

Analyzing the Impact of Loan Portfolio Management on the Financial Performance of Publicly Traded Banks in Ghana

Dr. Edward Domina Attafuah, PhD, MIOd, FCBA, FCIFIA¹, Dr. Seth Amoako, PhD² and Michael Kwakye, PhD Student, CA, MIOd, FCBA, FCIFIA³

¹Accountant, University Health Service; University for Development Studies; Senior Tutor- New Life College; Member Institute of Directors; Doctor of Philosophy, Universidad Empresarial De Costa Rica; Doctoral Fellow, Institute of Certified Business Analyst and Consultants; Fellow, Chartered Institute of Financial Investment Analyst

²Lecturer, AAMUSTED Post Office Box 8984, Ahinsan Kumasi

³Universidad Empresarial de Costa Rica; Senior Tutor- University of Cape Coast; Code – Zenith Campus, Accra; Doctoral Fellow, Institute of Certified Business Analyst and Consultants; Fellow, Chartered Institute of Financial Investment Analyst; Member Institute of Directors

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ABSTRACT

The banking sector is pivotal for economic growth and development, primarily through its roles in financial intermediation, providing an efficient payment system, and supporting monetary policy execution. Over the past decade, the performance and profitability of Ghanaian banks have significantly improved. This study aimed to bridge the knowledge gap by examining the factors influencing the performance of commercial banks in Ghana. Key factors analyzed included loan portfolio management, interest expenses, administrative costs, and asset values.

A descriptive survey design was utilized, focusing on management employees from commercial banks in Ghana. The sample was selected using both stratified and simple random sampling techniques, and data were collected through self-administered questionnaires. The Statistical Package for the Social Sciences (SPSS) was employed for analyzing primary data, while secondary data were sourced directly from the banks.

The study revealed that fluctuations in interest margins had minimal impact on the profitability of both public and private sector banks, indicating that their profitability growth is relatively independent of interest rate changes. However, foreign banks benefited from higher returns due to these interest margin fluctuations.

Key Words: Loan Portfolio, Financial Performance, Publicly Traded Banks in Ghana

BACKGROUND

Banks, as financial intermediaries, are vital to the functioning of any economy. They are the primary sources of funds and their stability is crucial for the overall health of the financial system (Amoasi, 2019). By performing essential roles such as financial intermediation, providing efficient payment systems, and implementing monetary policies, banks act as key drivers of economic growth and development (Abreu, 2022). The significant bank failures in some nations like the USA during the Great Depression of the 1940s highlighted the importance of bank performance, a focus that has only intensified over time (Heffernan, 2023). The global financial crisis of 2007/2009 underscored the critical role of bank performance in both national and international economies, highlighting the need for constant vigilance. According to Aburime (2008), the significance of banks is particularly evident in developing countries, where financial markets are often underdeveloped, and banks serve as the primary source of finance for most firms while also holding the majority of economic savings (Tobias and Themba, 2021). Consequently, governments worldwide strive to create efficient banking systems to enhance financial intermediation, safeguard depositors, foster healthy competition, maintain system confidence and stability, and mitigate systemic risks and potential collapses (Amoasi, 2019).

During the last decades, the banking sector has experienced worldwide major transformations in its operating environment. Both external and domestic factors have affected its structure and performance. Despite the increased trend toward bank disintermediation observed in many countries, the role of banks remains central in financing economic activity in general and different segments of the market in particular (Brock and Franken, 2022).

In today's economic environment, achieving improved performance and efficiency in public and private sector banking institutions has been prioritized more than ever before. Banking organizations aim at achieving these with the objective of improving competitiveness, delivering better service, and reducing costs. It is against such a background that organizations around the world have prioritized achieving heightened performance and efficiency with such goals in perspective. To achieve milestones in profitability increments, commercial banks should understand and address the determinants of their profitability. Only when these determinants are understood, can organizations be able to tackle the matter of profits improvement (Demirguc et al, 2020).

