The Relationship between Efficiency, Productivity, and Profitability of Ghanaian Banks

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Abstract:*The main purpose of the paper was to examine the impact operational efficiency, and productivity has on the profitability of Ghanaian banks. Secondary data obtained from the annual financial reports of nine sampled banks for nine years was used for the study. Multiple regression was used for the analysis through SPSS version 23.*

The results of the analysis indicated that, the most significant variables that affect the profitability of banks in Ghana are net interest margin, non-interest income margin; operating expenses to income ratio; profit per employee; and business per employee. Equity to assets ratio and personnel expenses to operating expenses ratio on the other hand, had an insignificant relationship with the profitability of Ghanaian banks.

The implication of the findings is that management should not rely on interest income as the sole source of revenue but rather put much effort in increasing revenue through non-interest income streams. The results again imply that Ghanaian bank management should place emphasis on having lean employees size, and increase the banks' business by mobilizing more deposits and advancing more quality loans. Management should again ensure a reduction in operational expenditure through minimization of wastages and cost cutting to improve operational efficiency.

Keywords: *Efficiency, productivity, employee, profitability, Management, performance, Ghana, banks, relationship*

I. Introduction

The banking sector of any nation reflects the healthiness of its economy. This makes the banking sector very vital that requires constant monitoring by the regulators. Any systemic failure in the banking sector is a recipe for disaster to depositors, shareholders, managers and the entire economy.

The Ghanaian Banking system in the last couple of years has seen many inefficiencies in their operations, which has manifested in the downwards performance of the sector in the past couple of years. The Non-performing Loan ratio of the banking sector increased from 15.6% in February 2016 to 17.7% in the same period in 2017 but ended the year at 17.3%. The ratio further worsened to 22.7% as of December 2017 (BoG banking stability report, 2017). Due to the worrisome development in the industry, the central bank of Ghana (BoG) embarked on a clean-up exercise in the sector where assets were reclassified to ascertain the actual position of the banks. The clean-up exercise which began in 2017 saw the licenses of two commercial banks (UT and Capital Banks) revoked and the taken over of their assets and liabilities by Ghana Commercial bank. Five banks in 2018 also had their operating licenses revoked and consolidated into a new bank called Consolidated Bank the government owning a 100% share. The decision for consolidating the banks was aimed at protecting the depositors and the economy as a whole. This exercise cost the government a whooping sum of GH₵9.9billion. On the 31st May 2018, the licenses of 386 insolvent microfinance and microcredit companies were revoked as part of the clean-up exercise. The development is definitely something to be worried about considering the critical role banks play in the country's economy.

Looking at the current growing inefficiencies in the Ghanaian banking industry leading to the collapse and withdrawal of operational licenses of some banks and other financial institutions, the chosen topic comes at the right moment to add to the existing literature and serve as guide to managers in the industry for corrective action and as a guide going forward.

II.   Objectives

The broader objective of the study is to ascertain the impact of operational efficiency on the profitability of banks in Ghana. The specific objectives are:
1. To find out the relational impact of the management efficiency indicators on Ghanaian banks' profitability
2. To find out the relational impact of employee productivity indicators on the profitability of Ghanaian banks

III.   Literature Review

3.1. The Market Power Theory and Efficient-Structure Theory

Berger (1995) opines that two competing theories can explain the relationship between market share and performance. These theories are the market power theory and efficient-structure theory. The market power theory is based on two hypotheses- the traditional structure-conduct-performance (SCP) hypothesis and the relative market power hypothesis (RMP). The structure-conduct-performance hypothesis states that markets that are more concentrated lead to higher loan rates and lower deposit rates due to reduced competition. The relative market power hypothesis, on the other hand, states that only large banks with distinctive branding can influence pricing and raise profits. The findings of Eriki and Osifo (2015) corroborated the relative-market power hypothesis where the researcher found larger and older banks to be more efficient than their smaller and newer counterparts are. Another finding by Nkegbe and Ustarz (2015) supported the RMP hypothesis when they found a positive and significant relationship between bank size and profitability.Eriki and Osifo (2015) in their study on the determinants of performance efficiency found larger and older banks to be more efficient than their smaller and newer counterparts did. This affirms the relative-market power hypothesis, which states that only large banks with unique branding can influence pricing and raise profits. Mawutor and Awah (2015), however, argued that the profitability of banks is not influenced by their size as they found a statistically insignificant relationship between the two variables. According to Yonjil and Miller (2005), the difference between these two hypotheses depends on whether market power demonstrates generic to a market or specific to individual banks within the market.

