



International Journal of Multidisciplinary Research and Growth Evaluation



International Journal of Multidisciplinary Research and Growth Evaluation

ISSN: 2582-7138

Received: 25-03-2021; Accepted: 18-04-2021

www.allmultidisciplinaryjournal.com

Volume 2; Issue 3; May-June 2021; Page No. 30-39

Impact of financial risk management policy on the financial performances of deposit money banks in Nigeria

Tunde Olutokunboh Obafemi ¹, Felix Egun Araoye ², Emmanuel Olusuyi Ajayi ³

¹ Ph.D, Department of Accountancy, Federal Polytechnic, Offa, Kwara State, Nigeria

² Ph.D, Department of Management and Accounting, Ladoko Akintola University of Technology, Ogbomosho, Oyo State, Nigeria

³ Ph.D, Department of Economics, Accounting and Finance, Bell University of Technology, Ota, Ogun State, Nigeria

Corresponding Author: Tunde Olutokunboh Obafemi

Abstract

Financial Risk is crucial and major determinant for the growth and survival of a firm, most firms indulge in financial risk management in order to report certain targeted performance, but the poor practices of financial risk management policy have led to the collapse of lot firms. The extent of financial risk management among listed money deposit banks in Nigeria was still not well studied and therefore there was the need for a detailed research on financial risk management. This study investigate the existence of financial risk management among some selected commercial banks in Nigeria and their financial performance from the period of 2014 to 2019. To assess the financial risk management practices, a self-administered survey questionnaire was used across the selected banks. The study used multiple regression analysis and the findings were

presented in the form of regression equation and table. The findings from study revealed that most of the Nigerian money deposit banks were practicing average financial risk management and as a result the financial risk management practices mentioned herein modern risk measurement techniques such as risk value techniques, involved risk value, Risk-Adjusted and simulation techniques. The study, therefore, recommend that Nigerian banking industry should explore the use of derivatives to reduced financial asset risks and to perfect control on financial management risk policy implementation. Daianu, Daniel and Lungu (2008) pointed out that financial risk arises from likely losses in financial market as a result of movement in financial performance variables.

Keywords: management, deposit money banks, financial, Nigeria

1. Introduction

The impact of financial risk management policy on financial performance has an import effect pm economic growth of each firms due to the likely negative effect on firms performance. The true burden of the financial risk policy over firm performance has been a problem among the financial institutions within quoted firms. Conventional wisdom shows that business owners bear most burden of financial risk on firm's performance. Since the owners are the investors of the company, such burden may fall on them (the shareholders). The impact of financial risk management policy on firm performance is one of the central problems in most developing countries (Delis, 2005) ^[9]. The effect matters not only for the evaluation of firm performance but also for general economic development. The term financial risk be used like general term for multiple kinds of risk related with financing and credit implementation including all financial transactions that involve credit policy risk of default. (Allen Saunders 2004) ^[3].

The term financial risk may be used like a group of multiple types of risk associated with financing, including financial transactions that include company loans in risk of default. [Bobakovia (2003)] ^[12] Pointed that financial risk arises from likely losses in financial markets due to movements in financial variables. It is usually associated with leverage with the risk that obligations and liabilities cannot be met with stocks. Our focus in this study will use the term financial risks to broadly cover loan risk, market change price risk, interest rate risk, liquidity risk and forex risk. Financial risk may be caused by change in interest rates, currency exchange rates, variation in market prices, default risk and liquidity gap that affect the cash flows and, therefore its firm performance and competitive position in product markets. Indeed most of the Nigerian Commercial banks outline credit risk, liquidity risk, market risk, interest rate risk and foreign exchange risk as the most important types of financial risks they faced.

Financial Risk management policy can therefore be defined as a rule set for financial activities to maximize the financial performance of a bank by reducing costs associated with the cash flow volatility.

The manager's behavior toward risk (risk appetite and risk aversion) and corporate governance can affect the choice of risk management activities. Ariffin, Archer and Karim (2012) ^[7] notes that a robust risk management framework can help banks to reduce their exposure to risks, and improved their ability to compete in the 71 Stephen Muthii Wanjohi *et al.*: The Effect of Financial Risk Management on the Financial Performance of Commercial Banks in Nigeria market. Today, banks financial risk management is one of the most important key functions in banking operations as commercial banks are in the risk business. Al-Khourri (2011) ^[2] notes that due dynamic environment, all banks are exposed to a large number of risks such as credit risk, liquidity risk, foreign exchange risk, market risk and interest rate risk, among others – such risks may create some source of threat for a bank's survival and success.

Allen and Saunders (2004) ^[3] observed that the crisis that affected global financial stability and the economy in 2007-09 has reinforced the need to rethink some of the approaches adopted by the financial community in assessing bank financial performance. To this end, it is important to obtain a comprehensive view of those likely factors that may influence banks' financial performance, including the adequacy of business models in relation to risk appetite, and the question of how this adequacy is handled inside and outside banks through corporate governance processes. Against this backdrop, appropriate benchmarks, sensitivity analyses as well as stress tests ought to be considered in order to assess the real capability of banks to face stressed risk market conditions and absorb consecutive shocks on the basis of their business strategy and degree of risk tolerance.

1.1 Financial Risk Management Policy

Anguka (2012) ^[5] defines financial risk management policy as a sequence set of rules prescribed by firm, such focuses on four (4) processes: (1) the identification of events into one or more broad categories of market, credit, operational and other risks into specific sub-categories; (2) the assessment of risks using data and risk model; (3) the monitoring and reporting of the risk assessments on a timely basis; and (4) the control of these risks by senior management. Because of the vast diversity in risk that banking institutions take, there is no single risk management guidelines for banking institutions prescribed risk management system that works for all. Each money deposit banking firm should tailor its risk management policy program to its needs and conditions. However, given the critical role of banks for a modern market economy, the capacity, of bank's balance sheets, the dispersion of banks' creditors – typically many small depositors – and the maturity transformation banks perform converting short-term deposits into medium to long-term assets there is need for regulations in the banks.