The determinants of profitability are empirically well explored although the definition of profitability varies among studies. Disregarding the profitability measures, most of banking studies have noticed that the capital ratio, loan-loss provisions, interest rates and expense control are important factors in achieving high profitability. Bank profitability is usually expressed as a function of internal and external determinants. The internal determinants originate from bank accounts (balance sheets and/or profit and loss accounts) and therefore could be termed micro or bank-specific determinants of profitability. According to Amoasi (2019), the external determinants are variables that are not related to bank management but reflect the economic and legal environment that affects the operation and performance of financial institutions. Profitability, solvency, and liquidity are the three most important goals of any business; profitability is the most important one. As a goal, profit isn't always understood well. Sometimes it is confused with cash flow. Sometimes it is confused with the highest income or the lowest cost. In rough terms, profitability is income minus expense. Ideally the difference is positive and large.

Statement of the Problem

The profitability of banks is a critical concern, particularly in countries with bank-based financial systems, such as Ghana. Banks are essential financial intermediaries that support various sectors of the economy, including the informal sector, making their stability crucial for overall economic health. Understanding the factors influencing bank profitability is vital for maintaining economic stability. Despite extensive empirical research on bank profitability—highlighting factors such as operating expenses, loan provisions, asset values, and interest rates (Goaied, 2021; Naceur, 2023; Athanasoglou et al., 2021; Aburime, 2023)—there is a call for more detailed, country-specific studies (Tobias and Themba, 2021; Ravallion, 2019). In Ghana, publicly traded banks have shown high profitability even when other business sectors struggle, indicating a need for a focused study on the specific determinants of profitability within this context.

LITERATURE REVIEW

Loan Portfolio and Profitability of Commercial Banks

One of the core functions of publicly traded banks is loan issuance, which is crucial for their profitability as loans represent some of the highest-yielding assets and contribute significantly to operating revenue. However, this practice exposes banks to liquidity risks, given that loans are funded by customer deposits. According to Hamisu (2021), credit creation carries substantial risks for both lenders and borrowers. The failure of a borrower to meet contractual obligations can severely disrupt a bank's operations, while high credit risk increases the likelihood of bankruptcy, endangering depositors. In an effort to remain competitive and sustain profitability, banks often engage in higher risk-taking. This tendency towards greater risk has led to the insolvency and failure of numerous banks. Although a higher volume of loans can enhance interest income and profit potential, it also exacerbates liquidity risk. Consequently, commercial banks must navigate the delicate balance between maintaining adequate liquidity and achieving profitability (Devinaga, 2020).

Owojori et al (2021) highlighted that available statistics from liquidated banks in Nigeria clearly showed that inability to collect loans and advances extended to customers and directors or companies related to directors/managers was a major contributor to the distress of the liquidated banks. At the height of the distress in 1995, when 60 out of the 115 operating banks were distressed, the ratio of the distressed banks' non-performing loans and leases to their total loans and leases was 67%. The ratio deteriorated to 79% in 1996; to 82% in 1997; and by December 2002, the licenses of 35 of the distressed banks had been revoked. At the time, the banking licenses were revoked, some of the banks had ratios of performing credits that were less than 10% of loan portfolios (Hamisu, 2021).

Interest Expense and Profitability of Publicly Traded Banks

Interest expenses and interest income are critical components affecting net interest income and, consequently, bank profitability. As such, interest rates are frequently examined as key determinants of bank performance in financial research. Local monetary policies and market supply and demand conditions play a significant role in influencing interest rates. When these rates fluctuate due to changes in monetary policy or economic conditions, publicly traded banks (commercial banks) experience corresponding shifts in the returns they earn on their assets. This is particularly evident because banks typically hold a significant portion of assets with short maturities, which causes their yields to adjust rapidly with interest rate changes. However, certain elements of a bank's investment portfolio are less sensitive to these fluctuations. For instance, consumer loans, fixed-rate mortgages, bank credit card loans, business term loans, long-term investment securities, and real assets like rental offices are less affected by immediate yield declines when interest rates drop. Nonetheless, even these longer-term assets are not immune to yield reductions, though their adjustments are more gradual compared to short-term assets (Devinaga, 2020).