The efficient-structure theoryon the other, simply states that the reason why some banks perform better is that they are more efficient than the rest (Aguenaou et al., 2017). To achieve efficiency in banking, two hypotheses are underlying the efficient-structure theory- the X-efficiency hypothesis, which posits that banks having better management practices control cost and raise profit thereby propelling the bank closer to best practice, lower-bound cost curve that allows those banks to acquire larger market share. The other one is the scale-efficiency hypothesis, which posits that some banks achieve a better scale of operation and thus lower cost due to their capacity to achieve economies of scales, which permit them to lower cost and increase profit.

3.2.   Evidence on Efficiency

Some researchers (e.g. Eriki and Osifo, 2015) have argued that conventional ratios are fraught with in-built limitations such as the inability to analyse the efficiency of multiple decision-making units simultaneously in a very dynamic framework. However, Arafat et al. (2013) argued that in the banking industry, the efficiency ratio of a bank is a quick and easy measure of its ability to turn assets into income. Efficiency ratios of 50% are generally regarded as the maximum optimal ratio. An increase in efficiency ratio is an indication that either revenue is decreasing or cost is increasing. Keramidou et al. (2012), attempted to explore the relationship between efficiency and profitability in the Greek meat firms and found that not all efficient firms are the best performers in terms of profitability. The further argued that some smaller and medium firms recorded a higher level of efficiency, performance and profitability. Mawutor and Awah (2015), in their study of listed banks in Ghana, found a significant negative relationship between productivity measured by the ratio of interest expense to operating income and profitability.Nkegbe and Ustarz (2015) again found operational efficiency to be positively related to profitability.

Aguenaou et al. (2017) in their study on the efficiency of Moroccan banks also found management efficiency related negatively to profitability. The relative market power hypothesis posits that only large banks with unique branding can influence pricing and raise profits but, on the contrary, DonsyahYudistira (2003) found the existence of diseconomies of scale for small-to-medium Islamic banks in the MENA region. This means the researcher found evidence of market power having no significant impact on Islamic banks' efficiency and attributed it to their relatively new nature. Another finding by Arafat et al. (2013) indicated that size and growth has no significant effect on Indonesian banks.

IV.   Research Gap

The relationship between efficiency, productivity, and profitability has not been researched in Ghana as previous studies have either focused on productivity and profitability or efficiency and productivity. Meanwhile, the current crisis in the Ghanaian banking system was partly due to the inefficiencies identified by the central banks. It is on the above premise that the researcher settled on the topic to establish the relationship that exist

between efficiency, productivity, and profitability to serve as a guide to the management of the existing banks going forward. The study is crucial especially now that the Ghanaian banking sector is undergoing structural overhauling.It will contribute to the body of knowledge and literature and serve as a guide to managers to understand the effect of efficiency and productivity on profitability.

V.   Methodology

The data for the study was secondary which was collected from the financial statements of nine banks for nine years. Return on Assets served as the proxy for profitability and acted as the dependent variable, whereas the efficiency and productivity ratios served as the independent variables. The sampling technique used was purposive because of the unavailability of data on some of the banks for the study period. The sampled banks were used in the study due to data availability. Multiple regression was used for the analysis of the data.

Table 1: Study Variables and their Ratio computation

	DEPENDENT VARIABLE	**RATIO COMPUTATION**
	Return on Assets (ROA)	$\frac{Net\ Profit}{Total\ Assets} X\ 100$
MANAGEMENT EFFICIENCY RARIOS	**INDEPENDENT VARIABLES**	
	Net Interest Margin Ratio (NIM)	$\frac{Net\ Interest\ Income}{Total\ Assets} X\ 100$
	Non-interest Margin Ratio (NIIM)	$\frac{Non-Interest\ Income}{Total\ Assets} X\ 100$
	Operating Expenses to Operating Income Ratio (OPEXINC)	$\frac{Operating\ Expense}{Operating\ Income} X\ 100$
	Equity to Assets Ratio (EQASS)	$\frac{Total\ Equity}{Total\ Assets} X\ 100$
EMPLOYEE PRODUCTIVITTY RATIOS	Profit per Employee (PPE)	$\frac{Net\ Profit}{Total\ Employees}$
	Personnel Expensesto Operating Expenses Ratio(PEXOEX)	$\frac{Personnel\ Expenses}{Operating\ Expenses} X\ 100$
	Personnel Expenses to Operating Income ratio (PEXINC)	$\frac{Personnel\ Expenses}{Operating\ Income} X\ 100$
	Business Per Employee Ratio (BPE)	$\frac{Deposit + Loans\ \&\ Advances\ (Credit)}{Total\ of\ Employees}$