Once those financial risks have been identified, they should be measured in order to determine their effect on the banking institution's profitability and capital employed. This can be measure by using various techniques ranging from simple to sophisticated models. Accurate and timely measurement of risk is very essential to effective risk management policy. An institution that does not have adequate risk measurement policy system has limited ability to control or monitor risk levels. Banking sectors should periodically test their risk measurement policy tools to make sure they are accurate. Good risk measurement policy systems should assess the risks of both individual transactions and general risk. After

measuring risk base policy implementation, such banking institutions should establish and communicate risk limits through policies, standards, and procedures that define responsibility and authority. These limits should serve as a means to control exposure to various risks associated with the banking institution's activities.

Financial risk management policy has enhanced growth within industry starting '90 as a result of the increasing volatility of financial markets, financial innovations (financial derivatives), the growing role played by the financial products in the process of financial intermediation, and important financial losses suffered by the companies without risk management systems (for example, Enron and WorldCom), [Allen and Saunders, 2004] ^[3]. Delis [2005] ^[9] pointed that Risk Management as commonly perceived does not mean to minimize risk; in fact, its goal is to optimize the risk-reward trade off. And, the role of risk management is to assure that an institution does not have any need to engage in a business that unnecessarily imposes risk upon it. Dembe, Allard and Boden [2000] ^[18], notes that risk management is still evolving in Nigeria and therefore many institutions lack adequate information on effective risk management policy methodologies.

1.2 Financial Performance

Financial performance is used to measure both financial institution policy and operations in form of monetary terms. It also shows a bank's overall financial health over a period of time, and it helps to differentiate banks across the banking sector at the same time. Al-Tamimi and Al-mazrooel (2007) examined financial performance as a general measure of how financial institution generates revenues from its capital. Athanasoglou Brissimis and Delis [2005] ^[9], explained that financial performance as a subjective measure of how well a firm uses its assets from primary mode of business to generate revenue. In order to assess the financial performance of money deposit banks, there are different types of indicators that can be used. Some of the main financial performance indicators include Return on Asset (ROA), Return on Equity (ROE), Return on capital employ, Earning per share, Dividend per share etc.

All the above indicators were internal performance measure of shareholder value, and it is by far the most popular measure of performance. ROE proposes a direct assessment of the financial return of a shareholder's investment. It is easily available for analysts, only relying upon public information; and it allows for comparison between different companies or different sectors of the economy.

ROE = net income / average total equity

OR

ROE = (result/turnover)*(turnover/total assets)*(total assets/equity).

The first element is the net profit margin, the second element represents the efficiency of the assets and the last corresponds to the financial leverage multiplier. ROE reflects how effectively a bank management is using shareholders' funds or capital employed. Thus, it can be deduced from the above statement that the better the ROE the more effective the management in utilizing the shareholders capital.

The Return on Assets (ROA) is the net income for the year divided by total assets, usually the average value over the year. ROA measures the ability of the bank management to generate income by utilizing company assets at their disposal.

In other words, it shows how efficiently the resources of the company are used to generate the income. Al-khouri (2011)^[2] examined that ROA indicates the efficiency of the management of a company in generating net income from all the resources of the institution. Return on Capital Employed (ROCE) allows banks to allocate capital to individual business units according to their individual business risk. As a financial performance evaluation tool, it then assigns capital to business units based on their anticipated economic value added. ROCE is the key measures of bank profitability. The theoretical ROCE can be extracted from the one-factor Capital Asset Pricing Model (CAPM) as the excess return on the market per unit of market risk (the market price of risk). This measure takes into account the bank's cost of capital. RAROC adjusts the value-added in relation to the capital needed. However, literature is quite critical of this measure as a tool to analyze performance, essentially due to its thorough accounting basis, while it is then difficult to calculate RAROC without having access to internal data. Furthermore, it appears that RAROC may be appropriate for activities with robust techniques for measuring statistical risk, such as loan or credit activity.

1.3 Impact of Financial Risk Management Policy on Financial Performance

Efficient financial risk management policy is required in any company as return and risk are both directly related to each other meaning that increase in one will lead increase in others and vice versa. Dembe; Allard and Boden (2000)^[18] observed that effective risk management policy leads to more balanced trade-off between risk and benefit, to realize a better position in the future. Financial risk caused by variation in interest rates, currency exchange rates; default and poor liquidity management may have negative effects on the bottom-line of the bank. Anguka (2012)^[5] Notes that bank risk taking has impact on bank turnover (Performance) as indicated by total assets, total deposit, net interest, margin and net income. Athanoglou, Brissimis, and Delis (2005)^[9], examined that the profitability of a bank depends on its ability to foresee monitor and avoid risks, and possibility of provisions to cover losses brought about by risk that arises. Daianu, Daniel, Lungu (2008), Point out that the ultimate objective of risk management implementation is to maintain financial performance in the banking sector as aspects of financial risk management promote early warning system of monitoring relevant indicators; as well as stimulating and making provisions for possible realistic strains on the system by conducting stress testing.

1.4 Money Deposit Banks in Nigeria

Money Deposit banks are financial intermediary institutions that take deposits and gives credit amongst other financial services. In Nigeria, the banking sector plays a major role in the banking sector, particularly with respect to mobilization of savings and provision of loan As per Bank Supervision Annual Report (2012) the banking sector consisted of the Central Bank of Nigeria, as the regulatory authority, . During the period 2014-2019, the Nigerian banking system showed resilience, which was attributed in part to the low financial integration in the global financial market and the intensive supervision and sound regulatory reforms [Bobakovia 2003]^[12].

1.5 Statement of the Problem

Financial risk management policy will no doubt affect certain proportion of the financial performance of the money deposit banks, due to lack of proper management policy implementation on risk reduction effect on the shareholders' wealth. In Nigeria, the deposit money banking sector plays a major role during the economy growth. The effect of financial risk management policy on return on equity will no doubt influence the rate at which firms finance the proposal project. Increase in financial risk may reduce firm's performance. The issue of the impact of financial risk management policy on firm performance has remained a tropical issue of the Nigerian financial institution and Nigerian money market (Baker, Rowell & Veil 2001). How the financial risk management policy affects the firm's performance has not been determined within or outside the Nigerian context. This statement of problem may be examined through an impact of financial performance within the selected firms.