The interest rate spread is defined as the ratio of the net interest income (banks' interest income banks' interest expenses) to total assets. This markup reflects the bank's interest profitability that covers the cost of intermediation which, according to the industrial organization point of view, is the difference between the price of bank intermediation and the cost of its output. In fact, this margin should reflect a bank-specific component, an information premium for assessing and monitoring investments, and market structure and a premium for managing risks Alicia et al (2007). English (2002) examines the impact of risk arising from interest rate changes on bank interest margin. His results obtained for a panel of international banks from ten industrialized countries suggest that commercial banks were able to manage their exposure to the volatility of yield curve. Therefore, changes in rates did not have consequences on bank interest margin level.

Empirical Studies

Profitability of Publicly Traded Banks

According to Ahmad and Jamal, (2022), administrative/ operating expenses represent an element that is as important as the other determinants herein in determining the level of bank profitability. Controlling operating costs is closely related to the concept of managerial efficiency or productive efficiency. Operating expenses are defined in the OECD Bank Bulletin (2019), as including all expenses relating to the ordinary and regular banking business other than interest expenses, fee and commission expenses, provisions, income taxes and computer programming and equipment maintenance costs. Thus, operating costs comprises all expenses related to the use of physical and labor factors. Since these expenditures are management controllable expenses, and if controlled properly, can contribute positively to the generation of operating revenue (Devinaga, 2020). Administrative expenses as percent of total assets may have a positive or negative impact on profits. Lack of competence in expenses management in a bank eventually results in poor profitability for the bank. When administrative costs are managed properly, an increase in expenses will increase the interest margin of a bank and raise income. Negativity in administration costs could also indicate a bank's inability to pass its expenses to customers because of the competition. If the bank fails to pass on the cost to the consumers, the profitability of the bank will be at a higher chance of decreasing (Ahmad and Jamal, 2022).

Asset Value and Profitability of Commercial Banks

A bank's revenue is generated from its assets. However, it is worth noting that not all assets generate revenue. Thus, the assets of a bank can basically be classified as income or revenue-generating and non-income generating. The evaluation of assets quality undoubtedly is a very important task for every bank. Real-life experience shows that low-quality assets are the most common reason of bank bankruptcy. Thus, by continuously evaluating the quality of its assets, it is possible to forecast the sustainability of the bank and timely avert a lot of problems (Nazir, 2020).

An important prerequisite for the stability and profitability of a bank is the management of the structure of bank assets. Therefore, it is the aim of every bank's management to optimize the structure of assets (and liabilities) with regard to the bank's specific business policy, and which determines its profit, as well as with regard to an evaluation of the level of risk, which the bank is willing to bear, or respectively against which it has created against sufficient reserves. An optimum structure of a bank's balance sheet ensures the maximization of a bank's profit at the level of risk borne. The role of ordering the structure of assets is to manage the net interest margin and mitigate the risk of interest rate changes, where presently these are some of the most serious risks to which commercial banks are exposed (Liu et al,2020). The sensitivity of assets to interest rate changes is an important issue. This sensitivity enables a bank to change the structure of its assets so as to minimize the negative effect of a change in interest rates, or, conversely, to exploit positive changes fully. Assets sensitive to interest rate changes include those reaching maturity shortly, assets with re-pricing, and a part of assets that are amortized over a defined period (Athanasoglou et al.2019).

