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## INTERNAL ENVIRONMENT AND PROFITABILITY OF BANKS: THE TERMINAL BENEFITS NEXUS

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**ABSTRACT:** *The main purpose of this study is to evaluate the effect of internal environment on profitability of deposit money banks in Sub Saharan (SSA) with special focus on terminal benefits nexus. Specific objectives are examination of the effect of staff terminal benefits, employee productivity, capital adequacy and board size on return on assets (ROA) of the banks. Panel data on selected banks from six SSA countries for the period 2004-2016 were used. Panel data regression approach was employed under fixed and random effects models. Findings indicated among others that capital adequacy and employee productivity have positive significant effect on ROA while staff terminal benefits and board size exhibit negative insignificant effect. Also staff terminal benefits and board size correlate negatively and significantly with ROA while employee productivity and capital adequacy show positive significant relationship with ROA. The findings equally showed that staff terminal benefit has negative significant relationship with employee productivity. The study concludes therefore, that internal environment has both negative and positive significant effect on profitability of deposit money banks in SSA with significant terminal benefit nexus. It is recommended among others that organizational restructuring by deposit money banks should be handled with caution so as to minimize the usual negative reactions of surviving and retrenched employees which could reduce productivity and profitability.*

**KEYWORDS:** Capital conservation buffer, large board size, Employee retrenchment, Team efficiency ratio, Employee productivity

**JEL Classification:** G21, J26

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### INTRODUCTION

Globally, business entities do not operate in isolation. They are integral part of and influenced by the environment they operate in. The entities equally impact on the environment. The environment could be broadly categorized into internal and external. This categorization is universal and applies to the banking industry in any market economy. The internal environment at its simplest level refers to all the factors which are specific to a particular organization and influence the operations and performance of the organization. According to Abukhames (2015), the internal business environment consists of factors within the company which impact the success and approach of operations of the business.

On the other hand, the external environment is concerned with all the factors outside the company which have the potential to impact on the company's performance (Indria and Primiana, 2015). Both internal and external factors affect performance of a financial institution (Staikouras and Wood, 2011). However, it is the internal environment of each bank that determines the extent to which the bank exploits the opportunities and threats presented by the external environment to enhance its performance. This has been noted by Siddiqua, Chowdhury, Mainuddin and Rahman (2017) and Samad (2015) who believe that the internal factors of a bank play great role in determining its profitability. The work of Berger (1995) is credited by most research scholars as

being one of the first studies to distinguish between internal and external determinants and develop a theory of bank profitability (Iacobelli, 2017).

Internal environment of each deposit money banks in SSA is increasingly becoming complex and challenging because of increasing pressure from equally dynamic and complex external environment. For instance internal environment issues of the deposit money banks such as, corporate governance, capital base, staff productivity and terminal benefits, composition of board of directors, tolerable overhead cost, adopted annual account preparation format and information to be disclosed in the annual accounts among others are shaped mainly by the dictates of the external environment. In recent years the issue of corporate governance has been featuring in local and international fora. The heightened focus on this issue drives from the linkage of poor corporate governance to some notable corporate failures and financial scandals such as the collapse of Carillion – the second largest construction giant in Britain in 2018 and most bank distress and failures around the world (Nwaubani, 2019, ACCA, 2018). The bank distress and failures witnessed in the recent decades have called to question the adequacy of the capital base of the banks.

On the other hand, the increasingly challenging operating environments of deposit money banks (DMBs) in Sub Saharan Africa (SSA) has prompted the banks to closely and constantly monitor the issues of employee productivity. This attitude has often led to regular loss of jobs and resultant payment of terminal benefits (Nwaubani and Orikara, 2019). Some of the banks have been sharply criticized by the public criticisms on these issues. Normally staff terminal benefits constitute a charge on income and in view of this fact, its implications on profitability could be predicted. However, this item has for a long time been one of the least featured variables in empirical studies with little or nothing clearly known about its other likely firm performance nexus.

In all, the varied functions of the deposit money banks in the economy have brought them to the centre of the ever complex and dynamic external environment coupled with their specific internal environment. The critical challenge confronting the banks globally is how to harmonize their internal environment with the dictates of the external environment and yet be profitable (Nwaubani, 2019). Without strategic and sustainable management of the internal environment, a firm's going concern status will be threatened by the turbulent external environment. In view of this reality, it becomes clear that though the performance of a deposit money bank is shaped by both internal and external environments, the internal environment is crucial to the profitability and sustainability of a bank.

### **Statement of the Problem**

The global banking environment has become increasingly complex and challenging particularly since after the 2007/2009 global financial crisis. Following the crisis which ravaged the world economies between 2007-2009, the banking sector has been hit by regulatory reforms (Michaels, 2015). The increasing complexities and challenging nature of both internal and external environments do present opportunities and threats to deposit money banks in SSA and in turn influence their profitability. A number of empirical studies have been carried out on the effect of factors of the internal environment on the profitability of the deposit money banks in the Sub Saharan Africa (SSA). The studies used different combinations of factors of internal environment such as bank's size, capital adequacy, price earnings ratio, productivity among others (Nwaubani, 2019). The problem is that although many previous studies used different factors of internal environment, available evidence suggests that empirical studies combining staff terminal benefits

in examination of effect of internal environment on profitability are very scanty. For instance, Němečková (2017) focused on role of general employee benefits in employee motivation and retention in the financial sector of the Czech Republic; Umoh, Ama and Nwokocha (2014) centred on the effect of employee benefits and other variables on Continuance Commitment in the Nigerian manufacturing industry while Tessema, Ready and Embaye, 2013 examined the effect of staff benefits and other motivational factors on job satisfaction across firms in USA, Malaysia and Vietnam. To the best of the knowledge of the researcher only Nwaubani and Oriksara(2019) incorporated staff terminal benefits as internal environment factor in their models to investigate effect of internal environment on performance of banks in SSA. Therefore, part of the motivation for this study is building up and enriching empirical studies on effect terminal benefits as a factor of internal environment on profitability of banks. Another problem this study is poised to address is that most empirical studies examining the effect of capital adequacy as a factor of internal environment incorporated this factor as individual country data. For instance, Ally (2014)-Tanzania, Maredza (2014)-South Africa, Soyemi, et al(2013)-Nigeria, Rama and Lakwe(2012)-Ethiopia used single country data not Sub Saharan Africa regional data in their works. Only Oino (2015), Munyambonera(2013), and Flamini, McDonald and Schumacher 2009) employed SSA regional data in their studies. Therefore, studies incorporating SSA regional data in the investigation of capital adequacy and other internal factors on profitability of banks in SSA are scanty. This study is therefore, an attempt at enriching the empirical studies incorporating capital adequacy as SSA regional data. This is another source of the motivation for this study.

Another challenge is that of all the reviewed empirical works only Nwaubani and Oriksara(2019), Iacobelli (2017) and Tan(2016) incorporated employee productivity in their models for examining effect of internal factors on banks' profitability in SSA. Again, only Nwaubani and Oriksara was carried out within and in the context of SSA while the other; Iacobelli and Tan were carried out outside SSA- that is in USA and China respectively. Another motivating factor for this study is the enrichment of the extant literature revolving around effect of employee productivity and other internal environment factors on profitability of banks and presentation of an empirical study which utilizes employee productivity data indigenous to SSA. A further challenge is that very few of the reviewed works (Flamini, McDonald and Schumacher 2009) used corporate governance variables in their studies on effect of internal environment on banks profitability in SSA. The corporate governance variable in Flamini was captured as government/private ownership of banks. In this study, board size as a corporate governance variable is incorporated into the model to bridge the gap created by the omission of board size in the previous empirical studies.

