KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY,

KUMASI

COLLEGE OF ARTS AND SOCIAL SCIENCES

SCHOOL OF BUSINESS

ASSESSING THE PERFORMANCE OF RURAL BANKS IN ASHANTI REGION

A CASE STUDY OF NWABIAGYA RURAL BANK LIMITED (2004-2013)

By

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Thesis submitted to Department of Accounting and Finance, Kwame Nkrumah University of Science and Technology in partial fulfillment of the requirement for the degree of

MASTER OF BUSINESS ADMINISTRATION (FINANCE OPTION)

School of Business, KNUST

College of Art and Social Sciences

June, 2015

DECLARATION

I hereby declare that this submission is my own work towards the Master of Business Administration (Finance Option) Degree and that, to the best of my knowledge, it contains no material previously published by another person nor material which has been accepted for the award of any other degree of the University, except where due acknowledgement has been made in the text.

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ABSTRACT

This research is a case study for assessing the performance of Rural Banks in Ashanti Region with Nwabiagya Rural Bank Ltd as a case study. The bank was established in August 1987. Currently, the bank has eight (8) branches, about 125,000 customers and 201 staff in Ashanti Region. In assessing their performance, a ten year annual financial statements for the period of 2004 to 2014 was used. As a financial institution, some of major challenges being confronted with include loan default, fraudulent practices and competition from other banks. In the mist of these challenges, the bank sometimes put up splendid performance which warranted awards from some organizations. The study has been grouped into five chapters. Chapter one deals with introduction to the study which consists of background of the study, problem statement, research, general and specific objectives. Other areas explored include scope, justification, brief methodology, limitations and organization of the study. In chapter two, various literatures were reviewed to find out what others had written about the work, what were missing out in their works and why what were missing out were very important to this study. In Chapter three both primary and secondary data were collected. The primary data were collected using questionnaire and interview guides. The secondary data were collected from the data base of the bank. The major statistical tools employed for analyzing the performance were SPSS, Minitab software, bar and pie charts. In chapter four, the data were analyzed to find out whether they were similar to or different from previous studies. In chapter five, the main findings were that, the major determinants of bank's performance were profitability, customer growth, number of agencies established. The major challenges included loan default, competition from other banks and high taxes from the government. It was also revealed that the bank either reinvested its profitability in other agencies or shared it as dividend among their shareholders. The main

recommendations were that, in order to increase their performance further, the bank should employ the services of experts to restore their net work problems confronting them, install ATM at their premises and other areas; and offer more projects to assist the people in the community using part of their profits.

ACKNOWLEDGEMENT

To every beginning, there is also an end. I owe all the pride I have in the two year MBA course in finance to the Alpha and Omega, the Supreme God for being my personal shepherd and fountain of knowledge throughout the course. “Names of great men are not mentioned in books but in the hearts and minds of people” so says an old adage. In this regard, all those who assisted me in diverse ways in producing this work I might not be able to present all such names due to time constrain and space but such people must be rest assure that they are dear to me forever.

I am proud to show my appreciation to my supervisor, Professor Kwaku D. Kessey, a lecturer at KNUST, planning department, who in spite of his heavy scheduled accepted to supervise this research work. By his patience, tolerance, advice and encouragement, I was put in the right psychological frame to produce this research work. May the Good Lord richly bless him and his family. To all other lecturers at KSB, I appreciate your efforts in tuition. Other people in diverse ways gave support for this thesis to come to fruition and to such, I am most grateful.

Specifically, I am indebted to all authors whose work I borrowed some ideas to make this piece. Again, to all respondents to questionnaires at the various branches of Nwabiagya Rural Bank Limited, especially, Mr. Mahama whose cooperation and tolerance I was able to reach a decision, I thank you very much. My gratitude also goes to Mr. Joseph Gyamfi, HOD –Economics, Admass, who encouragement and support has brought me this far. I am also graceful to Mr. Joseph Kyenkyehene, Mathematics tutor-Admass for his technical support in this work. My last but not the least thanks go to all my course mates especially, Nii Okine Benedict, Osei Francis and Asiedu Nantwi Michael for proofreading this dissertation.

DEDICATION

This work is dedicated to my parents, Nana Kwame Offe and Maame Mary Afriyie, and beloved wife, Elizabeth Dadzie and children, Sister Gillian Kusi Afriyie, Nana Asare Baffour, Sister Mildred Kusi Kyei and Brother Opoku Kusi Michael for sacrificing their comforts throughout the study period for this MBA Degree. May the Good Lord richly bless them and increase their years on this earth.