Chijoriga (2020), cited in Xuezhi et al, (2022) noted that poor asset quality resulted in banking failure. Asset quality in terms of credit risk results into the non-repayments of loans hence lower interest revenue but better asset quality in terms of the lower percentage of non-performing loans results into higher profitability (Xuezhi, 2012). Poor asset quality should reduce profitability in as far as it limits the bank's pool of loanable resources. Such a priori is generally confirmed in developed countries but not always in emerging countries. Brock and Suarez (2000), for example, show a negative relationship between bank spreads and NPLs over total loans for most Latin American banking systems. They argue that this is due to distortions caused by inadequate regulation that allow banks to report misstated loan losses. How to account appropriately for asset quality is an issue across many countries' banking systems.

Research Gaps

Literature indicates that several determinants significantly influence profitability in the banking sector, including asset value, loan portfolio, asset quality, and interest expenses. These factors are essential for achieving profit maximization across banking institutions globally. This study examines these four key variables to determine their impact on the profitability of commercial banks in Ghana.

RESEARCH METHODOLOGY

Research Design

This study employed a descriptive survey design, which, according to Orodho (2020), involves gathering information through interviews or questionnaires administered to a sample of individuals. This approach is effective for collecting data on attitudes, opinions, habits, and other social issues. Sekaran and Bougie (2021) further explain that a descriptive study aims to identify and describe the characteristics of the variables of interest within a given context.

Population

All employees of the banking sector in Ghana formed the population of this study. The target population was 13,042 employees who were on the roll by the end of the year 2022 as stated by the Central Bank of Ghana supervision report of 2022. However, due to the location of the researcher and logistical challenges, the accessible population was those employees in senior management and middle management ranks. All the

elements that meet certain criteria for inclusion in a study consist of all members of a real or hypothetical set of people, events or objects from which a researcher wishes to generalize the results of their research; while accessible population consists of all the individuals who realistically could be included in the sample

Sampling

Two sampling techniques were employed in this study i.e. stratified sampling and simple random sampling. Stratified sampling was employed to group the bank employees into two groups of senior management and middle management. The two groups were arrived at because this study required employees who had detailed knowledge of the bank and its operations. Simple random sampling was done within each stratum to be able to serve the questionnaires to the employees. As at 31st December 2022, the accessible population of this study had 13,042 management employees broken down as 7,021 in senior management and 6,021 in middle management cadre. This size of the population is defined by Mugenda & Mugenda (2023) as a large population because it has more than ten thousand employees. The sample of the study was therefore determined using a formula recommended by Mugenda & Mugenda (2003) for getting the minimum sample size from a large population.

$n = Z^2 * p * (1-p) / d^2$ Where: n = sample size determined by formula

Z = normal distribution of Z score which is normally fixed at 1.96

p = proportion of units in the sample size possessing the variables under study which is normally set at 50% (0.5) d = significance level of 0.05

Once the formula is substituted with values then the sample size will be 384

$$n = (1.96)^2 \times (0.5) \times (0.5) / (0.05)^2 = 384$$

However this study targeted 400 respondents above the minimum sample size of a large population.

Table1: Sample Matrix

Strata	Population	Percentage	Sample Size
Senior Management	7,023	56	215
Middle Management	6,019	44	185
Total	13,042	100	400

Source: Researcher's construct 2024

Data Processing and Analysis

According to Hyndman (2020), data processing involves translating the answers on a questionnaire into a form that can be manipulated to produce statistics. This involves coding, editing, data entry, and monitoring the whole data processing procedure. The main aim of checking the various stages of data processing was to produce a file of data that was error free as possible.

After data was obtained through questionnaires and secondary sources, it was prepared for analysis by editing, handling blank responses, coding, categorizing and keyed into SPSS (Statistical Package for Social Sciences) computer software for analysis, and the information generated by the SPSS was used to make generalizations and conclusions of the study. F-test, t-test were used to check the level of significance while a multiple regression model was also used to test the significance of the influence of the dependent variable. The multiple regression Model was presented as below: $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + e$

Where:

- i. Y = the value of the dependent variable
 - ii. $\{ \beta_i; i=1,2,3,4,5 \}$ = The coefficients representing the various independent variables.
 - iii. $\{ X_i; i=1,2,3,4,5 \}$ = Values of the various independent (covariates) variables.
 - iv. e is the error term which is assumed to be normally distributed with mean zero and constant variance.
- Y = Profitability of Commercial banks in Kenya

X_1 = Loan Portfolio

X_2 = Interest Expense

X_3 = Administrative Costs

X_4 = Asset Base/Value

Using SPSS, the regression model was tested on how well it fitted the data. The significance of each independent variable was also tested. Fisher distribution test called F-test was applied. It refers to the ratio between the model mean square divided by the error mean square. F-test was used to test the significance of the overall model at a percentage confidence level. The p-value for the F-statistic was applied in determining the robustness of the model. The conclusion was based on the basis of p value where if the null hypothesis of the beta is rejected then the overall model would be significant and if null hypothesis is accepted the overall model would be insignificant. Similarly the t-test statistic was used to test the significance of each individual predictor or independent variable and hypothesis. The p-value for each t-test was used to make conclusions on whether to fail to accept or fail to reject the null hypotheses. The benchmark for this study for failure to reject or failure to accept the null hypothesis was a level of significance of 5%.

DATA ANALYSIS, FINDINGS AND INTERPRETATION

Reliability Analysis

The table2 below shows the results of the reliability analysis, mean and standard deviation (SD).

Table 2: Reliability Analysis

	Component	No. of Items	Cronbach's Alpha	Mean	S.D
1	Loan Portfolio	6	0.71	3.79	0.81
2	Interest Expense	5	0.69	3.84	0.87
3	Administration Costs	5	0.72	3.66	0.93
4	Asset Value	5	0.77	4.11	0.84

Source: Researcher's Construct 2024

Table 2 shows that the reliability that exists is somehow acceptable where the Cronbach's alpha lies between 0.69 and 0.77. One component has Cronbach's alpha less than 0.7 which indicate that the respondents are very acquainted on how the interest expense issues directly relate to the profitability index of the banks. It can also be on the account of how the bankers understand the interest expense element and thus not very clear to them how the four items have been related to the adduced profitability influence.

For the purpose of this study the banks were distributed into three categories. As shown in the table 3 below.

Table 3: Categorization of Banks by Type

Banking Classification Type	Number	Representative Bank in the Study
Public Banks (Government Ownership)	2	1. Ghana Commercial Bank 2. National Investment Bank
Private and Domestic Control	4	1. Prudential Bank, 2. Cooperative Banks 3. Equity Bank, 4. Family Bank
Foreign Control Ownership	2	1. Standard Chartered Bank 2. Barclays Bank
Totals	8	

Source: Researcher Construct 2024

Determinants (Bank specific) of Foreign Sector Vs Domestic Sector for Bank's ROE

The empirical findings for the first sub-sample show different results from those of the entire sample in the table 4. The deposit growth shows a positive relationship with profitability of private sector banks which is indicative of the fluctuation in deposit affected the profitability of private banks not foreign and public banks. Thus the deposits (Private Sector) received by banks could be a source of increasing profits. For instance in specificity is Equity Bank growth attributed to the many low economic segment population who deposit in small amounts but the numbers bring in the volumes. Therefore this factor has a positive effect only for private sector and it does not show that receiving more deposits improve foreign banks Return on Equity (ROE) and Return on Asset (ROA). It may be interpreted that the deposit growth ratio is not a profitability determinant for foreign banks in the Kenyan market.

Durbin Watson Test (Auto Correlation)

Findings show that there is no autocorrelation present up-to 6th lag. The factors presented above are not commutatively in a direct relationship.