### **Objectives of the Study**

The main purpose of this study is to determine the effect of internal environment on performance of deposit money banks (DMBs) in Sub Saharan Africa (SSA) with focus on terminal benefits nexus. This is achieved through specific objectives which are:

- i) To investigate the effect of Staff terminal benefit on return on assets of deposit money banks in Sub Saharan Africa.
- ii) To evaluate the effect of employee productivity on return on assets of deposit money banks in Sub Saharan Africa.
- iii) To determine the effect of capital adequacy on return on assets of deposit money banks in Sub Saharan Africa.

- iv) To determine the effect of board size on return on assets of deposit money banks in Sub Saharan Africa

Following the objectives four hypotheses were formulated in a null form and tested at 95% confidence level as stated below:

**Ho1:** Staff terminal benefits have no significant effect on the return on assets of deposit money banks in SSA.

**Ho2:** The effect of employee productivity on return on assets of deposit money banks in SSA is not significant.

**Ho3:** The impact of capital adequacy on the return on assets of deposit money banks in Sub Saharan Africa is not significant

**Ho4:** Board size has no significant effect on return on assets of deposit money banks in Sub Saharan Africa is not significant.

### Concept of Internal Environment

The internal business environment of a firm refers to factors and events within the firm which have direct and specific implications for the firm (Abukhames 2015, Primiana 2015, McKinney 2017). This view is consistent with the opinion of Houghton Mifflin Harcourt- Harcourt (2016) that a firm's internal environment is composed of the elements within the organization such as the employees, management, and corporate culture, which influence employee behavior. In its simplest sense, internal environment refers to all the factors which are specific to a particular firm and influence the operations and performance of the firm. In the view of Queensland Government's Business platform- Queensland (2016) internal factors are the strengths and weaknesses of an organization. They are also influenced by policies and decisions of a bank's executive management (Rao and Lakew, 2012). Equally they reflect differences in policies and decisions of one bank from the other with regard to the approach to adopt to run a particular deposit bank. They are easier to control than external the factors of environmental.

Determined by policies, strategies and decisions of each firm, internal environment of each deposit money bank is unique, specific to and reflective of the policies of the deposit money bank (Nwaubani and Oriara, 2019). While the banks are commonly influenced by the external environment, it is the internal environment of each bank which defines the ability of the bank to take advantage of the opportunities and threats presented by the external environment to enhance its performance. As noted by Siddiqua, Chowdhury, Mainuddin and Rahman (2017) and Samad (2015) the internal factors of a bank play great role in determining profitability of the bank. This view is also held by Osuagwu (2014) who observes that bank profitability is largely determined by factors which relate to the internal organization of each bank.

### The Internal-External Environments Nexus

Generally, the internal environment of a firm is influenced by the external environment and the former is adjusted to conform with the dictates of the latter. The adjustment is justified by the fact that normally the firm has no control over the external environment. The firm can only take steps to minimize the adverse effects and maximize the opportunities presented by the external factors. The connection between the two environments lies in the fact that the internal environment is a sub set of the larger system known as the external environment and there is constant interaction between them. Stemming from this nexus, internal decisions and policies of the deposit money banks in

SSA bordering on capital base /structure, board size, credit portfolio mix, and interest charged on such credits, branch network, employee issues, tolerable overhead cost, adopted annual account preparation format and information to be disclosed among others are based on the dictates of the external environment. For instance, the adoption of code for corporate governance for banks in SSA is typical example of how external environment (regulation) influences internal environment and both interact to shape performance of a deposit money bank. According to Nwaubani(2019) corporate governance from a broader perspective could be viewed as the processes and structures by which a corporate entity is directed and controlled so that it will operate at all times in a responsible, fair and transparent manner to all stakeholders while being held accountable in order to serve and sustain the interests and expectations of the stakeholders. In other words, corporate governance is primarily a firm's broad framework of internal discipline for ensuring that the organization is run in fair, transparent and professional manner in order to achieve and sustain the goals of the stakeholders particularly the shareholders. Ordinarily, the structures and processes by which companies are directed and controlled are primarily internal to a firm. However, as part of the government responsibility to provide legislation and regulations to ensure that the business entities adopt best practices and operate in a manner that protect the interest of all stake holders, codes of corporate governance have been introduced for adoption by organizations. This cuts across the whole world.

Again in most SSA countries, minimum paid up capital base have been reviewed upward and made compulsory through regulation as part of the financial reforms in the region. The banks have to worry about meeting up with the new requirement. In Nigeria most of the banks had to adopt mergers and acquisitions while others adopted stand-alone approach as they went to the capital market to raise the funds to meet new minimum capital requirement in 2005. The survival of the banks was then at stake as those which failed to meet the new minimum required capital base were liquidated. Thus, though capital base of a deposit money bank is an internal decision of the bank, its minimum capital requirement is determined by regulation and has implications for its internal environment and performance.

The internal-external environment nexus generally drives from the fact that virtually no aspect of the business internal environment is insulated from the influence of the external environment. This is more in highly regulated organizations such as deposit money banks which are constantly regulated by governments through the external environment. It seems that it is this tendency of the external environment to control the internal environment that gives credence to the critical role of the internal environment in a firm's performance. This position is explained from the fact it is the strength and weakness of the internal environment which determine how the firm manages the headwinds and exploits the opportunities presented by the external environment to improve its performance. In this sense, the internal environment of a firm could be described as the immune system of the firm. Empirical evidence in Jabar and Al-khawaldeh, 2014; Maredza, 2014 among others supports this view as internal environment is documented as significant determinants of bank profitability. It accounts for the major differences between a profitable and strong bank and a loss-making and weak one. Baharuddin and Azmi (2015), Boadi (2015); Flamini, et al (2009), Ibenta (2005) Oino (2015), Rao and Lakew,( 2012); Samad, (2015) among others have identified internal factors to include: credit risk, size of bank, growth of asset, price earnings ratio, productivity, capital base, liquidity, operational efficiency and others.

**Terminal Benefits as a Concept**

According to Nwaubani and Oriksara(2019) staff terminal benefits could be viewed as an umbrella term referring to pensions, gratuities, severance entitlements and other terminal benefits paid or payable to an exited or retiring staff of a firm because of his/her disengagement or retirement.

From the internal-external environment nexus, it is appreciated that the increasingly dynamic and challenging internal environment of the banking sector in Sub Saharan Africa (SSA) in the recent decades, is influenced mainly by equally challenging and dynamic external environment. Faced with internal and external pressures, most deposit money banks in SSA have had to engage in regular un-announced lay-off/down-sizing of their employees. Consequently, downsizing has become more prevalent giving rise to issues of payment of terminal benefits such as compensation packages and severance entitlements. The drive for efficiency and profitability through cost reduction is generally seen as the motive of the organizations that engage in down-sizing. For instance downsizing is seen in some studies (Nwaubani and Oriksara 2019, Ozkanli and Bumin, 2006) as a tool employed by firms usually in times of economic crisis with the aim of reducing overhead costs and enhance productivity, efficiency, profitability and competitiveness through systematic reduction of the work force of the particular firm. This view is consistent with the opinion of Kukemuller ( 2019) who sees down-sizing as a reactive and cost-cutting measure which contrasts with the concept of rightsizing. According to the author, the term rightsizing is intended as a long-term strategy to have an organization run with the right level of talented staff in all its units.

