asset and the dependent variable Profit after tax (PAT) as the table revealed that the overall coefficient of correlation (R) is 0.628 which indicates an affirmative connection between returns on asset and profit after tax. The coefficient of determination R^2 is 0.416 which shows that the model is accurate and fit for prediction at about 42%. The AdjR² is -0.254 which means that about 25% of the explained variable was accounted for by returns on asset and the remaining 75% is not accounted for due to some financial errors. The DW of 1.922 shows weak serial correlation but can be tolerated in the series.

Table 4.3.3b which is the Coefficient table shows the level of significance for returns on asset. The p-value of the t-statistics for returns on asset is 0.636 which is greater than 5% level of significance.

Summary of Results

The findings of the result of returns on equity revealed that the coefficient is significantly related to the dependent variable (PAT) because the p-value significant level (0.038) is smaller than 0.05 significance level and greater than 95% confidence level, therefore, we accept the alternate hypothesis (H₁) that returns on equity have significant relationship with firms profitability in Nigeria while the null hypothesis H₀₁ is rejected.

The findings of the result for loans and advances revealed that the coefficient is significantly related to the dependent variable (PAT) because the p-value significant level (0.000) is smaller than 0.05 significance level and greater than 95% confidence level; therefore, we accept the alternate hypothesis (H₁) that loans & advances have significant relationship with firms' profitability in Nigeria.

The findings of the result for returns on asset shows that the coefficient is not significantly related to the explained variable (PAT) because the p-value of 0.636 is more than 0.05 significance level and less than 95% confidence level, therefore, the null hypothesis (H₀), that returns on asset does not have significant impact on firms profitability in Nigeria is accepted.

Conclusions

Based on the summary of results above, we hereby conclude that returns on equity and loans and advances have significant impact on bank profits in Nigeria since the p-value is smaller than 5% significant level and greater than 95% confidence level, while returns on asset does not have significant impact on bank profits in Nigeria as the p-value is bigger than 5% significant level and less than 95% confidence level.

Policy Recommendations

- 1. Directors and board members should advise shareholders to continue to increase their level of equity investment so as to enable the bank have a large fund that it can trade with to generate increasing revenue, they can also encourage investors by issuing right issue and bonus shares.
- 2. All credit risk managers and lending officers should adhere strictly to good lending practice; they should investigate the purpose of the loan and ensure the feasibility of every loan proposed.
- 3. Deposit money banks should improve the quality of its asset so that it can advance banks performance and also increase net earnings. The implementation of good corporate governance practice is important.

References

- Ahmad, N.H. and Ariff, M. (2017). Multicountry Study of Bank Credit Risk Determinants, International Journal of Banking and Finance, 5(1), 135-152.
- Ajekigbe, J.M. (2019). "Risk Management: A Must for Banks to Sustain the Gains of Banks Consolidation in Nigeria", Being a Text Valedictory Address by the President/Chairman Organized by the Chartered Institute of Bankers of Nigeria, February, 2.
- Al-Khouri, R. (2015). Assessing the Risk and Performance of the GCC Banking Sector, International Journal of Finance and Economics, ISSN 1450-2887, Issue65, 72-8.
- Babie E.A (2016), The practice of social research, loads mouth, publishing Co. Belmost Califonia.

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- Bode Z., (2013), Essentials of Investment, 5th Edition,McGraw-Hill. London.
- Chen, K. and Pan, C. (2017). An Empirical Study of Credit Risk Efficiency of Banking Industry in Taiwan, Web Journal of Chinese Management Review, 15(1), 1-16.
- Diamond Bank (2019). Annual reports retrieved from (www.diamondbank.com).
- Dubben N. and Sayce S. (2017). Property Portfolio Management: An Introduction. Routledge, London.
- Eco Bank (2019). Annual reports retrieved from (www.ecobank.com).
- Epure, M. and Lafuente, I. (2013).Monitoring Bank Performance in the Presence of Risk, Barcelona GSE Working Paper Series No.61.
- Fidelity Bank (2019). Annual reports retrieved from (www.fidelitybank.com).
- First Bank Nigeria (2019). Annual reports retrieved from (www.firstbanknigeria.com).
- First City Monument Bank (2019). Annual reports retrieved from (www.fcmb.com).
- Guaranty Trust Bank (2019). Annual reports retrieved from (www.gtb.com).

- Hudson-Wilson J., (2019). New Trends in Portfolio Theory, Journal of Property Management, Vol. 55 Iss. 3 Pg. 57.
- Kargi, H.S. (2012). Asset Risk and the Performance of Nigerian Banks, Ahmadu Bello University, Zaria.
- Kithinji, A.M. (2015). Asset dit Risk Management and Profitability of Commercial Banks in Kenya, School of Business, University of Nairobi, Nairobi.
- Lewis J. (2017). MPT comes to Real Estate, Institutional Investor, Vol. 24, Iss.2,Pg 153.
- Luy, D. D. (2013). Evaluation of Credit Risk Management Policies and Practices in a Vietnamese Joint-Stock Commercial Bank's Transaction Office. Business Economics and Tourism.
- Markowitz H., 1952, Portfolio Selection, Journal of Finance, Vol 7, 1952, pp 77-91.
- Nnanna, O. J., (2013), Today's Banking Risks and Current Regulatory and Supervisory Framework, CBN Bullion Publication.
- Santomero, A., (2017). Financial Markets Instruments and Institutions, Irwin Publishers.

- Pan A.C. (2017), Opening Remarks to Conference Participants, in CBN(ed), Consolidation of Nigerian's Banking Industry: Proceeding of Fourth Annual Monetary Policy of Conferences, Abuja, FCT.
- Isaac, P. N. (2018), Capital Restructuring of Banks: A Conceptual Framework in CBN (ed) consolidation of Nigeria's Banking Industry: Process of Fourth

Annual Monetary Policy Conference, Abuja, FCT.

- United Bank for Africa (2015). Annual reports retrieved from (www.ubagroup.com)
- Wema Bank (2015). Annual reports retrieved from (www.wemabank.com).
- Zenith Bank (2015). Annual reports retrieved from (www.zenithbanknigeria.com).