The above statement of problem calls for more academic research and findings to bring more about the reliable ideas regarding the selected firms. However there is little study that has been done in Nigeria to establish how the broader financial risk management affects the financial performance of money deposit banks in Nigeria.

1.6 Research Objective

- I. To examine the effect of financial risk management policy on overall turnover in selected financial institution in Nigeria.
- II. To establish the effect of financial risk management policy on the financial performance on selected financial institutions in Nigeria.

1.7 Research Question

1. To what extent does financial Risk Management policy affect overall turnover in selected financial institution in Nigeria?
2. To what level does financial risk management policy affect financial performance in selected financial institution in Nigeria?

1.8 Significance of the Study

The finding of this study would be of benefit to the management and investors that contribute to the evolution of the important subject of financial risk management policy. Specifically, the study will explain the extent to which theoretical risk models such Value at Risk (VAR) are used by money deposit banks to measure the risks. The study will provide insight in the most successful strategies banks use to handle financial risk. The findings will assist Central Bank of Nigeria in formulating guidelines policy that will enhance financial risk management in the banking sector. The study will also be important to the money deposit banks that will be able to understand the risk management policy practices that contribute to financial performance of money deposit banks and ensure that they undertake acceptable banking policy practices and procedures. Academicians will benefit from the information of the study as the study will contribute to existing body of knowledge. The study will further provide the background information to research organizations and scholars and identify gaps in the current research for further research.

2. Literature Review

2.1 Conceptual Review

According to Anguka (2012) [5], financial performance is the company's ability to manage and control its resources. Financial performance can be measured by analyzing financial statements using financial ratios. According to Harahap (2008), financial ratios are divided into four types of ratios, namely, liquidity ratios, profitability ratios, solvency ratios and activity ratios. The measurement results of performance achievement serve as the basis for management or manager of the company to improve performance in the next period and be used as the basis of reward and punishment.

2.2 Diachronic Analysis of Financial Risk Policy

The evolution of financial risk policy on regulated money deposit banks is characterised by disclosure obligation on the firm by the management financial risk management is a studied both performance and economic growth (Campbell, Hilscher and Szilayu (2008)). Allen and Saunders (2008) considered in the mentioned meta-strictly that financial risk management policy act as a determinant of the overall financial risk and complexity of the management owners profitability and general performance. Alexandru, Genu and Romanescu (2008) investigated the determinants of financial risk management policy in United State by studying the views of management and shareholders about the factors that determine financial performance and provide evidence whether these factors are related to money deposit banks characteristics see financial risk as a major determinant of firm is growth. Banks have to consider cautiously cost and benefit that will arise from discharge of the management functions. It is therefore suggested that, financial risk management policy should reflect a factor that recognizes different level of risk across selected firms (Daianu, Daniel and Lungu (2008)). The study of Diffu (2011) noticed that management mostly evaluate the expected value of return after the consideration of financial risk management policy. This shows that there are connections between the financial risk management policy and financial performance.

2.3 Financial Risk Management Policy Mechanism Influences the Banks Financed Performance

The effect of financial risk management policy on financial performance management is able to meet the needs of every shareholder if such policy is adequately implemented. This shows that internal stakeholders will be more dedicated to contribute to the company and external stakeholders will give a good assessment of the company. In addition customers will improve their service so that the company's financial performance will improve (Al-Tamimi and Al-Mazroosic (2007)). This is in accordance with the concept of stakeholder theory, which assumes that the company must be responsible to various risk factors in organization that have influence on this company performance because the decision on risk management policy made will affect the return on equity, Return on assets and earnings per share of the firm, Good relationships between internal stakeholders and a company will create support towards the financial performance. Such support is reflected in productivity services so as to improve firm financial performance.

Research that proves that adequate internal control system has a positive effect on financial performance, includes research conducted by Daianu (2013), Ariffin, Archer and

Karim Anguka (2012) [7] and Daianu, Danidl and Lungu (2008), opined that incorporating systemic have negative influence on risk management.

2.4 Theoretical Review

2.4.1 Modern Portfolio Theory (MPT)

Modern portfolio theory (MPT) is a theory of finance that attempts to maximize portfolio expected return for a given amount of portfolio risk, or equivalently minimize risk for a given level of expected return of firm, by carefully choosing the proportions of various assets. Prior to Markowitz's work, "Portfolio Selection," published in 1952 by the Journal of Finance, investors focused on assessing the risks and rewards of individual securities in constructing their portfolios intuitively. Markowitz formalized this intuition. Detailing mathematics of diversification, he proposed that investors focus on selecting portfolios based on those portfolios' overall risk-reward characteristics instead of merely compiling portfolios from securities that each individually has attractive risk-reward characteristics. This means that investors should select portfolios not individual securities.

Treating Single-period returns for various securities as random variables, this could be done by assigning them expected values, standard deviations and correlations. Based on these, we can calculate the expected return and volatility of any portfolio constructed with those securities. We may treat volatility and expected return as proxies for risk and reward. Out of the entire universe of possible portfolios, certain ones will optimally balance risk and reward. These comprise what Markowitz called an efficient frontier of portfolios. An investor should select a portfolio that lies on the efficient frontier. Daianu ,Daniel ,and Lungu (2008), further expanded on Markowitz's work by adding a risk-free asset to the analysis. This made it possible to leverage or deleverage portfolios on the efficient frontier. This led to the notions of a super-efficient portfolio and the capital market line. Through leverage, portfolios on the capital market line are able to outperform portfolio on the efficient frontier. Markowitz (1952) Formalized the capital asset pricing model (CAPM) as ; $E(RJ) = RF + \{ E(RM) - RF \} * BJ$

Where;

$E(RJ)$ = Expected Return on Firms.

RF = Free Risk.

$E(RM)$ = Expected Return on Market.

BJ = Beta of Value of Firm.