In view of the emotional strain of lay-offs on both the exited and surviving staff, issues bordering on downsizing and terminal benefits particularly in the banking sector are often echoed and of concern to the public in SSA region. The amount of staff terminal benefits enjoyed by retiring/exiting employees is expected to motivate the surviving staff for higher productivity and to enhance their commitment and loyalty to the organization. However in a case of terminal benefits arising from down-sizing, these benefits and the performance of the now trimmed firm seem to depend on the strategic steps by executive management to reduce adverse reactions of both the affected and surviving staff in the retrenchment exercise (Nwaubani and Oriksara, 2019; Isa, Kakkar and Sharma, 2016; Kurebwa 2011). According to the authors most of the exited employees usually see the exercise as poorly and unfairly implemented – thus being capable of demoralizing the lucky survivors.

The survivors have been held to appear worse off than the laid-off (Appelbaum and Donia,2001). The down-sized seem better off than the survivors because it is expected that they would be paid terminal benefits such as severance entitlement and with that they could start their lives all over and survive. In the case of the survivors/the retained employees, they are now exposed to fear of the unknown because of the perceived job insecurity. Thus, the emotional effect of downsizing is brought to bear on the survivors with serious implications for their productivity and profitability of the firm. Consequently, there is need to manage the emotional effect of downsizing on the surviving employees so that the post lay-off performance of the firm would not be worse off. From the descriptive statistics in Table 2, the average terminal benefits paid by the deposit money banks as a percentage of total staff cost within the period 2004 to 2016 is 6.20% while the maximum is 35.70% with minimum being zero and median 4.60%. These statistics suggest that payment of terminal benefits by the banks fluctuated within the referenced period as indicated by Figure 2 below. The fluctuations suggest periods of higher pressures from the external environment headwings. For

instance a close look at the Figure 2 reveals that highest terminal benefits were paid within 2007 and 2011. These periods witnessed the global financial crisis/meltdown that swept through global economies with unprecedented shocks. In the banking sector across the world, the devastating effect of the crisis left behind, huge nonperforming loans and extra-ordinarily high bad debts provisioning among others which eroded profitability and shareholders' funds of the banks. The chain of events obviously and seriously threatened the going concern of the banks. Most the banks resorted to downsizing as part of the survival strategy with resultant payment of higher terminal benefits within those periods.

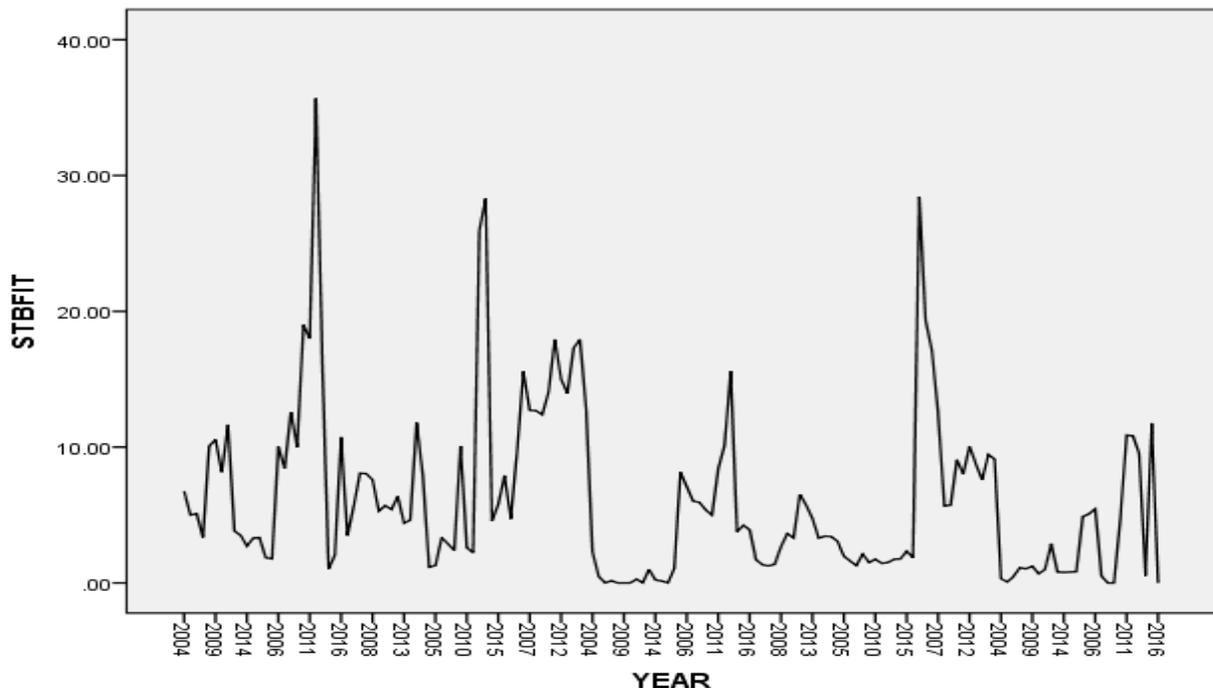


Figure2 Movement in the payment of terminal benefits by SSA deposit money banks (2004-2016)  
Source SPSS(20) Output, 2019

### Concept of Employee Productivity

According to Nwaubani and Orikara (2019b) productivity is an input-out concept which at its simplest level refers to efforts and results achieved. The efforts and result are specific to a certain period of time and within the limits of available resources. Broadly it refers to the quantitative and measurable contribution of employees- either as an individual employee or a team to the achievement of certain specific and measurable set objectives of a firm within a specific period of time and within the limits of available resources (Nwaubani and orikara,2019b). With respect to the banking sector, employee productivity in a narrow sense could be seen as assigned performance targets/budgets to an employee and percentage achieved by him/her within a specific period. The targets represent specified key performance indicators by Executive Management. However, employee productivity in most literature is usually measured as the natural log of total revenue (or net operating income) divided by total number of employees within a certain period of time (Iacobelli 2017, Tan2016, Chapagai, 2011, Athanasoglou, Brissimis, Delis 2008). This is because output is usually represented by total revenues or assets while labour and capital are measured by number of employees and total non-labor cost respectively (Athanasoglou, Georgiou and

Staikouras, 2008). According to the authorst, majority opinion , when it comes to employee productivity in banks, is that there is not yet a generally agreed definition of what constitute bank output because of the intangible, multiple and interdependent nature of the services provided by banks which make it difficult to separate and price them independently.

In this study employee productivity as it relates to the banking sector is measured in terms of team efficiency ratio which is a modified intermediation approach (Bod'a and Zimkova, 2015). This approach which was first applied empirically by Nwaubani and Orikara(2019b) reflects profit maximization tendency of deposit money banks and measures employee productivity in terms of how much profit the employees generate as a team for each one US dollar paid them as salary by their employers( Nwaubani and Orikara, Universalclass,2018,Sauermann, 2016, Bod'a and Zimkova, 2015). The relevance of this approach lies in its emphasis on profitability which is crucial to firm's survival

### **Theoretical Framework**

The theoretical framework of this study focuses on Robin Maris Growth maximization managerial theory of the firm.