5.1.   The Study Variables

The study variables as specified in Table 1 comprise of the dependent variable, which is ROA serving as the proxy for profitability and the independent variables, Net Interest Margin Ratio (NIM), Non-interest Margin Ratio (NIIM), Operating Expenses to Operating Income Ratio (OPEXINC) and Equity to Assets Ratio (EQASS). The rest are Profit per Employee (PPE), Personnel Expensesto Operating Expenses Ratio (PEXOEX), and Business per Employee Ratio (BPE).

5.2.   Dependent Variable

Return on Assets (ROA): the ROA was used as a measure for profitability in the study. Profitability ratios show a company's overall efficiency and performance. Profitability is the ability to make a profit from all business activities of an organization, a firm, company or an enterprise. It depicts how efficiently the management can make a profit by using all the resources available in the market (RBI report on currency and finance, 2009). Nagaraju and Boateng (2018) defined profitability as the ability of a business to collect more revenue than it pays out. There are several measures of profitability used by researchers, but in most instances, ROA and ROE are the preferred proxies. Nevertheless, Rivard and Thomas (1997) argued that ROA best measures profitability because unlike ROE high equity multiplier does not distort it. It was on the backdrop of the above argument that ROA would be used as the measure of profitability for this study.

5.3.   The Independent Variables
5.3.1.   Efficiency Ratios

Management efficiency is a very vital component of corporate financial management due to the direct effect it has on profitability of corporate organizations. Efficiency measures performance of the bank in a normative sense by comparing it with the industry leader within or outside. The ratios that were used as proxies for efficiency are Net Interest Margin Ratio, Non-interest Margin Ratio, Operating Cost to Income Ratio, and Operating Income Ratio.

Net Interest Margin (NIM) Ratio

Net interest margin or spread ratio is the difference between the total interest earned, and the total interest expended normalised by assets. The spread ratio shows how effectively the banks deploy all their funds to generate income from credit and investment activities. The lower the spread ratio, the more efficient is the bank. The more a bank can generate enough fees, the more it may concentrate on activities that carry high fixed costs, which results in creating worse efficiency ratios (Arafat et al., 2013).

Non-interest income Margin (NIIM) Ratio

The non-interest income margin ratio, measures the margin of interest earned on the assets employed other than interest income. According to Boateng and Nagaraju (2018), any income a bank earns from its activities other than its core banking business or investment is referred to as non-interest income. Because it usually comes from fees and other charges, it is often called fee income since fees form a major part of non-interest income.

Operating Expenses to Income (OPEXINC) Ratio

The ratio of operating expenses to the operating income is an indication of how profitably the bank has deployed its funds. The OPEXINC ratio reflects the ability of the bank to generate revenue from its expenditure. According to Kosmidou et al., (2008) it is typically used as an indicator of management's ability to control cost. The ratio captures the impact of off-balance sheet operations and that makes it a better measure of efficiency than the cost to assets ratio. The lower the ratio, the more efficient is the bank.

Equity to Assets (EQASS) Ratio

The equity to assets ratio is a solvency ratio that measures the amount of assets that are financed by owners' investment. In other words, the ratio of the banks' equity to its assets determines what percentage of the assets are owned by shareholders and not leveraged such that it could come under the control of its debtors in the event of bankruptcy. The ratio of shareholders equity to assets highlights two important financial concepts of a solvent and sustainable business. If the ratio is high, then it means the bank management has minimized the use of debt to fund its assets, which represents a conservative way to run the business entity. On the other hand, a lower ratio means a large amount of debt was used to pay for the assets, so in case of bankruptcy, debtors have higher percentage claim over the assets.