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LIST OF ABBREVIATIONS /ACRONYMS

1. NRB – Nwabiagya Rural Bank
2. BOG – Bank of Ghana
3. ACH – Automated Clearing House
4. CCC – Cheque Code line and Clearance
5. GDP – Gross Domestic Products
6. SPSS – Statistical Package for Social Scientists
7. ARB – Association of Rural Banks
8. SME – Small and Medium Enterprise
9. ILO – International Labour Organization
10. COT – Commission on Turnover

CHAPTER ONE

INTRODUCTION

1.0 Background of the study

Prior to attainment of independence, many of the financial institutions were found in urban areas. The traditional banks were unwilling to carry out banking business with the rural dwellers who generally engaged in farming, petty trading, artisanship and the like because their turnovers were relatively small. Again, monthly loan reimbursement schedules of the few traditional banks in the rural areas were unsuitable for the rural dwellers who were non- monthly income earners. These conditions made it difficult for them to contract credit facilities from the traditional banks. The commercial banks were only interested in the provision of loans and other financial assistances for the people in the urban areas who engaged in commercial activities and other civil service works. There was a gap between the activities of people in rural and urban areas. Therefore, in 1976, Bank of Ghana decided to close this break by creating rural banks in some of the rural areas to provide financial assistance for the rural folks to improve the rural economic activities and ownership of shares.

Shortly after independence, many rural banks proliferated in the country because they were identified as the solution to the challenges confronting the rural populace in accessing banking products. The rural banks were tasked to deepen and widen financial intermediation by introducing the right innovative instruments aimed at creating wealth and reducing poverty among the rural populace.

After the inception of rural banking industry in Ghana, it has grown considerably in terms of assets and contribution to the country's economic growth. According to Bank of Ghana (2006) financial report, the major functions of Rural and Community Banks

(RCBs) were supposed to be geared towards: i. mobilizing savings in the rural communities and channeling them into the provision of credit to rural microenterprises, agro-based firms and cottage industries. ii. Monetizing the rural communities by way of inculcating in rural folks the culture of formal banking. iii. Serving as tools for the growth and development of micro-enterprises in the rural communities in facilitating rapid rural industrialization for the overall enhancement of the national economy.

Currently, most of these rural banks have sidetracked their attentions from the rural communities to the cities and other urban centers where people engage in all sorts of activities which would enable them to mobilize reasonably higher savings. Nonetheless, others have strategically located themselves in the mist of rural dwellers to provide banking services for them.

Over the years, many rural banks claim to have made considerable performance but careful assessments of their financial reports on performance indicate diverse outcomes as many are bedeviled with colossal challenges. This is because, according to Aboagye and Otieku (2010), as at June 2007, out of the 145 RCBs, the 23 which were closed down by Bank of Ghana (2001) justified their actions with reasons such as poor loan recovery and corruption, low deposits mobilization, persistent operational losses, use of unqualified staff, non-submission of prudential returns, management incompetence, embezzlement and fraud, negligence and ineffective board of directors, ineffective accounting procedures, non-compliance with regulations in granting credits, high unearning assets and high non-performing credit portfolios.

In Ghana, the earliest rural bank called Nyakrom Rural Bank in Central Region was established in1976. Four years later, the number increased to 20. In 1996 and 2013, the number respectively soared to 122 and 136. The largest proliferation of rural banks took place during the period of 1981 to 1985. During that period, out of the eighty six (86) rural banks which were formed, twenty three (23) were liquidated between 1999 and 2000. As at 2013, there were 137 rural banks in Ghana.

Nwabiagya Rural Bank Ltd (NRB) is a community owned Financial Institution established in August 1987. Currently, the bank has eight (8) branches in Ashanti Region. These are Abuakwa, Anwiam, Bohyen, Magazine, Sagoe lane, Offinso, Dunkirk (near Kumasi Central Market) and Barekese where the headquarters is situated.

Nwabiagya Rural Bank, a profitable Rural Bank in the Country and ranked amongst the top 20 is not without challenges. Some of the major challenges include the ever growing competition in the banking industry, changing technology in the global environment and the persistent fall in discount and interest rates, low capitalization and increasing cost of operations. Despite these challenges, the bank received numerous awards for its services in 2010 and 2011. For instance, at the Ghana Club 100, 2010 edition, the Bank was placed 48th in the rankings. Also, during the 4th Ghana Business and Financial Services Excellence Awards organized under the auspices of the Ministry of Trade and Industry on 25th November 2011, the bank picked up the following awards: Gold Award-Rural Banking (Loan Disbursement), Silver Awards-Rural Banking (Deposit Mobilization). Again, at the 8th Ashanti Financial Services Excellence Awards, organized under the auspices of Manhyia Palace, held on 29th July 2011, Nwabiagya Rural Bank Limited picked up the following awards: Gold Award – Best Rural Bank (Loan disbursement), Silver Award –Best Rural Bank (Deposit Mobilization) and Silver Award – Best Rural Bank (Corporate Social Responsibility)

The bank has step up their deposit mobilization drive and to make credits available to people in their catchment area that engaged in various economic activities and minimize the incidence of irregularities and malpractices.

In the face of the valuable financial services, majority of the rural banks including Nwabiagya Rural Bank Limited occasionally perform extremely good but may also have challenges which bring fluctuations in their performance levels during certain years. It is therefore important for an independent body to look into their performance regarding their operational efficiency against the backdrop of their mandate as stated above by Bank of Ghana through a case study approach.