#### **Robin Marris Growth maximizing Theory of the Firm (1964)**

According to van Dooren (2017) existing literature supports the use of the theory of the firm when considering the profitability of the banking industry(Kantarelis, 2007). The theory explains the nature of a firm and states that the firm's objective is to maximize profits. It measures profit as the difference between a firm's total revenue and total cost and asserts that in order to maximize profit, the firm is expected to maximize its revenues and minimize or stabilize its costs. The traditional firm is a single business entity whose entire operations are carried out by an entrepreneur with the main objective of profit maximization (Jhingan and Stephen,2009). However, according to Nwaubani and Idika 2019) the sole objective of profit maximization of the neo-classical firm has become unrealistic as the modern firm has varied objectives and interest arising from its complex nature and the fact it is run by managers different from the owners/shareholders.

In 1964 Robin Marris developed a dynamic balanced growth maximizing model of the firm in recognition of the varied interests of the managers and shareholders ( Jhigan and Stephen, 2009). Marris suggests that managers are usually more concerned with salary, prestige, status, power, job security while shareholders are more interested in profits, market share and output (Rekhi, n.d.).

The managers see growth in the size of the firm as key to enhancing their promotion prospects and meeting their interest. The mangers therefore, desire to pursue activities which will see the firm expand rapidly over time. However, the fear of losing their jobs if the expansion pursuit goes wrong, compels them to pursue suboptimal growth objective. This eventually leads to low productivity. The dilemma of the management team is that failure to drive expansion and profitability for internal growth implies dependence on external borrowing with potential risk of take-over and loss of the jobs which they work hard to secure.

Pursuing a balanced growth rate is desirable in order to checkmate the temptation of managers just involving in expanding too fast by undertaking very risky projects and engaging in huge debt to finance the expansion and on the other hand to ensure that the managers don't lose drive and initiative. Such a balanced growth rate will lead to more profits, dividends to the shareholders and

maximization of the market values of the firm and avoidance of take-over of the firm which will be beneficial to both parties.

Marris theory specifies a dynamic model which yields a balanced growth rate anchored on management capacity to successfully generate greater demand and ability of existing products and services to generate sufficient profit. The generated profit is expected to be for reinvestment with the aim of improving current dividend payments to meet expectations of shareholders.

Marris theory is relevant to this study as the theory focuses mainly on bank size which is achieved through profits reinvestment or capital injection. It minimizes the tendency for employees to be comfortable with poor productivity while at the same time puts a check on unguided risk appetite of the managers over investments to drive their personal ambition in the firm. Such ambition may result in huge financial loss to the firm. A deposit money bank which adopts Marris model in its productivity and performance drive is likely to remain stable and profitable in face of external headwinds. The control over reckless expansion represents pressure from shareholders and constraint to profitability of the bank. The interactions between the shareholders and Executive Management of deposit money banks as captured in Marris model combine to influence the profitability of the banks and the way the interactions are managed by each bank partly explains the difference in the profitability of the banks.

### **The Empirical Review of Related Literature**

This empirical review is done in two stages:- first part looks at the evidence from the Sub Saharan Africa as a region. The second stage reviews evidence from other parts of the world. Each category starts with the most current evidence and then runs down to the earlier evidence. Overall, the review is current with the earliest date as 2013.

#### **Empirical Evidence from Sub Saharan Africa**

Nwaubani and Orihara(2019) examined the effect of employee productivity and staff terminal benefits on performance of banks in Sub Saharan Africa ( SSA) using balanced panel data from 12 SSA banks from 2004 to 2016. The authors represented performance with profitability measured by return on assets operational efficiency proxied by net interest margin. Fixed and Random Effects models were employed as determined by Hausman test. Findings revealed among others that employee productivity has positive significant effect on ROA with staff terminal benefits exhibiting negative insignificant effect on ROA and NIM. The staff terminal benefits also indicated negative significant correlation with employee productivity.

Yakubu(2016) examined the influence of bank-specific and macroeconomic factors on Commercial banks profitability in Ghana using secondary data on five commercial banks for the period 2010-2015. The study employed the ordinary least square regression model to analyse the data. The results suggested that bank size, liquidity, capital adequacy, asset management, expense management, and real interest rate are positively related to profitability. GDP growth and inflation rate on the other hand, are related negatively to profitability. However, only bank size, liquidity, and expense management have a significant effect on commercial banks profitability. The author concluded that commercial banks profitability in Ghana is largely determined by bank-specific factors. Mungly, Setanah, Seetah, Babajee, Maraye and Ramdhany (2016) examined the factors that determine profitability of banks in Mauritius using a sample of 15 banks covering the period

2005 -2013. A static and a dynamic model were considered during the analysis. The static model was estimated with Generalized Estimating Equation (GEE) while the dynamic model was estimated with the Arellano-Bond two-step Generalized Method of Moments (GMM). Findings revealed that cost management efficiency has significant negative effect on return on assets (ROA) and return on equity-ROE. On the other hand, capital adequacy, credit risk, diversification and GDP growth indicated positive and significant effect on ROA.

Shuremo (2016) examined the effect of bank-specific, industry-specific and macroeconomic determinants on banks' profitability in Ethiopia applying the balanced panel data regression approach on eight Ethiopian commercial banks. The period is 2002 - 2012. The study used ordinary least square (OLS) technique to estimate the parameters. The findings showed that all bank specific determinants except credit risk and expense management have statistically significant and positive relationship with banks' profitability. On the other hand, variables like credit risk, expense management and regulation have a negative and statistically significant relationship with banks' profitability. All macroeconomic determinants in this study like economic growth, interest rate spread and exchange rate have statistically significant and positive relationship with banks' profitability. The study suggests that bank managers, directors, and all stakeholders should not only be concerned about internal structures and policies, but also must consider the external environment together to improve their bank performance in general and profit in particular.

Oino (2015) analyzed how competitive the banks in sub-Saharan Africa are and what determines their profitability using a panel data of 97 sub-Saharan African banks for the period from 2000 to 2012. Findings using the fixed effects indicate that both internal and external factors are determinants of profitability of the banks. Specifically, the cost-income ratio and capital ratio negatively and significantly influence profitability. Measuring revenue diversification with the Herfindahl-Hirschman index (HHI), the results indicate that the more diversified the bank is, the more profitable it is. Also the result reveals that on average banks have a 40% return on equity.

Adeusi, Kolapo and Aluko (2014) examined the factors that influence the profitability of commercial banks in Nigeria using panel data approach to analyze the time series and cross-sectional data obtained from 2000 to 2013 on a sample of fourteen banks. The findings revealed that asset quality, management efficiency, and economic growth are the determinants of commercial banks' profitability(return on assets) being statistically significant on profitability in both the fixed effect and random effect models.

Ally (2014) investigated the effect of bank specific and macroeconomic factors on banks' profitability in Tanzania. The fixed effects regression model was used on a panel data obtained from 23 banks from 2009 to 2013. The empirical results show that bank-specific factors:- capital adequacy asset quality, expenses management, liquidity ratio significantly affect banks' profitability in Tanzania. However, macroeconomic factors do not seem to have significant effect on banks' profitability. Echekeba, Egbunike and Ezu (2014) determined the impact of bank-specific factors namely capital adequacy, asset quality, management efficiency, earnings quality and liquidity management (CAMEL) on the profitability of commercial banks in Nigeria using data obtained for the period 2001 to 2010. The model was estimated using ordinary least square method. The findings indicated that only liquidity has a significant impact on banks profitability while others indicated no impact.