Table 5: Durbin Watson Test (Auto Correlation)

	Order					
	1	2	3	4	5	6
DW	2.0122	2.1321	2.1128	1.6454	1.6715	1.7074
Pr<DW	(0.3618)	(0.4747)	(0.7102)	(0.3438)	(0.4215)	(0.6591)
Pr>DW	(0.6382)	(0.5253)	(0.2898)	(0.2898)	(0.5785)	(0.3709)

Source: Researcher, 2024

Multi-Collinearity Diagnosis

The table 6 has presented the summarized value of tolerance, variance inflation factor, Eigen value and condition index. The largest value of variance inflation factor (VIF) is 6.821 which are below 10 meaning there is no Multi-Collinearity in the established model. The values of Tolerance is also greater than 0.1

Table 6 Multi-collinearity Diagnosis

Variables	Tolerance (Tol)	Variance Inflation factor	Eigen value	Condition Index
Capital to Asset Ratio	0.694	1.441	0.485	4.107
Provision to Total loan Ratio	0.536	1.867	0.245	5.782
Cost Income Ratio	0.194	5.159	0.011	27.300
Liquid Asset Ratio	0.174	5.759	0.009	30.388
Deposit Growth Ratio	0.229	4.362	0.005	40.258
Gross Domestic Product	0.147	6.821	0.002	62.833
Inflations	0.204	4.907	0.001	126.32

Source: Researcher Construct, 2024

Ordinary Least Square Estimation (ROE)

The capitalization level has lost its significant (negative) effect on ROE for public and private sector both. While that very less but significant for foreign banks profitability (ROE). This could be interpreted in many ways. Firstly, it could be because bank capital is more costly for domestic banks than foreign banks. Secondly, it may suggest that foreign banks have better capability in increasing their earnings when increasing their equity. Thirdly, it could be due to the fact that foreign banks have lower capitalization than domestic banks, hence less profit.

Finding indicated that Net interest Margin were a positive and significant effect on ROE for foreign sector, and this gave an assumption that if banks have certain monopoly power, they will realize higher profits. In the category of the public sector banks and private sector banks, they were not much affected by increasing or decreasing of interest margin. It can therefore be interpreted that the profitability growth of public and private sector banks are not dependent on fluctuation of interest rate although the foreign banks have the benefit of high return due to increase or decrease in interest margin.

The findings indicated that the Cost Income has a negative impact on ROE of public and foreign sector Banks but a positive or insignificant impact on ROE of private sector banks. It can therefore be said that foreign and public sector banks that are not able to control their expenses and realize lower profits. As for the private sector banks have an upper hand in controlling the cost factor and enhancing the profitability margin. Going by the empirical result of literature that Liquidity ratio does improves domestic private bank's profitability, which suggests that investing in government securities is profitable for domestic banks. This may be due to the fact that foreign banks have access to other markets and better opportunities to invest their funds abroad. But the inferences show that the liquidity ratio is not significant for any sectors profitability. The findings could also be interpreted that foreign banks have less investment opportunities in the Ghanaian market for short term period because the findings are for 4 years only.

Table 7 presents the results for OLS estimation for Return on Equity for banks in the last 4 years.

Table 7 Ordinary Least Square Estimation (For ROE)

Variables	Parameter Estimation		
	Public Sector	Private Sector	Foreign Sector
Capital to Asset Ratio	0.014	-0.99	0.095*
CI 95% p-value	[-0.065; 0.093] (0.712)	[-0.245; 0.048] (0.171)	[-0.014; 0.205] (0.048)
Provision to Total Loan Ratio	-0.11	0.26	0.26
CI 95% p-value	[-0.101 ;0.078] (.790)	[-0.326 ;0.378] (.875)	[-0.030 ;0.060] (.083)
Net Interest Margin	.068	.162	.517*
CI 95% p-value	[-0.237 ; 0.372] (.643)	[-0.267 ; 0.591] (.433)	[0.206 ; 0.829] (.003)
Cost Income Ratio	-.299*	.018 [-0.212 ; -0.249]	-.809*
CI 95% p-value	[-0.594 ; -0.003] (.048)	(.867)	[-1.114 ; -0.504] (.000)
Liquidity Asset Ratio	-0.884	2.471	0.109
CI 95% p-value	[-1.834 ; 0.067] (.066)	[-.127 ; 5.070] (.061)	[-.475 ; .694] (.696)
Deposit Growth Ratio	-0.362	1.737*	-0.189
CI 95% p-value	[-1.111 ;0.388] (.320)	[-0.017 ;3.491] (.042)	[-.625 ;.248] (.372)
Gross Domestic Product	2.307*	0.170	0.044
CI 95% p-value	[0.935 ;3.679] (.003)	[2.235 ;2.576] (.882)	[-1.331 ;1.419] (.947)
Inflations CI 95% p-value	-0.510 [-1.401; 0.381] (0.241)	0.731 [-1.920; 0.459] (0.210)	-1.289** [-2.401;-0.176] (0.26)
R2	.887	.838	.955