2.5 Moral Hazard Theory

A moral hazard is where one party is responsible for the interests of another, but has an incentive to put his or her own interests first. For example one might take risks that someone else will have to bear. Moral hazards such as these are a pervasive and inevitable feature of the financial system and of the economy more generally. Daianu (2013), Described moral hazard as "any situation in which one person makes the decision about how much risk to take, while someone else bears the cost if things go badly." Athanasoglou, Brissimis and Delis (2005) [9], aptly put it, no other industry but finance "has a comparable talent for privatizing gains and socializing losses. Instead of "creating value," as we were repeatedly assured, the practices of financial engineering (including structured finance and alternative risk transfer), huge leverage, aggressive accounting and dodgy credit rating have enabled their practitioners to extract value on a massive

scale—to walk away with the loot, not to put too fine a point on it—while being unconstrained by risk management, corporate governance, and financial regulation, all of which have proven to be virtually useless’.

2.6 Merton’s Default Risk Model

The quantitative modeling of credit risk initiated by Dembe, Allard, and Boden [2000] ^[18], Shows how the probability of company default can be inferred from the market valuation of companies. The original Merton model was based on some simplifying assumptions about the structure of the typical firm’s finances. The event of default was determined by the market value of the firm’s assets in conjunction with the liability structure of the firm. When the value of the assets falls below a certain threshold (the default point), the firm is considered to be in default. A critical assumption is that the event of default can only take place at the maturity of the debt when the repayment is due. Many theoretical studies suggested models that relax some of the restrictive assumptions in the Merton model. However, empirical literature mainly focused on the application of the original model.

2.7 Determinants of Banks Financial Performance and Turnover

The financial performance and turnover of commercial banks can be determined by either internal factors or external factors. Internal factors could be bank specific determinants while external factors are Industry specific determinants and Macroeconomic determinants. Bank specific indicators include: growth in bank assets, capital adequacy, operational efficiency, and liquidity. Industry specific factors include: ownership, bank size, bank concentration index. While on the other hand, the key macroeconomic variables include: growth in GDP, GDP-per capital, inflation expectation, interest rate and its spread.

Campbell, Hilscher, and Szilagu (2008). Using data for the 14 largest banks in China for the period 1993-2003, studies the determinants of commercial bank performance in China. The study concluded that, performance of commercial banks in China was mainly determined by firm-level factors such as cost management capability and risk management capability. The study on Malaysian banks by Allen and Saunders (2004) ^[3], also shows that efficient management is among the most important factors that explain high bank profitability. Al-Tamimi and Al-Mazroel (2007) Found a positive and significant relationship between size and bank profitability. Al-Khoury (2011) ^[2], Provided evidence of the importance of macroeconomic factors in determining the profitability of banks. Diffu (2011), Concluded that the financial performance of commercial banks in Kenya was driven mainly by board and management decisions, while macroeconomic factors had insignificant contribution.

2.8 Empirical Literature Review

Arinffin, Archer and Karim Anguka (2012) ^[7], Provided a comparative study of Bank’s Risk Management of UAE National and Foreign Banks. This research helped them to find that the three most important types of risks facing the UAE commercial banks were foreign exchange risk, followed by credit risk and then operating risk. They found that the UAE banks were somewhat efficient in managing risk; however the variables such as risk identification, assessment and analysis proved to be more influencing in risk

management process. Finally, the results indicated that there was a significant difference between the UAE National and Foreign banks in practicing risk assessment and analysis, and in risk monitoring and controlling. Dembe, Allard and Boden (2000) ^[18], made a study “Risk Management Practices of Islamic Banks of Brunei Darussalam” to assess the degree to which the Islamic banks in Brunei Darussalam implemented risk management practices and carried them out thoroughly by using different techniques to deal with different types of risks.

The results of the above study showed that, like the conventional banking system, Islamic banking was also subjected to a variety of risks due to the unique range of offered products in addition to conventional products. The results showed that there was a remarkable understanding of risk and risk management by the staff working in the Islamic Banks of Brunei Darussalam, which showed their ability to pave their way towards successful risk management. Bobakovia (2003) ^[12], in their study on credit risk management and profitability in commercial banks in Sweden highlighted that credit risk management has effect on profitability. The analysis further indicated that the impact of the credit risk management on profitability for the 4 commercial banks sampled was not the same. The study was limited to identifying the relationship of credit risk management and profitability banks in Sweden.

Daianu, Daniel and Lungu (2008), did a study “Credit Risk Management and Profitability of Commercial Banks in Kenya”, to assess the degree to which the credit risk management in practice had significantly contributed to high profits in commercial banks of Kenya. Data on the amount of credit, level of nonperforming loans and profits were collected for the period 2004 to 2008. The results of the study showed that, there was no relationship between profits, amount of credit and the level of nonperforming loans. The findings reveal that the bulk of the profits of commercial banks were not influenced by the amount of credit and nonperforming loans suggesting that other variables other than credit and nonperforming loans impact on profits.

Allen and Saunders (2004) ^[3], Investigated on whether a strong and independent risk management is significantly related to bank risk taking and performance during the credit crisis in a sample of 74 large bank holding companies. They constructed a risk management index (RMI) which was based on five variables relating to the strength of banks risk management: dummy variable whether the bank has a designated CRO who is member of the executive board, a dummy variable whether the CRO is among the top five highly paid executives, the ratio of the CRO’s total compensation to the Chief Executive Officer’s total compensation, a dummy variable whether at least one of the non-executive directors of the bank’s risk committee has banking experience, and a dummy variable whether the bank’s risk committee met more frequently in the respective year as compared to the average value across the other sample banks. Their findings indicated that banks with high RMI value in 2006 had lower exposure to private-label mortgage-backed securities, were less active in trading off balance sheet derivatives and had a smaller fraction of nonperforming loans, a lower downside risk and a higher Sharpe Ratio during the crisis years 2007-2008.

Al-khoury (2011) ^[2], On his study “Assessing and the Risk Performance of the GCC Banking” assessed the impact of bank’s specific risk characteristics, and the overall banking

environment on the performance of 43 commercial banks operating in 6 of the Gulf Cooperation Council (GCC) countries over the period 1998-2008. Using fixed effect regression analysis, results showed that credit risk, liquidity risk and capital risk are the major factors that affect bank performance when profitability is measured by return on assets while the only risk that affects profitability when measured by return on equity is liquidity risk. Alexandru, Genu and Romanescu (2008), On his paper "Do Effective Risk Management Affect Organizational Performance" assesses the current practices of risk management in Pakistani software development sector.