Maredza (2014) applied a two step-methodology framework to a panel of four small banks and four large banks for the period 2005-2011 in South Africa to explore the internal determinants of bank

profitability but with more focus on the impact of bank efficiency. The framework involved generation of total factor productivity efficiency scores. The scores were examined along with other internal factors for impact on profitability (return on average assets and net interest margin) using Generalized Least Squares Fixed Effects Model. Findings showed that high total factor productivity efficiency and capital adequacy lead to higher profitability while high cost inefficiency, diversification activities, large bank size, and high credit risk result in lower profitability. Onuonga (2014) employing generalized least squares method, estimated the impact of bank assets, capital, loans, deposits and assets quality on profitability of Kenya's top six commercial banks over the period 2008-2013, Profitability was proxied by return on assets - ROA. The findings indicated that bank size, capital strength, ownership, operations expenses, diversification do significantly influence profitability of the commercial banks.

Osuagwu (2014) employed a panel of selected banks (which account for over 60% of total bank assets in Nigeria), to investigate the determinants of bank profitability in the light of bank specific variables, industry related factors and macroeconomic influence. Findings showed that bank profitability is largely determined by credit risk and other factors that relate to the internal organization of banking firms. Also market concentration and exchange rate are significant as determinants of bank profitability. However, exchange rate is significant determinant of profitability only to the extent profitability is measured by return on equity and non-interest margin.

Soyemi, Akinpelu and Ogunleye (2013) employed panel data covering the period 2006 to 2010 for ten listed banks in Nigeria to examine factors influencing profitability among deposits money banks (DMBs) in Nigeria. Findings show that bank size and capital adequacy ratio is negatively and significantly related to profitability of bank. The findings suggest that some banks in Nigeria may be suffering from diseconomy of scale which is as a result of inefficiencies that may be associated with large complex organizations. The external determinants of financial structure and macroeconomic variables adopted depict no significant influence on profitability. Management expenses, current and saving deposit accounts variables have no effect on bank profitability. Tiisekwa (2013) examined the determinants of profitability of commercial banks in Tanzania using CAMEL framework. Multiple regression approach was employed to analyze the data. Data of three banks covering a period of seven years from 2006 to 2012 were analyzed. Result revealed that asset quality is the major determinants of banks profitability in Tanzania. It is also shown that NMB which is 50% foreign owned and 30% government owned rank best among the three banks.

### **Empirical Evidence from Outside Sub Saharan Africa**

Iacobelli (2017) used panel data spanning the period 1980 to 2015 to examine the factors determining the profitability of the top sixteen global banks. Bank-level and country-level variables were specified and analyzed using Fixed effects and Generalized Method of Moments (GMM) techniques. Findings indicate that bank characteristics (such as capital risk, credit risk, productivity growth rate, expenses and size), industry structure and macroeconomics variables are important in explaining global banks' profitability. Specifically, while Capital has significant positive impact on ROA, credit risk and operational efficiency respectively indicate highly significant negative impact on ROA. Also higher economic growth and inflation and business cycle have significant influence on banks' profitability

Němečková( 2017) evaluated effect of benefits in employee motivation and retention using employees at financial institutions, operating in the Czech Republic in 2011 and 2013. The survey

employed questionnaires and roundtable discussions, interviews approaches. The results obtained from the roundtable discussions were used as checks on the results of the questionnaire survey. No significant difference was observed. Part of the results showed that employee benefit was ranked among the eleven most important factors positively influencing employee motivation.

van Dooren (2017) examined the determinants of differences in bank profits between the EU countries for the period 1998-2013. The study focused on three regions of Europe namely the Northwest, Mediterranean region and new entrants of the European Union which included Croatia, Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Romania, Slovakia and Slovenia. The Northwestern European countries were Austria, Belgium, Denmark, France, Germany, Ireland, Luxembourg, the Netherlands, Sweden and the United Kingdom while the Mediterranean countries consist of Greece, Italy, Portugal, and Spain. The period was also divided into three phases namely the pre-recession (1998-2006), the recession (2007-2008) and the post-recession (2009-2013) time period. The data were analyzed employing panel data regression approach. Findings indicated that bank market share, the banks' risk levels, and inflation rates were significant determinants of bank's profitability in the European Union between 1998 and 2013. The results also showed that there were significant differences in changes of ROA between regions in the European Union during the recession and post-recession years. Chandrasiri and Thilakerathne (2016) explored factors which determined profitability of commercial banks in Sri Lanka within the period as Sri Lankan central bank introduced new rules for amalgamation. Secondary data of 8 listed commercial banks and 2 semi government banks were analyzed using regression analysis technique. Outcomes showed that bank capital and total deposits are main determinants of profitability (return on assets) of banks. Hashem (2016) examined the determinants of banking sector profitability in Egypt using quarterly time series data from 2004 to 2014. The model utilized cointegration technique to investigate the long run relationship between the return on equity as a proxy for bank profitability and several bank-specific variables including liquidity, capital adequacy and percentage of non-performing loans. Vector Error Correction Model (VECM) was employed to explore the short run dynamics and the speed adjustment to reach the long- run equilibrium. Findings revealed that banking sector profitability is negatively related to capital adequacy, percentage of loan provisions and the ratio of deposits to total assets while displaying positive relationship with the size of banking sector. This implies that the banking sector exhibits economies of scale.

Kamran, Johnson and Sammer (2016) examined the relationship between bank specific and macro-economic characteristics with bank profitability using data of forty-four Pakistani banks over the period 2005-2009. Pooled series panel data approach was used to investigate the impact of assets, loans, equity, deposits, economic growth, inflation and market capitalization on major profitability indicators. The empirical results showed that both internal and external factors have a strong influence on profitability of banks in Pakistan. Tan (2016) evaluated the impact of risk and competition on profitability of the Chinese banking industry (state-owned, joint-stock and city commercial banks) over the period 2003–2011 under a one-step Generalized Method of Moments (GMM) system estimator. The results showed no robust finding with respect to the impact of competition and risk on bank profitability but indicated that Chinese banks' profitability is affected by taxation, overhead cost, labor productivity and inflation. Albulescu (2015) examined the influence of financial soundness indicators on the banks' profitability, at the macro-level, in a set of emerging countries focusing only on the internal conditions of banks. IMF monthly data for the period 2005-2013 were used and analyzed employing panel data fixed effects approach. Results revealed that non-performing loans have a negative impact on banks' profitability while the level

of liquidity has a mixed influence, the capitalization and the interest rate margins positively affect the banks' profitability.

Messaia, Gallah andf Jouni (2015) examined determinants of banks' profitability in Western European countries during the distress period 2007-2011 using a sample of 322 banks. The 322 banks were divided into two groups- those in countries affected by the crisis (Italy, Greece, Portugal, Spain and Ireland) and those in the other countries not affected. Dynamic panel data technique was used and the results revealed that capital ratio and credit risk are the major determinants of profitability (ROAA and NIM) of the banks. Petria, Capraru and Ihnatov (2015) assessed the main determinants of banks' profitability in EU27 over the period 2004-2011. Proxies used for banks profitability were return on average assets (ROAA) and the return on average equity (ROAE). The data were analyzed using panel data multiple regression approach under fixed effects and random effects models. The empirical findings indicated that credit and liquidity risk, management efficiency, the diversification of business, the market concentration/competition and the economic growth have influence on bank Profitability. Market concentration has negative impact on the bank profitability while competition is consequently considered as having a positive impact on bank profitability in EU27.