5.3.2. Productivity Ratios

The productivity is understood as the ability and willingness of an economic unit to produce maximum possible output with given inputs. The higher the output per unit of input, the higher is the productivity. The standard measures of productivity involve the calculation of output per unit change in a single input on the assumption that other variable factors, technology and institutions remain unchanged (RBI report on currency and finance, 2009). Business per Employee, Profit per Employee, the ratio of operating income to staff expenses, the ratio of operating cost to average assets or the ratio of operating income to staff expenses are often used in the banking sector as the traditional measures of productivity. Employee productivity plays a vital role when measuring the overall efficiency and productivity of banks. For the purpose of this study, Profit per Employee Ratio, Personnel expenses to Operating Expense Ratio and Business per Employee Ratio were the ratios used as proxies for productivity.

Profit per Employee (PPE) Ratio

Profit per employee, which is the ratio of profit generated by the bank to the total number of employees, helps to ascertain the amount of profit earned by spending on each employee. The higher the PPE ratio, the more efficient is the bank.

Business per Employee (BPE) Ratio

The business, which is made up of the sum of deposit and credit divided by the total employee, is a productivity ratio that indicates business generated by each employee. In other words, it determines how much business is generated by spending on each employee. The higher the ratio of BPE, the more efficient and productive the employees of the bank are.

Personnel expenses to Operating expenses (PEXOEX) Ratio

Personnel expenses comprise of wages and salaries subject to withholding tax and comparable expenses as well as expenses determined directly based on wages or salaries such as social security contribution and voluntary personal insurance contribution and pension expenses. Personnel expenses or labour cost plays a very vital role in determining the profitability of banks. Making a comparison of the ratio against the bank's

historical ratios let managers understand whether the employee efficiency is deteriorating, or improving or being maintained.

5.4. *The Model Specification*

To be able to ascertain thestatistical relationship between banks profitability measured by ROA and the independent variables (efficiency and productivity), a multiple regression model was adopted for the study. The multiple regression is not just one technique but a family of techniques, which can be used to establish the relationship between one continuous dependent variable, and many independent variables, Jullie Pallant (2005). The regression model will be in the below form:

$ROA = \beta_o + \beta_1 NIM + \beta_2 NIIM + \beta_3 OPEXINC + \beta_4 EQASS + \beta_5 PPE + \beta_6 BPE + \beta_7 PEXOEX + \varepsilon$

Where:

ROA = Return on Assets
NIM = Net Interest Margin,
NIIM = Non-interest Income Margin
OPEXINC = Operating Expenses to Income ratio
EQASS = Equity to Assets ratio
PPE = Profit per Employee ratio
BPE = Business per Employee ratio
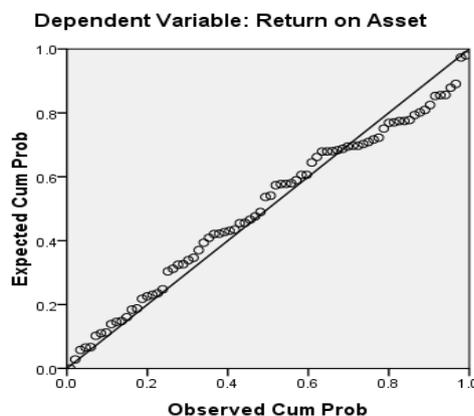**PEXOEX** = Personnel expenses to Operating expenses ratio
β_o = constant term
$\beta_1, \beta_2, \beta_3 ... \beta_7$ = Coefficient of the dependent variables and ε is the error term

VI. Data Presentation And Discussion Of Results

Figure 1: Normal P-P Plot of Regression Standardized Residual

5.1. *Test of Outliers, Normality, and Multicollinearity*

The P-P plot, Cooks Distance, scatterplot, and Mahalanobis Distance are some of the tests for normality and outliers of data. In the normal P-P Plot, if the points will lie in a reasonable straight line from bottom left to right then, it suggests there is no much deviation from normality. The P-P Plot shown in Fig.1 indicates that the data is normally distributed. According to Tabachnick and Fidell (2001, p. 69), Cook's Distance value of cases greater than 1 indicates a problem which needs to be removed. In table 2 below, it can be observed that the maximum Cook's Distance value is .295, suggesting that there is no problem of outliers.

To rule out the existence of multicollinearity among the variables, Nagaraju and Boateng (2018) suggested that the correlation between any two variables should not exceed .8. From the correlation among variables, as shown in table 3, it could be observed that none of the values exceeded .8; hence, multicollinearity is ruled out. To further, proof the absence of multicollinearity among the variables, the tolerance and the variance inflation factor are used. Tolerance less than .1 indicate the possibility of multicollinearity among the variables, whereas the variance inflation factor (VIF) above 10 indicates the presence of multicollinearity. In our case all, the tolerance values are all above 0.1 whiles the VIF values are all way below 10, confirming the absence of multicollinearity.