Based on the data, collected from 25 organizations working in software development sector, the results indicated that risk management practices were not widely used by the organization(s); moreover most of the organizations did not have documented risk management policy properly. Therefore, these organizations could not deal with the risks systematically and sometimes faced negative consequences for the non-systematic approaches. However, few companies had implemented certain risk management techniques and are enjoying high performance.

Al-Tamimi and Al-Mazrooel (2007), Did a study on "The Influence of Financial Risk Management on The Financial Performance of Commercial Banks in Kenya". The study sought to assess the influence of financial risk management practices namely; Risk aggregation and Capital Allocation practices, Supervision and Regulation, Disclosures and Funded and Unfunded Credit protection on the Financial Performance on Commercial Banks in Kenya. The specific objectives were to determine the influence that these practices have had on the financial performance of commercial banks in Kenya and to establish the relationship between Financial Risk Management and Financial Bank performance. The study used a descriptive survey of commercial banks in Kenya.

The credit and management staff of the forty two commercial banks and one mortgage company formed the target population with a sample size of one hundred and seven staff randomly chosen for the study. Primary data through close ended questions was collected in this study on the financial risk management practices employed and their influence on the financial performance of the commercial banks. Data was analyzed using correlation analysis and regression models with the strength of the model being tested using Cornbrash's Co-efficient Alpha. The study found that most commercial banks had highly adopted financial risk management practices to manage financial and credit risk and as a result the financial risk management practices mentioned herein

Stephen Muthii Wanjohi *et al.*: have a positive correlation to the financial performance of commercial banks of Kenya. The study recommended that commercial banks should seek and obtain information consistently so as to permit them to detect potential problems at an early stage and identify trends not only for particular institutions, but also for the banking system as a whole, while also ensuring transparency of banking activities and the risks inherent in those activities, including credit risk.

Al-khouri (2011) ^[2], on his study "Credit Risk and Commercial Banks' Performance In Nigeria: A Panel Model Approach." Carried out an empirical investigation into the quantitative effect of credit risk on the performance of commercial banks in Nigeria over the period of 11 years (2000 - 2010). Five Commercial banking firms were selected

on a cross sectional basis for eleven years. The traditional profit theory was employed to formulate profit, measured by Return on Asset (ROA), as a function of the ratio of Non - performing loan to loan & Advances (NPL/LA), ratio of Total loan & Advances to Total deposit (LA/TD) and the ratio of loan loss provision to classified loans (LLP/CL) as measures of credit risk. Panel model analysis was used to estimate the determinants of the profit function. The results showed that the effect of credit risk on bank performance measured by the Return on Assets of banks is cross - sectional invariant. That is the effect is similar across banks in Nigeria, though the degree to which individual banks are affected is not captured by the method of analysis employed in the study. A 100 percent increase in non - performing loan reduces profitability (ROA) by about 6.2 percent, a 100 percent increase in loan loss provision also reduces profitability by about 0.65percent while a 100 percent increase in total loan and advances increase profitability by about 9.6 percent. Based on the study findings, the study recommended that banks in Nigeria should enhance their capacity in credit analysis and loan administration while the regulatory authority should pay more attention to banks' compliance to relevant provisions of the Bank and other Financial Institutions Act (1999) and prudential guidelines.

Dionne (2003), Provided a comparative study of Credit Risk Management on Financial Performance of commercial Banks in Kenya. A causal research design was undertaken in this study and this was facilitated by the use of secondary data which was obtained from the Central Bank of Kenya publications on banking sector survey. The study used multiple regression analysis in the analysis of data and the findings were presented in the form of tables and regression equations. The study found out that there was a strong impact between the CAMEL components on the financial performance of commercial banks. The study also established that capital adequacy, asset quality, management efficiency and liquidity (CAMEL) had weak relationship with financial performance (ROE) whereas earnings had a strong relationship with financial performance. The study concluded that CAMEL model can be used as a proxy for credit risk management.

Daianu (2013), on their study "Determinants of Financial Performance of Commercial Banks in Kenya" assessed on moderating effect of ownership structure on bank performance. To fill this glaring gap in this vital area of study, the authors used linear multiple regression model and Generalized Least Square on panel data to estimate the parameters. The findings showed that bank specific factors significantly affect the performance of commercial banks in Kenya, except for liquidity variable. But the overall effect of macroeconomic variables was inconclusive at 5% significance level. The moderating role of ownership identity on the financial performance of commercial banks was insignificant. Thus, they concluded that the financial performance of commercial banks in Kenya was driven mainly by board and management decisions, while macroeconomic factors have insignificant contribution.

3. Research Methodology

Research Design

The research used a descriptive research design. Descriptive survey research portrays an accurate profile of persons, events, or account of the characteristics, for example behavior, opinions, abilities, beliefs, and knowledge of a

particular individual, situation or group Arinffin, Archer and Karim Anguka (2012) [7]. The descriptive survey method was preferred because it would ensure complete description of the situation (in depth study of financial risk management policy), making sure that there was minimum bias in the collection of data.

3.1 Population

The target population comprised of the three (3) money deposit banks they are ,zenith bank plc, union bank plc and first bank plc ..

3.2 Data Collection

The study used both primary data and secondary data The primary data for this study was collected using personally administered questionnaires. The questionnaire was adapted from Bobakovia (2003) [12] and Delis (2005) [9]. The questionnaire consisted of six sections. The first section was designed to gather the institutional information. The second section was designed to gather information about the risk management environmental policy

The other sections gathered information about risk measurement followed by risk monitoring, risk mitigation and internal control techniques adopted by the commercial banks. The questionnaire was designed to consist of 5 likert scale point, 5 for strongly agree, 4 for agree, 3 for no opinion, 2 for disagree and 1 for strongly disagree. The secondary data was collected from the various CBK Bank Supervision Annual Reports. The five years (2014-2019) annual ROE ratio was averaged to form the dependent variable (financial performance).

3.3 Data Analysis

Inferential statistics was used to examine the casual relationships between the financial risk management policy on the bank's turnover and financial performance. An F-test was used to assess how well the set of independent variables, as a group, explains the variation in the dependent variable/ effectiveness of the model as a whole in explaining the dependent variable. We used a t-test to assess the significance of the individual regression parameters/assessing whether the individual coefficients were statistically significant

3.4 Model Specification

The study utilized the regression analysis with the equation of the form. The model provided a statistical technique for estimating the relationship between the financial risk management and the financial performance of the banks.