Yesmine and Bhuiyah( 2015) investigated the factors having impact on the financial performance of 10 local private commercial banks (PCB) and 4 nationalized commercial banks (NCB) operating in Bangladesh using secondary data covering the period from 2008-2014. The data were analyzed under multiple regression model. The study indicated that asset utilization and operating efficiency have significant positive impact on banks' profitability whereas credit risk has significant negative impact with asset utilization being the most critical factor for the PCBs performance. Ahmad and Matemilola (2014) investigated the determinants of bank profits and net interest in the post-crisis era in Asia using panel data regression analysis method. Four countries, namely Malaysia, Thailand, Indonesia and South Korea, were selected as they successfully revamped after the Asian financial crisis. The study covers the period 2003 to 2008. Results indicated that bank-unique characteristics rather than external factors consistently explain a substantial part of the variation in banks profits and net interest margins in the Asian countries. Amongst the variables, capital adequacy has significant positive effects on bank profitability. Also the results showed that increased bank size has inconclusive evidence. Tessema, Ready and Embaye (2013) analyzed the effect of employee recognition, pay, and benefits on job satisfaction. A cross-sectional survey approach was employed involving responses from 457 university students in the U.S., 347 in Malaysia and 391 in Vietnam. Employee recognition, pay, and benefits were found to have a significant effect on job satisfaction across income levels and cultures in the three countries.

### **Identified Gaps in Reviewed Literature**

- Empirical studies combining staff terminal benefits in examination of effect of internal environment on profitability are very scanty.
- Capital adequacy: Studies incorporating SSA regional data in the investigation of capital adequacy and other internal factors on profitability of banks in SSA are scanty. Most empirical studies incorporated this factor as individual country data.

- Reviewed previous empirical works with the exception Nwaubani and Orikara(2019), Iacobelli (2017) and Tan(2016) did not incorporate employee productivity in their models for examining effect of internal factors on banks' profitability in SSA.
- Again, of the three works only Nwaubani and Orikara was carried out within and in the context of SSA while the other; Iacobelli and Tan were carried out outside SSA- that is in USA and China respectively.
- Corporate Governance Factor: Board size as a corporate governance factor was omitted in the previous empirical studies reviewed.

## RESEARCH METHODOLOGY

The research design adopted in this work is *ex-post facto*. Secondary data from 12 deposit money banks selected from 6 Sub Saharan African countries of Nigeria, South Africa, Ghana, Kenya, Mauritius and Botswana were collected for the period 2004 -2006. The banks are: Guaranty TrustBank, First Bank, Zenith Bank and Access Bank for Nigeria; Standard Bank and Nedbank for South Africa; Kenya Commercial Bank and Equity Bank for Kenya; Mauritius Commercial Bank and SBM Bank for Mauritius; Standard Chartered Bank of Ghana for Ghana and Barclays Bank of Botswana for Botswana. Panel data multiple regression approach was employed. The final model of the study is a modified version of the models adopted by Atuahene (2016) and Flamini, et al (2009) and it is given as:

$$ROA_{ic,t} = \alpha + \sum \beta_1 STBFIT_{ic,t} + \sum \beta_2 EMPROD_{ic,t} + \beta_3 CAADQCY_{ic,t} + \beta_4 BODSIZE_{ic,t} + V_{it}$$

Where:

ROA<sub>ic,t</sub> is the return on total assets of bank i in country c for period t;

STBFIT<sub>ic,t</sub> is terminal benefits paid as % of staff cost of bank i in country c for period t,

EMPROD<sub>ic,t</sub> is the employee productivity of bank i in country c for period t,

BODSIZE<sub>ic,t</sub> is the board size of bank i in country c for period t,

$\alpha$  is the constant for the model

$\beta_1$  to  $\beta_4$  are parameters/ beta coefficients to be estimated

$v_{it} = u_{it} + \epsilon_{it}$  is the composite disturbance factor, while  $u_{it}$  = between-entity errors and  $\epsilon_{it}$  = within-entity errors (the idiosyncratic errors).

**Table 1: Measurement of Variables of the Study**

S/n	Variable Dependent /Independent (Dependent)	Measurement	A priori Expectation
1	ROA - Return on Assets (Dependent)	Profit before tax divided by total tangible asset ;; Iacobelli ,(2017), Mungly et al.( 2016) or as given in the annual accounts of each bank	
2	STBFIT- staff terminal benefits (Independent)	Annual pension contributions and post-retirement/post termination benefits paid by each bank as a percentage (%) of staff cost( Nwaubani and Orikara, 2019)	-/ +
3	EMPROD- employee productivity (Independent)	Profit Before Tax divided by total salary amount paid . (Nwaubani and Orikara, 2019; Universalclass 2018, Sauermann 2016 ; Bod'a and Zimkova, 2015.)	-/+
4	CAADQCY- capital adequacy (Independent)	Tier1 capital +Tier2capital divided by total risk-weighted assets.(Hoffman ,2011; Liu ,2013 Petria, et al, 2015, Iacobelli, 2017). Or as given in the annual reports of each bank	-/+
5	BODSIZE-board size (Independent)	Total No. of directors on board( Appiah,2017; Alshetwi, 2017; Mamatzakis and Bermpei, 2015)	-/+

Source: Author's Compilation, 2019

## Diagnostic Tests - Panel Stationarity Tests

The selected variables were subjected to panel data unit root tests in order to check the problem of spurious regression. Five stationarity tests under EViews 9 are: Levin, Lin and Chut t; Breitung t-stat; Im, Pesaran and Shin W-stat; ADF-Fisher Chi-square and PP-Fisher Chi-square. The results confirm that all the variables except return on asset (ROA) are stationary at level. The ROA is stationary at first difference but was subjected to Hausman test.

### Multicollinearity Check

The size of the correlation coefficient of each of the independent variables in Table 3 below suggests that the model does not suffer from serious multicollinearity.

### Data Analysis Technique

Balanced Panel data multiple regression approach was employed to analyze the data under random effects and fixed effects models. The adoption of fixed or random effects model for each variable is dictated by result of Hausman test. The random effects model is adopted when it appears that the error terms (unique errors) are not correlated with the explanatory variables (Torres-Reyna, 2007). The null hypothesis in the Hausman test is that the preferred model is random effects model otherwise, fixed effects is adopted. The null hypothesis is rejected and the fixed effects model accepted if the resulting p-value from the test is less than the selected level of significance.