Table 2: Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	-.56380	7.02168	3.15643	1.685016	78
Std. Predicted Value	-2.184	2.292	.011	.994	78
Standard Error of Predicted Value	.185	.688	.308	.084	78
Adjusted Predicted Value	-.71471	7.24698	3.16096	1.703467	78
Residual	-3.795448E0	2.048473	-.030522	.912945	78
Std. Residual	-3.797	2.049	-.031	.913	78
Stud. Residual	-4.060	2.152	-.033	.975	78
Deleted Residual	-4.339499E0	2.259039	-.035049	1.043022	78
Stud. Deleted Residual	-4.610	2.211	-.041	1.011	78
Mahal. Distance	1.655	35.483	6.869	4.880	78
Cook's Distance	.000	.295	.017	.040	78
Centered Leverage Value	.021	.461	.089	.063	78

a. Dependent Variable: Return on Asset

Table 3: Correlations

		ROA	NIM	NIIM	OPEXINC	EQASS	PPE	BPE	PEXOEX
Pearson Correlation	ROA	1.000							
	NIM	.390	1.000						
	NIIM	.297	-.082	1.000					
	OPEXINC	-.709	-.257	-.189	1.000				
	EQASS	.235	.155	.185	-.291	1.000			
	PPE	.742	.326	.087	-.680	.112	1.000		
	BPE	.025	.101	-.217	-.140	-.028	.480	1.000	
	PEXOEX	.315	.461	.115	-.273	-.063	.146	-.164	1.000

6.2. *Model Fit Evaluation*

The R^2, which is referred to as the coefficient of determination, is used to assess the performance of the regression model. It indicates the variation in the depended variable attributed to the independent variables. The R^2 value of .760, as shown in table 4, therefore, implies that the independent variables jointly predict 76% variations in the profitability of banks in Ghana. Even when the R^2 was adjusted for bias, should the number of variables increase, it still recorded 73.6%. From table 5, it could be observed that the model is statistically significant at 5% significance level indicating the fitness of the model

Table 4: Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.872[a]	.760	.736	.999604

a. Predictors: (Constant), Personnel expenses to operating expenses, Equity to Assets, Business per Employee, Non-interest income margin, Operating Expenses to income ratio, Net interest margin, Profit per Employee b. Dependent Variable: Return on Asset

Table 5: ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	221.240	7	31.606	31.631	.000[a]
	Residual	69.945	70	.999		
	Total	291.185	77			

a. Predictors: (Constant), Personnel expenses to operating expenses, Equity to Assets, Business per Employee, Non-interest income margin, Operating Expenses to income ratio, Net interest margin, Profit per Employee
b. Dependent Variable: Return on Asset

Table 6: Coefrients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95% Confidence Interval for B		Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	1.831	1.171		1.563	.122	-.505	4.166					
	NIM	.102	.057	.131	1.812	.074	-.010	.215	.390	.212	.106	.653	1.532
	NIIM	.180	.089	.128	2.007	.049	.001	.358	.297	.233	.118	.841	1.189
	OPEXINC	-.024	.011	-.201	-2.243	.028	-.045	-.003	-.709	-.259	-.131	.427	2.343
	EQASS	.017	.023	.048	.743	.460	-.029	.064	.235	.088	.043	.808	1.238
	PPE	1.745E-5	.000	.692	7.034	.000	.000	.000	.742	.644	.412	.355	2.817
	PEXOEX	.006	.012	.035	.484	.630	-.018	.029	.315	.058	.028	.654	1.530
	BPE	-3.357E-7	.000	-.313	-4.240	.000	.000	.000	.025	-.452	-.248	.629	1.590

a. Dependent Variable: ROA

6.3.   The Regression Equation
From the results, as shown in table 6, the regression equation will now be in the form below.
ROA = 1.831+ .102NIM + .180NIIM - .024OPEXINC + .017EQASS + $1.745E-5$PPE + .006PEXOEX - $3.357E-7$BPE

6.4.   Discussion of Results
From Table 6, the net interest income margin and profitability had a positive and insignificant relationship. The standardized beta of .131 implies that a unit increase in the ratio of the net interest income to assets will lead to a 13.1% increase profitability of Ghanaian banks. The positive relationship between NIM and ROA corroborates the findings of Boateng (2018). The finding is an indication that interest income forms the greater portion of bank profits.