The modified model for this research is:

Model 1: Examine the effect of final risk management policy on overall turnover in selected firms

$$TO = F(RME, RM, RMT, RMN, AIC, FS) \dots \dots \dots \text{Eqn (1)}$$

$$TO_{it} = \beta_0 + \beta_1 RME_{it} + \beta_2 RM_{it} + \beta_3 RMT_{it} + \beta_4 RMN_{it} + \beta_5 AIC_{it} + \beta_6 FS_{it} + \sum_{it} \dots \dots \dots \text{Eqn (2)}$$

$$TO_{it} = \beta_0 + \beta_1 RME_{it} + \beta_2 RM_{it} + \beta_3 RMT_{it} + \beta_4 RMN_{it} + \beta_5 AIC_{it} + \beta_6 FS_{it} \dots \dots \dots \text{Eqn (3)}$$

$$TO_{it} = \beta_0 + \beta_1 RME_{it} + \beta_2 RM_{it} + \beta_3 RMT_{it} + \beta_4 RMN_{it} + \beta_5 AIC_{it} + \beta_6 FS_{it} \sum_{t=1}^{5-1} \mu DUM + \sum_{it} \dots \dots \dots \text{Eqn (4)}$$

The independent variables RME, RM, RMT, RMN ,and AIC were operationalized and measured using the questions posted in the questionnaire.

TO = Overall turnover (financial performance)

RME = Risk management Environment
Financial Risk Management Policy Indicator

RM = Risk management Policy

RMT = Risk Mitigation Policy

RMN = Risk Monitoring Policy

AIC = Adequate Internal Control Policy

FS = Firm's size (as firm's characteristics)

$\mu_{it} = \alpha_1 + \sum_{it}$ is often indicator called the composite error

DUM = Firms unobservable effect and μ is the dummy coefficient

B_0, β_{1-6} and \sum are as described earlier. The subscript i represents he entity of each quoted bank at the time t , while subscript represents the year.

Model 2: Establish the effect of financial risk management policy on the financial performance in selected financial institutions in Nigeria

$$FP = F[RME, RM, RMT, RMN, AIC, FS] \dots \dots \dots \text{Eqn (5)}$$

$$FP_{it} = \beta_0 + \beta_1 RME_{it} + \beta_2 RM_{it} + \beta_3 RMT_{it} + \beta_4 RMN_{it} + \beta_5 AIC_{it} + \beta_6 FS_{it} + \sum_{it} \dots \dots \dots \text{Eqn (6)}$$

$$FP_{it} = \beta_0 + \beta_1 RME_{it} + \beta_2 RM_{it} + \beta_3 RMT_{it} + \beta_4 RMN_{it} + \beta_5 AIC_{it} + \beta_6 FS_{it} + \mu_{it} \dots \dots \dots \text{Eqn (7)}$$

$$FP_{it} = \beta_0 + \beta_1 RME_{it} + \beta_2 RM_{it} + \beta_3 RMT_{it} + \beta_4 RMN_{it} + \beta_5 AIC_{it} + \beta_6 FS_{it} \sum_{t=1}^{5-1} \mu DUM + \sum_{it} \dots \dots \dots \text{Eqn (8)}$$

Where

FP = Financial performance (dependent Variable Indicator)

3.5 Operationalization of the Study Variables

To measure the financial risk management policy practices, five important components in reference to Basel Committee on Banking Supervision, were used to formulate the questionnaire. The five components were Risk Management Environment, Risk Measurement, Risk Mitigation, Risk Monitoring and Adequate Internal Control. All these five components were then linked with the mean of ROE for the five years (2014-2019).

4. Data Analysis, Results and Discussion

Financial Risk Management Policy Practices in Nigerian Banks

To assess the level of financial risk management policy practices in the Nigerian money deposits banks by using the descriptive tests, the study used the 5-Likert scale approach in the questionnaire. The higher the scale indicated that the respondent strongly agreed to such policy practices adopted by their banks. Financial risk management policy practices were covered in five parts: Risk Management Environment, Risk Measurement Practices, Risk Mitigation Practices, Risk Monitoring Practices and Internal Control Practices as suggested by the Daianu (2013).

4.1 Risk Management Environment

With regard to “Risk Management Environment”, the results showed that all the respondents agree with almost all item statements. Majority of the respondents (with a mean of over 4.5) strongly agreed with seven items, namely item: There is a formal system of Risk Management in the bank; item: The Board of directors outlines the overall risk objectives; item: There is a section/department responsible for identifying, monitoring, and controlling various risks; item: The bank have internal guidelines/rules and concrete procedures with respect to the risk management system; item: The bank has the policy of diversifying investment across different sectors ;item: Your Bank has adopted and utilized Revised CBK Financial Risk management Guidelines; and item: Your Bank has adopted and utilized Revised CBK Prudential Guidelines.

4.2 Risk Measurement

Moving on to the risk measurement practices, only three items statement scored a mean of 4, that is the respondents agreed on the items statement. The item statements were; the bank regularly conducts simulation analysis and measure benchmark (interest) rate risk sensitivity; the bank uses Maturity Matching Analysis and item statement; the bank uses Estimates of Worst Case scenarios/stress testing for risk analysis. This is an indication that the risk measurements techniques are still developing in the Nigerian money deposits banks.

Value at Risk analysis, Risk Adjusted Rate of Return on Capital (RAROC) were not common measurements of risk in the Nigerian Banks as they scored a mean of 2 which showed that majority of the respondents were not aware of the techniques. Majority of the banks also confirmed that there were no internal risk rating systems as well as computerized support system for estimating the variability of earnings and risk management. These areas may need improvement in order to assist the bank in managing the risks efficiently.

4.3 Risk Mitigation

For risk mitigation practices, majority of item statements scored a mean 3.5-4.3 which are considered good. However,

item; “there are derivatives instruments to mitigate financial risk” scored a mean of 1.4 meaning majority of the respondents did not agree that Kenyan banks use derivative instruments to mitigate financial risk. This area may need improvement in order to assist the banks in managing the risks efficiently.