### Data Presentation

**Table 2** Descriptive Statistics of the Variables of Study

Date: 07/06/19

Time: 23:03

Sample: 2004 2016

	ROA	STBFIT	EMPROD	CAADQCY	BODSIZE
Mean	3.144103	6.198846	2.818654	17.11596	12.58333
Median	2.800000	4.605000	2.100000	15.49000	12.00000
Maximum	7.890000	35.69000	7.520000	52.00000	22.00000
Minimum	0.540000	0.000000	0.220000	7.390000	6.000000
Std. Dev.	1.712456	6.236665	1.937311	7.082948	3.424689
Skewness	0.729817	1.756773	0.786867	1.709552	0.269534
Kurtosis	2.967070	7.034265	2.255727	7.640579	2.524572
Jarque-Bera	13.85551	186.0319	19.69879	215.9641	3.358074
Probability	0.000980	0.000000	0.000053	0.000000	0.186554
Sum	490.4800	967.0200	439.7100	2670.090	1963.000
Sum Sq. Dev.	454.5386	6028.878	581.7422	7776.063	1817.917
Observations	156	156	156	156	156

Source SEViews9 Output, 2019

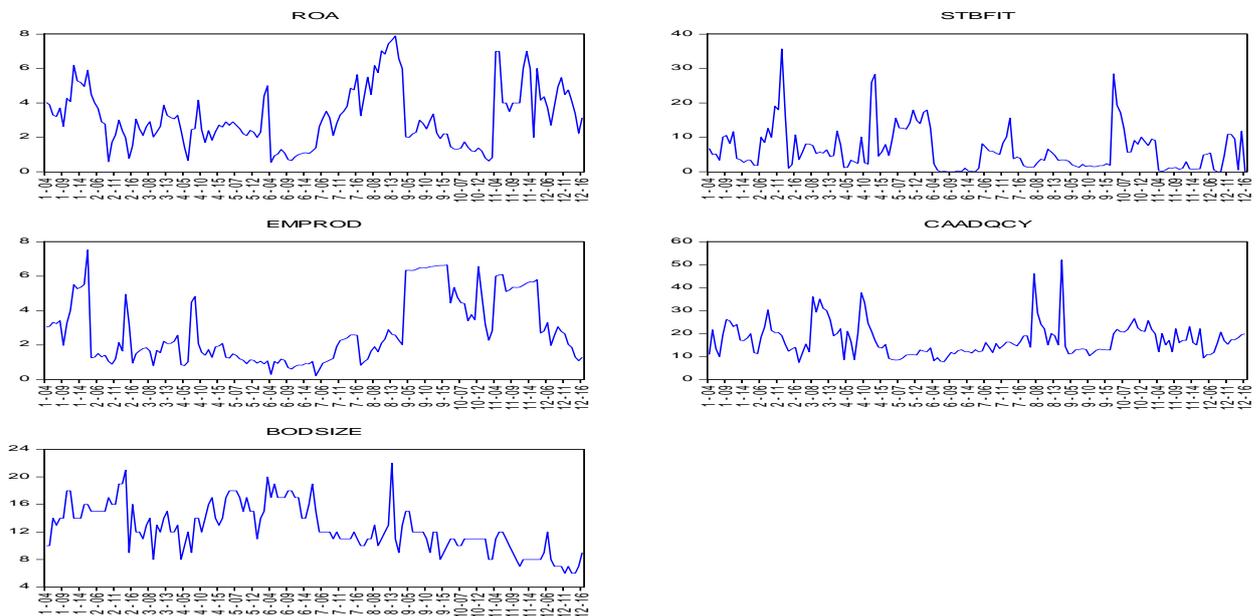
The mean, minimum and maximum values displayed by the variables in Table 2 above suggest that the variables fluctuated within the period under study. The fluctuations point to the pressures from both internal and external environments on the banks.

**Table 3** Correlation Among the Variables of the Study

		ROA	STBFIT	EMPROD	CAADQCY	BODSIZE
ROA	Pearson Correlation	1	-.163*	.222**	.200*	-.203*
	Sig. (2-tailed)		.042	.005	.012	.011
	N	156	156	156	156	156
STBFIT	Pearson Correlation	-.163*	1	-.225**	.101	.237**
	Sig. (2-tailed)	.042		.005	.209	.003
	N	156	156	156	156	156
EMPROD	Pearson Correlation	.222**	-.225**	1	.002	-.306**
	Sig. (2-tailed)	.005	.005		.979	.000
	N	156	156	156	156	156
CAADQCY	Pearson Correlation	.200*	.101	.002	1	-.168*
	Sig. (2-tailed)	.012	.209	.979		.036
	N	156	156	156	156	156
BODSIZE	Pearson Correlation	-.203*	.237**	-.306**	-.168*	1
	Sig. (2-tailed)	.011	.003	.000	.036	
	N	156	156	156	156	156

\*Correlation is significant at the 0.05 level (2-tailed). \*\*Correlation is significant at the 0.01 level (2-tailed).  
SPSS(20) Output, 2019

Table 3 above and Figure 2 below depict the relationship between the variables used in this study. It is revealing to observe that staff terminal benefit indicates significant positive relationship with boards size. This meets aprior expectation because the more directors that are appointed on the board, the more huge terminal benefits the banks would pay. Staff terminal benefit also indicates significant negative relationship with employee productivity and return on assets.



**Figure2** Graphical Representation of the correlation Among the Variable (2004-2016)  
Source EViews9 Output, 2019

**Data Analysis**

The results of the analysis are displayed on Tables 4A to 4C under Fixed Effects Model, Random Effect Model and Hausman Test as shown below.

**Table 4A** Results of Fixed Effects Model

Dependent Variable: ROA

Method: Panel Least Squares

Date: 07/06/19 Time: 23:10

Sample: 2004 2016

Periods included: 13

Cross-sections included: 12

Total panel (balanced) observations: 156

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	2.820452	0.788521	3.576890	0.0005
STBFIT	-0.044540	0.023558	-1.890701	0.0607
EMPROD	0.120128	0.074723	1.607650	0.1102
CAADQCY	0.053878	0.020669	2.606671	0.0101
BODSIZE	-0.052532	0.043103	-1.218756	0.2250

## Effects Specification

Period fixed (dummy variables)

R-squared	0.158011	Mean dependent var	3.144103
Adjusted R-squared	0.061091	S.D. dependent var	1.712456
S.E. of regression	1.659324	Akaike info criterion	3.953264
Sum squared resid	382.7165	Schwarz criterion	4.285620
Log likelihood	-291.3546	Hannan-Quinn criter.	4.088253
F-statistic	1.630331	Durbin-Watson stat	0.341585
Prob(F-statistic)	0.068416		

Under this model, only capital adequacy has positive significant effect on return on assets while staff terminal benefit exhibits negative but fairly (p-v of 0.06) significant effect.

**Table 4B Results of Random Effects Mode**

Method: Panel EGLS (Period random effects)

Date: 07/06/19 Time: 23:12

Sample: 2004 2016

Periods included: 13

Cross-sections included: 12

Total panel (balanced) observations: 156

Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	2.692321	0.757095	3.556120	0.0005
STBFIT	-0.034158	0.022524	-1.516531	0.1315
EMPROD	0.146492	0.073299	1.998563	0.0475
CAADQCY	0.047711	0.019308	2.471003	0.0146
BODSIZE	-0.044981	0.042421	-1.060331	0.2907
Effects Specification				
			S.D.	Rho
Period random			0.000000	0.0000
Idiosyncratic random			1.659324	1.0000
Weighted Statistics				
R-squared	0.114812	Mean dependent var		3.144103
Adjusted R-squared	0.091363	S.D. dependent var		1.712456
S.E. of regression	1.632355	Sum squared resid		402.3521
F-statistic	4.896307	Durbin-Watson stat		0.367944
Prob(F-statistic)	0.000969			
Unweighted Statistics				
R-squared	0.114812	Mean dependent var		3.144103
Sum squared resid	402.3521	Durbin-Watson stat		0.367944

Under Random Effects Model employee productivity and capital adequacy indicate positive significant effect on the return on assets.