The non-interest income margin also related positively with ROA and was significant. NIIM recorded a standardized beta of .128 and a Sig. value of .049. What it means is that a unit increase in the mobilization of non-interest income will result to a 12.8% increase in profitability of Ghanaian banks. This tells us that non-interest income also plays a significant role in the overall profitability of Ghanaian Banks.

The ratio of operating expenses to operating income had a negative and significant relationship with the profitability of Ghanaian banks. It could be observed from table 6 that operating expenses to operating income ratio recorded a standardized beta value of -.201, which means that a 1% increase in operating expenses will reduce profitability by 20.1 %. This finding corroborates the findings of Boateng (2018), and Oslon and Zoubi (2011) who found a similar relationship between cost to income ratio and profitability. This suggests that for banks in Ghana to be profitable, management of these banks must reduce wastages and initiate cost-cutting policies as higher cost reduces profit.

The ratio of equity capital to assets, which measures the amount of assets that are financed by owners' investment, had a positive and significant relationship with ROA (profitability). A coefficient of .048 indicates that a unit increase in the leverage ratio will lead to a 4.8% increase in ROA. The positive relationship did not come as a surprise because the larger part of banks' revenue emanates from interest income.

Profit per employee ratio also recorded a beta value of .692 and was significantly related to banks' profitability. The value of beta implies that a unit increase in profit per employee increases profitability by 69.2%. The finding suggests that efficient and productive employees drive banks' profitability.

The ratio of personnel expenses to the operating expenses recorded a beta value of .035 and was insignificant. It is an indication that Ghanaian banks are not overstaffed, as the portion in personnel-related expenditures to the total operating expenses is negligible.

Business per employee related negative and significant to profitability. A beta value of -.313 is an indication that a unit decrease in BPE will result in 31.3% increase in profitability. The total business of a bank is made up of the sum of its deposits and credits, which is liabilities and assets, respectively. Though a higher BPE ratio is best, if the credit, which the deposits finance, does not perform, then profitability will be negatively affected.

VII.   Conclusion And Recommendations

7.1. Conclusion

The data analysis has produced some impressive results. Three variables; net interest margin, equity to assets ratio, and personnel expenses to operating expenses ratio all had an insignificant relationship with the profitability of Ghanaian banks. Additionally, non-interest income margin, operating expenses to income ratio, profit per employee and business per employee were all found to be significantly related to profitability

PPE made the most significant unique contribution to the prediction of profitability of Ghanaian banks with 69.2% predictive power. It was followed by business per employee (31.3%), operating expenses to income ratio (20.1%), net interest income margin (13.1%), non-interest income margin (12.8%), equity to assets ratio (4.8%), and personnel expenses to operational expenses making the least unique contribution of (3.5%) towards the prediction of profitability measured by ROA.

The implication of this finding is that for banks in Ghana to increase their profitability, management should not rely on interest income as the sole source of revenue but rather put much effort in expanding the avenues that generate non-interest income. Ghanaian banks have a relatively moderate number of employees, which makes personnel expenses insignificant. Besides, loans, which form the most substantial portion of Ghanaian banks' assets, are financed mostly by deposits and not equity capital, which makes the equity to assets ratio insignificant factor in determining profitability. Emphasis should, however, be placed on having a lean number of employees and increase the banks business by mobilizing more deposits and advancing more quality loans. Management should again ensure a reduction in operational expenditure through minimization of wastages, and that will lead to improved efficiency.

7.2. Recommendations

1. Management of Ghanaian banks should employ qualified and productive staff for optimum performance
2. Since banks depend mainly on interest income for their revenue, management should ensure that quality loans are granted and recovery efforts intensified to increase profitability
3. Management of Ghanaian banks should know the significant role non-interest income play in the overall performance of banks and diversify their operations to be able to reap in more revenue, aside from interest income.
4. Wastages and inefficiencies must be brought to the barest minimum since a hike in operating expenses affects profitability significantly.
5. Overstaffing must be checked to avoid inefficiencies and unproductive staff. Besides, management must engage the services of qualified staff and also organize regular in-service training for their employees to increase productivity and profitability.

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