Source: Researcher's construct 2024

*Significant at the 0.05 level

**Significant at the 0.01 level

Ordinary Least Square Estimation (For ROA)

Table 8, presents findings on Public and Private Sector Banks with domestic or foreign controlled Banks. This classification allows for the detection of the effect of foreign investment on domestic banks' ROA. The findings showed that return from assets was not much influenced on foreign banks profitability but the return on equity was the source of generating the profitability growth. By comparison with private sector banks, most of the variables influenced on Banks ROA except Cost Income Ratio and Provision to total loan.

Table 8, showed that only one determinant (Capital Adequacy) is similar among private and foreign sector banks in increasing ROA. The R-squared of the foreign sector banks are high as compared to private and public sector banks. The results are also shown by looking at the foreign ownership variables that has no effect. According to Ali (2020), Return on Asset (ROA) is not influenced on all sectors of Banks.

This factor is instrumental in differentiating banks according to their ROE; it is incapable of separating them according to their ROA

Table 8: Ordinary Least Square Estimation (For ROA)

Variables	Parameter		
	Estimation		
	Public Sector	Private Sector	Foreign Sector
Capital to Asset Ratio	-0.002	0.010*	0.275*
CI 95% p-value	[-.012 ; 0.009] (.708)	[-0.020 ; 0.001] (.037)	[0.262;0.289] (.000)
Provision to Total Loan Ratio	0.03	0.013	0.02
CI 95% p-value	[-0.009 ;0.015] (.580)	[-0.010 ;0.036] (.246)	[-0.004 ;0.008] (.468)
Net Interest Margin	.015	.033*	.035
CI 95% p-value	[-0.025 ; 0.056] (.431)	[-0.005 ; 0.061] (.026)	[-.003 ;0.074] (.069)
Cost Income Ratio	-.056*	006	-.096*
CI 95% p-value	[-0.095 ; -0.017] .008	[-0.010 ; -0.021] 0.440	[-.134 ; -.058] 0.000
Liquidity Asset Ratio	-0.85	0.311	-0.051
CI 95% p-value	[-0.212 ; 0.042] 0.172	[.140 ; 0.483] 0.002	[-.123 ;.022] 0.155

Deposit Growth Ratio	-.007	.211*	-.045
CI 95% p-value	[-0.107 ;0.093] (.884)	[0.095 ;0.327] (.002)	[-0.099 ;.009] (.098)
Gross Domestic Product	0.302*	-0.094	0.179*
CI 95% p-value	[-0.119;0.485] (.003)	[-0.253 ;0.065] (.229)	[0.009 ;.349] (.041)
Inflations CI 95% p-value	.003 [-0.116 ; 0.121] (.962)	-.014 [-0.092;0.065] (.718)	-.014 [-.229 ;.046] (177)
Adj R2	0.879	0.832	0.995