4.4 Risk Monitoring

On the frequency of generating risk reports indicate that majority of the banks generates monthly risk reports. This can as well be classified as good risk management policy technique. Moving on to the risk monitoring policy practices all the items statement scored a mean of 3.5-4.6. This is a good indication of risk management policy.

4.5 Adequate Internal Control Policy

For internal control policy practices, the respondents strongly agreed in all items. This can be considered as good practice. Overall, for the Nigerian banks the best financial risk management policy practice is for Adequate Internal Controls Practice which obtained the highest mean of 90 per cent, followed by Risk Management Environment Practices (mean of 88 per cent). The Risk Monitoring Practice showed a mean of 73 per cent while Risk Mitigation practices recorded a mean of 72 per cent. The Risk Measurement practices recorded the lowest mean of 60 per cent.

4.6 Regression Model

The regression equation was of the form:

Model 1: Examine the effect of final risk management policy on overall turnover in selected firms

$$TO = \beta_0 + \beta_1RME_{it} + \beta_2RM_{it} + \beta_3RMT_{it} + \beta_4RMN_{it} + \beta_5AIC_{it} + \beta_6FS_{it} + \epsilon_{it} \quad \text{Eqn (1)}$$

$$TO_{it} = \beta_0 + \beta_1RME_{it} + \beta_2RM_{it} + \beta_3RMT_{it} + \beta_4RMN_{it} + \beta_5AIC_{it} + \beta_6FS_{it} + \epsilon_{it}$$

ϵ = disturbance term or error term

The regression model arising from the data in the table 1; below is of the form; $TO_{it} = 0.062X_1 + 0.097X_2 + 0.081X_3 + 0.048X_4 + 0.094X_5 - 0.260$

Table 1: Regression Coefficients.

Model	Unstandardized Coefficient		Standardized Coefficient		Sig.
	B	Std. Error	Beta	T	
1 (Constant)	-0.260	0.025		-11.902	0.00
Risk Management Environment	0.062	0.026	0.166	2.493	0.02
Risk Measurement	0.097	0.018	0.412	6.120	0.00
Risk Mitigation	0.081	0.017	0.393	5.253	0.00
Risk Monitoring	0.048	0.016	0.203	3.430	0.002
Adequate Internal Controls	0.094	0.026	0.240	3.942	0.001

Model 2: Established the effect of Financial Risk Management Policy on the Financial Performance in Selected Financial Institution in Nigeria.

$$FP_{it} = \beta_0 + \beta_1RME_{it} + \beta_2RM_{it} + \beta_3RMT_{it} + \beta_4RMN_{it} + \beta_5AIC_{it} + \beta_6FS_{it} + \epsilon_{it}$$

ϵ = disturbance term or error term

The regression model arising from the data in the table 2 below is of the form; $Y = 0.052X_1 + 0.095X_2 + 0.079X_3 + 0.046X_4 + 0.091X_5 - 0.252$

Table 2: Regression Coefficients

Model	Unstandardized Coefficient		Standardized Coefficient		Sig.
	B	Std. Error	Beta	T	
1 (Constant)	-0.252	0.023		-10.858	0.00
Risk Management Environment	0.059	0.024	0.164	2.489	0.02
Risk Measurement	0.095	0.016	0.408	5.852	0.00
Risk Mitigation	0.079	0.015	0.387	5.141	0.00
Risk Monitoring	0.046	0.014	0.199	3.382	0.002
Adequate Internal Controls	0.091	0.024	0.234	3.812	0.001

The models means that financial performance and Turnover are both highly dependent on the level of the financial risk management policy. The t-test indicates that both the financial performance and turnover are highly dependent of risk measurement practices and risk mitigation practices.

4.7 Interpretation of Findings

The study found that there was a significant relationship between the financial risk management policy on turnover and financial performance of money deposit banks.

Model 1 shows a strong positive correlation between ROCE and risk management policy (+90%) existed. A strong positive correlation relationship (+81%) exists between ROE and risk management policy. Moreover, there moderate correlations between ROCE and risk measurement policy, risk management environment and risk monitoring policy (56%, 51% and 54%, respectively). Based on these correlations, it can be concluded that the higher the ROCE for Nigerian money deposit banks, the better will be the risk mitigation policy and also risk measurement policy in the Nigerian banks. The R-Square indicates that an overwhelmingly 95.0% of the ROE is explained by the financial risk management policy. The adjusted R-Square of 0.946 also confirms the same. This means that there is a strong effect between the financial performance (ROE) and the financial risk management practice. Results show that financial risk management efficiency significantly affects the financial performance of commercial banks in Nigeria.

Model 2 shows a strong positive correlation between ROCE and risk management policy (+85%) existed. A strong positive correlation relationship (+79%) exists between ROE and risk management policy. Moreover, there moderate correlations between ROCE and risk measurement policy, risk management environment and risk monitoring policy (54%, 47% and 48%, respectively). Based on these correlations, it can be concluded that the higher the ROCE for Nigerian money deposit banks, the better will be the risk mitigation policy and also risk measurement policy in the Nigerian banks. The R-Square indicates that an overwhelmingly 92.9% of the ROE is explained by the financial risk management practices. The adjusted R-Square of 0.916 also confirms the same. This means that there is a strong effect between the financial performance (ROA) and the financial risk management practice. Results also show that financial risk management policy efficiency significantly affects the financial performance of money deposit banks in Nigeria.

Analysis also shows the regression coefficients and it was established that the intercept value was a negative value of 0.260 and 0.252. Tables 1 and 2 respectively also reveals that a unit increase in Risk Management Environment index will cause a 0.062 increase in Return on Capital Employed (ROCE) in table 1 and a unit increase in Risk Measurement index will lead to a 0.097 increase in ROCE. A unit increase

in Risk Mitigation Index will lead to a 0.081 increase in ROCE and a unit increase in Risk Monitoring Index will lead to a 0.048 and 0.046 table 2 increase in ROCE. Likewise a unit change in Adequate Internal Controls policy would cause a 0.094 positive change in ROCE.in model 1 while 0.091 in model 2

5. Summary of Findings, Conclusion and Recommendations

Summary

This study used primary data and secondary data to examine the effect of financial risk management policy in Nigerian banks on the financial performance of these Nigerian banks using correlation analysis and regression analysis. All the banks in the study good policy risk management with few areas of improvements. This includes the use of computerized support system for estimating the variability of earnings and risk management. The banks should consider complying with the more stringent guidelines of Basel III in additional to the CBN guidelines on financial risk management policy. On budget allocation to risk management sections, most banks had no stand-alone budget thus the risk management policy may not have been fully equipped in terms of resources.