**Table 4C** Results of Hausman Test

Correlated Random Effects - Hausman Test

Equation: Untitled

Test period random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Period random	5.248919	4	0.2627

\*\* WARNING: estimated period random effects variance is zero.

Period random effects test comparisons:

Variable	Fixed	Random	Var(Diff.)	Prob.
STBFIT	-0.044540	-0.034158	0.000048	0.1326
EMPROD	0.120128	0.146492	0.000211	0.0694
CAADQCY	0.053878	0.047711	0.000054	0.4031
BODSIZE	-0.052532	-0.044981	0.000058	0.3225

Period random effects test equation:

Dependent Variable: ROA

Method: Panel Least Squares

Date: 07/06/19 Time: 23:23

Sample: 2004 2016

Periods included: 13

Cross-sections included: 12

Total panel (balanced) observations: 156

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	2.820452	0.788521	3.576890	0.0005
STBFIT	-0.044540	0.023558	-1.890701	0.0607
EMPROD	0.120128	0.074723	1.607650	0.1102
CAADQCY	0.053878	0.020669	2.606671	0.0101
BODSIZE	-0.052532	0.043103	-1.218756	0.2250

Effects Specification

Period fixed (dummy variables)

R-squared	0.158011	Mean dependent var	3.144103
Adjusted R-squared	0.061091	S.D. dependent var	1.712456
S.E. of regression	1.659324	Akaike info criterion	3.953264
Sum squared resid	382.7165	Schwarz criterion	4.285620
Log likelihood	-291.3546	Hannan-Quinn criter.	4.088253
F-statistic	1.630331	Durbin-Watson stat	0.341585
Prob(F-statistic)	0.068416		

Based on the associated decision rule for model selection under Hausman test, the specified model for this study is the Random Effects model.

## DISCUSSION OF FINDINGS

From the random effect model results in Table 4B, staff terminal benefit exhibits negative insignificant effect on return on assets (ROA). This outcome could be explained in terms of amount of terminal benefits paid by the banks. The insignificant effect suggests that the annual amount paid by the banks is poor. This scenario has negative implications for staff loyalty/retention, productivity and profitability of the banks. Another possible reason may be connected to low downsizing of staff leading to less severance/compensation payments. However, with the spate of massive disengagement witnessed in the banking sector in SSA, it appears low retrenchment is ruled out.

Employee productivity and capital adequacy (capital base) have positive significant effect on ROA. The employee productivity findings re-emphasizes the fact that employees still remain critical resources of any organization notwithstanding technological advancement. The team efficiency ratio method followed in the measurement of productivity in this study has really brought out the contribution of productivity to a firm's profitability. The positive significant result connected with capital adequacy stresses the role of equity capital in the profitability and stability of deposit money banks. Improved capital base leads to more loanable funds for the banks which in turn translates into more interest income and higher profitability ordinarily. Also strong capital base provides buffer to which the bank can fall back to in times of financial crisis in order to absorb shocks and maintain financial stability. According to the specifications of Basel III accord, the recommended minimum capital adequacy ratio is 8% while the minimum capital adequacy ratio (including the capital conservation buffer) is 10.5%. As documented by Nikolas, 2019, the capital conservation buffer is designed to build up banks' capital, which they could use in periods of financial stress. From table 2 above, the average capital adequacy ratio of the twelve selected banks in Sub Saharan Africa is 17%. This suggests that the banks were well capitalized contributing to the profitability of the banks. Board size exhibits a negative insignificant effect on ROA. This outcome suggests that the banks should go for appropriate/optimum board size which would not leave the banks worse-off in terms of profitability because of costs associated with a large board size. Average board size of the twelve selected banks is 13. According to Mamatzakakis and Bermpei (2015) this board size is considered a large board.

With respect to correlation among the variables, staff terminal benefit indicates negative significant relationship with ROA and employee productivity while capital adequacy and employee productivity have positive significant correlation with ROA.. The staff terminal benefit also shows a positive significant relationship with board size. This result suggests that as more directors are appointed on the board, the more terminal benefits are paid to the outgoing ones- particularly the executive directors. More research efforts are required to ascertain if this relationship depend on the board composition and diversity- non executive or executive, gender diverse or not. The negative significant correlation between staff terminal benefit and employee productivity means that as more staff are retrenched and more terminal benefits paid, staff productivity is being reduced. In other words employee productivity and retrenchment oppose each other. This nexus has serious implication for banks since employee productivity has both positive significant relationship and effect with/on profitability. Actions of bank Executive Management which lower productivity would adversely affect profitability and vice versa. Therefore, such actions like organizational

restructuring/re-organization which usually results in retrenchment of staff by firms, particularly deposit money banks, should be handled with caution so as to minimize negative reactions of both retained and retrenched employees. Empirical evidence strongly suggests that job re-organization is linked to lower average employee trust which in turn indicates a positive relationship with employee productivity (Brown, Gray, Mchardy and Tarloy, 2015). This suggests that lowering average employee trust through retrenchment/downsizing may normally reduce productivity and by extension profitability. This is the terminal benefit nexus in the effect of internal factors on profitability of banks.

### **Contribution/Originality**

The work is about the first empirical study (the best of the knowledge of the researcher) to reveal that a positive significant relationship exists between staff terminal benefits and board size. It is also one of the very few empirical studies which combined staff terminal benefits as a factor of internal environment in examining the effect of internal environment on banks' profitability with a finding which has serious profit implications for banks.

## **CONCLUSION AND RECOMMENDATIONS**

This work evaluated the effect of internal environment represented by staff terminal benefits, employee productivity, capital adequacy ratio and board size on profitability of deposit money banks in Sub Saharan Africa (SSA). The study used balanced panel data and employed panel data multiple regression approach to analyze the data. Profitability is proxied by return on assets (ROA). The study revealed among others that staff terminal benefit indicates negative insignificant effect on profitability of the deposit money banks while employee productivity and capital adequacy have positive significant effect on the profitability. On the other hand, board size indicates negative insignificant effect. Staff terminal benefit equally shows negative significant relationship with the profitability, employee productivity and board size.

### **Conclusion**

Based on the above findings, this study concludes that internal environment has positive and negative effect on profitability of deposit money banks in SSA with negative significant terminal benefit-nexus.

### **Recommendations**

The study therefore, recommends that:

- 1) Organizational restructuring by deposit money banks should be handled with caution so as to minimize the usual negative reactions of both surviving and retrenched employees which could reduce productivity.
- 2) The revealed positive significant relationship between employee productivity and profitability strongly suggests that the banks should put in place measures to motivate their employees for greater productivity which leads to higher profitability.
- 3) Deposit money banks in Sub Saharan Africa are advised to minimize unjustifiable large board sizes
- 4) Deposit money banks may employ the Team Efficiency Ratio approach as part of their staff appraisal techniques as it is focused on profitability and shows profit per dollar salary paid the employees as a team.

5) Regular voluntary increase of the equity capital base of the deposit money banks will further improve their profitability. The banks should engage in this.

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