Researcher's Construct2024

SUMMARY, CONCLUSION AND INTERPRETATION

Summary of findings

The primary data findings indicate that the four determinants of profitability were actually real. The loan portfolio had a direct influence on the profitability of the banks. Non-performing loans and the new loans had different impact on the profitability of the bank. The interest expense was rated highly as a factor that works to reduce the profits. All the parameters under this were highly rated. The administration costs especially salary overheads were utterly blamed on reducing profitability. The depreciation of assets and the provisions was seen as a dent to profitability of any bank. However, it was also noted that the size of bank by asset value does not translate to higher profitability but it is a key fact for profitability efficiency. On account of customer preferences, the banks that had high mention were mostly Equity bank, Cooperative Bank Commercial Bank, Family Bank and the Barclays bank. Overall accessibility to the banks, reliability of the ATMs, the presence of variety of products and fast and efficiency in banking was rated 56 Percentage, 28 Percentage, 26 Percentage and 22 Percentage respectively. Financial stability was also considered a key component of choice at 17 %.

The increase in deposit showed a positive relationship with profitability of private sector banks. It can therefore be said of the fluctuation in deposit affected the profitability of private banks not foreign and public banks. In private sector banking, the deposits received could be a source of profits growth. Therefore, this factor had a positive effect only for private sector and it does not show that receiving more deposits improve foreign banks Return on Equity (ROE) and Return on Asset (ROA), because it is more pronounced in the private banks. Findings give an indication that the deposit growth ratio is not a profitability determinant for foreign banks in the Ghanaian market. Cost Income has a negative impact on ROE of public and foreign sector Banks but a positive or insignificant impact on ROE of private sector banks as shown by the findings. It can therefore be said that foreign and public sector banks that are not able to control their expenses and realize lower profits. The R-squared of the foreign sector banks are relatively higher than that of private and public sector banks. Inferentially, the results project that in the Ghanaian banking context the foreign banks ROA determinants are serrate and domestic banks ROA determinants.

Private sector banks have limited influence from the GDP in the Ghanaian market. This in essence means that in growth of GDP, the return from equity of foreign banks could be increase or decrease because they brought their equity in the market for investment from their parent country. But in case of private sector banks the result shows that there is no relationship exists between ROE/ROA of Private Sector and the macroeconomic factor of country. The findings give evidence that although the foreign banks operate in the Ghanaian market,

they are less influenced by its macroeconomic conditions as compare to domestic banks because there major parts of investment portfolio are depended on abroad. The result also found that the Inflation affects foreign banks more than domestic ones.

Conclusion

This study sought to analyse whether profitability measures were associated with increments or decline on loan portfolio, interest expense, administrative cost, and asset value at the organizational level. The study makes several contributions to the literature. In doing so, this study provides the first reliable evidence of the association of the four indicator factors on financial performance at the organizational level.

In the second section the research analysed the profitability differences and determinants of commercial banks in the Banking Industry for the year 2021to 2024 (annually). It analysed the influence of macro-economic indicator (inflation and GDP) on foreign and domestic banking sector of Ghana. The empirical findings report indicated that the profitability determinants of foreign banks were different from domestic banks. This research also shows the better capability in explaining the variability of domestic banks' profitability (ROE and ROA) than foreign ones, which may be deduced to mean that foreign banks operating in a market were not only affected by the conditions in market, but also by other factors that could be related to their home markets. As a deductive conclusion it can be said that local controlled commercial banks in Ghana were more profitable than foreign controlled ones as far as the profit volumes are concerned which is reflected in their yearly earnings per share but the foreign controlled commercial banks in Ghana, as a whole are more capital efficient as compared to the local controlled commercial banks subject to few exceptions. From the findings, it can be concluded that control over non-performing assets, operating expenses, provision and contingencies were major areas of concern for the management of public sector banks.

RECOMMENDATION

To strengthen the position of commercial Banks, the public sector banks must strive to greatly enhance efficiency through a control over shrinking spread, increasing non-interest income, and maximizing business per employee and per branch-. Technology up gradation, provision of better service quality, inculcating customer driven work culture, mental revolution among the staff of public sector banks, use of modern risk management practices are also the most sought after steps that are needed to ensure the sustainable level of profit and its growth.

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