The findings show that Nigerian banks are perceived to use less technically advanced risk measurement policy techniques of which the most commonly used are credit ratings, gap analysis, duration analysis, maturity matching, estimates of worst case scenarios/stress testing and earnings at risk. The more technically advanced risk measurement techniques which include value at risk, simulation techniques, RAROC and internal-based rating system are perceived not to be used widely by Nigerian banks in the study. On risk mitigation practices it was established that majority of the Nigerian banks had limited use of derivative instruments to mitigate financial risk. These areas may need improvement in order to assist the banks in managing the risks efficiently. Overall the best financial risk management practice is on adequate internal controls policy which obtained the highest mean of 90 per cent followed by risk management environment practices with a mean of 88 per cent. With regard to the type of reports, the reports on credit risk, market risk, interest rate risk, liquidity risk and foreign exchange risk have been produced monthly by the Kenyan banks in the study. Lastly, the study established a very strong relationship between financial risk management policy and financial performance in the Nigerian banks.

6. Conclusions

The study established that financial risk management policy had a strong impact on the financial performance of money deposit banks in Nigeria. The study also established that the risk measurement policy had the biggest impact on financial performance followed by risk mitigation policy. Thus, as each shilling invested in risk measurement techniques and

risk mitigation techniques increases revenues generation and the financial performance of banks increases.

7. Recommendation for Policy

From the finding and basing on the objectives, the study recommends the following; Nigerian banks should expound their risk measurements techniques so as to adequately manage the financial risks resulting from the increased financial innovations in the banking sector. Also the banking institution should explore the use of derivatives to mitigate the financial asset risks. Commercial banks should also check their risk management policy and practices and streamline them with global standards such as the Basel III accords. On budget allocation the banks should ensure risk management units have a stand-alone budget to ensure resources are availed for the ever changing risk environment. By this they would efficiently manage the financial risk and consequently increase their financial performance.

8. Areas for Further Research

The study suggests that a further study can be done on the effects of financial risk management by use of detailed questionnaire on the financial performance of other non-financial institutions such as consumable goods firms and development financial institutions (DFIs).

Further research may be directed towards the examination of how Nigerian banks have adopted the Basel III recommendations and how such recommendations have affected their financial risk management policy and the firm performance.

Lastly, a study may be directed towards causal relationship between bank Capital and profitability for the Nigerian banks.

9. References

- Alexandru C, Genu G, Romanescu ML. The Assessment of Banking Performances- Indicators of Performance in Bank Area. MPRA Paper No.11600, 2008.
- Al-Khoury R. Assessing the Risk and Performance of the GCC Banking Sector. International Journal of Finance and Economics, ISSN 1450-2887, Iss. 65, 72-8, 2011.
- Allen L, Saunders A. Incorporating Systemic Influences into Risk Measurements: A Survey of the Literature. Journal of Financial Services Research. 2004; 26:161-191.
- Al-Tamimi H, Al-Mazrooei M., Banks' Risk Management: A Comparison Study of UAE National and Foreign Banks. The Journal of Risk Finance. 2007; 8(4):394-409.
- Anguka W. The Influence of Financial Risk Management on the Financial Performance of Commercial Banks in Kenya. MBA Unpublished Research Project, University of Nairobi, 2012.
- Ariffin NM, Kassim SH. Risk Management Practices and Financial Performance of Islamic Banks: Malaysians Evidence. Islamic Economics & Finance Pedia, 2011.
- Ariffin NM, Archer S, Karim RA. Risks in Islamic banks: Evidence from empirical research. Journal of Banking Regulation. 2009; 10(2):153-163.
- Athanasoglou P, Delis M, Staikouras C. Determinants Of Bank Profitability in the South Eastern European Region. Munich Personal RePEc Archive, 2006.
- Athanasoglou P, Brissimis S, Delis M. Bank-Specific, Industry-Specific and Macroeconomic Determinants of Bank Profitability. Working Paper, 2005, 25.
- Bharath S, Shumway T. Forecasting Default with the Merton Distance to Default Model. Review of Financial Studies. 2008; 21:1339-1369.
- Bikker JA, M Etzemakers PAJ Bank Provisioning Behavior and Procyclicality. Journal of International Financial Markets, Institutions and Money, Elsevier. 2005; 15(2):141-157.
- Bobakovia IV. Raising the Profitability of Commercial Banks, BIATEC, UME, 2003, 6.
- Campbell JY, Hilscher J, J Szilagyi. In Search of Distress Risk. Journal of Finance, 2008; 63(6):2899-2939.
- Central Bank of Nigeria. Bank Supervision Annual Reports. The Central Bank of Kenya, (2008-2012).
- Central Bank of Nigeria. Prudential Guidelines for Institutions Licensed under the Banking Act. The Central Bank of Nigeria, 2012.
- Central bank of Nigeria. Risk management Guide Lines. The Central Bank of Kenya. Coleman T. S. (2011) A Practical Guide to Risk Management. Research Foundation of CFA Institute, 2013.
- Daianu, Daniel, Lungu, Laurian. Why Is This Financial Crisis Occurring? How to Respond To It? Journal for Economic Forecasting, 2008.
- Dembe Allard E, Boden Leslie I. Moral Hazard: A Question of Morality? New Solutions. 2000; 10(3):257-279.
- Diffu I. The Relationship between Foreign Exchange Risk and Financial Performance of Airlines in Kenya: A Case Study of Kenya Airways. MBA Unpublished Research Project, University of Nairobi, 2011.
- Dionne G. Risk Management: History, Definition and Critique. Cahiers De Recherche 1302, CIRPEE, 2013.