1.1 Problem Statement

Rural banks are financial intermediaries which are supposed to be established in rural areas purposely to provide financial assistance to the rural folks and ownerships of shares. As financial intermediaries, they take money in the form of deposits from the surplus unit and loan it out to the deficit unit in their areas of operations. One of their major aims in providing this service is to make profit and close the gap between the activities of the people in the rural areas and that of the urban centers. The people in the rural community mostly engage in low income activities such as peasant farming and other small and medium scale enterprises. By the nature of their works, most of these people are generally micro wage and low income earners. The rural banks therefore could be exposing themselves to credit risks in making financial transactions with some of these rural folks which may adversely affect their performance.

According to Essel et al. (2000), most banks are unable to meet their target profits due to certain challenges confronting them. Therefore, the study is intended to investigate the challenges and management decisions affecting the performance of rural banks and explore the relationship between profitability rate and performance.

1.2 Research Objectives

The objectives of the study were in two folds, namely, general and specific.

1.2.1 General Objective

The general objective of the study was to assess the performance of rural banks in Ashanti Region.

1.2.2 Specific Objectives

The specific objectives of the study were:

1. To identify the determinants of performance of rural banks in Ashanti Region.
2. To find out the constraints to the performance of rural banks in Ashanti Region.
3. To examine the measures employed by rural banks to reduce the constraints in their performances.
4. To find out what management use their profits for.

1.3 Research Questions

1. What are the determinants of high performance of rural banks in Ashanti Region?
2. What are the constraints to the performance of rural banks in Ashanti Region?
3. What measures do the rural banks employ to reduce the constraints in their performance?
4. What do management used the profit obtained for?

1.4 Scope of the study

The research was conducted in six of the bank's branches, namely, Barekese, Bohyen , Abuakwa, Magazine, Sagoe lane, and Offinso, all located in and around Kumasi

Metropolitan City. The bank has eight branches in Ashanti region of Ghana. The bank has staff strength of over two hundred (200) workers who engaged in various forms of banking activities in their headquarters and other branches. The bank deals with more than one hundred and twenty five thousand (125,000) customers. Majority of the customers engaged in small and medium scale enterprise activities. Due to the problem of land tenure system coupled with high cost of land renting, few of them are peasant farmers who practiced various forms of agricultural activities for their survival.

1.5 Justification for the study

A lot of studies have been done in the performance of commercial and other banking industries. However, not much literary works have been done in this area of study for rural banks in Ghana. Therefore, the study will provide a platform for financial analysts and other policy makers in the country who will be concerned in knowing the performance of rural banks. It will also provide an indication of how the bank's performance has been like for the financial years 2004 to 2013. Again, the study will provide a guide for further studies on performance of rural banks since there are not significant structural and operational differences among the rural banks in the country.

1.6 Brief methodology

For simple analysis of the performance of rural banks in Ashanti region, the trend analysis approach was used using Minitab software. Both primary and secondary data were used for the analysis. The main tools used to collect the data were interview guide and questionnaire. The Data for the period 2004 - 2013were used for analysis.

1.7 Limitations of the study

A number of problems that occurred which limited the study includes the following:

1. Many of the customers who were interviewed were illiterates and so the structured questions had to be interpreted to them in Asante Twi before they could respond. This wasted a lot of time and a limited number of sample sizes were selected for the interview.
2. Most of the bank staffs were busy with the various activities of the bank and so had to take the questionnaires home and spent so many days before they could complete them. This delayed the completion of the questionnaire.
3. During the literature review, it was difficult to get the relevant books needed for the study. A lot of time was spent in visiting internets and libraries to obtain the relevant information for the study.

1.8 Organization of the study

The study has been organized into five chapters. Chapter one deals with the introduction of the study. This consists mainly of background of the study, statement of problem, research objectives, research questions, justification for the study, brief methodology, scope of the study, limitations of the study and organization of the study. Chapter two reviews the relevant literature in relation to the study. Chapter three deals sources of data and the methods used to collect and analyze the data for the study. Chapter four concentrates on data analysis and discussions of results whilst chapter five is a summary of findings, conclusions and recommendations.

CHAPTER TWO

LITERATURE REVIEW

2.0 INTRODUCTION

There have been several studies conducted about the performance of rural banks in Ghana. Some of the important areas explored include the determinants of performance of rural banks in Ghana, constraints to their performance, measures employed to reduce such constraints and what the management used their profit obtained for. However, there are many areas which are missing in the works of previous studies. Therefore, in coming out with material worth reading, many sources of literature materials such as books, journals, reports, articles and other internet materials were read to find out what were missing out in other people's work and why what were missing out were essential in this study.

2.1 Definition of bank's performance

The financial performance of a firm is defined as measuring the results of the firm's policies and operations in monetary terms. These results are reflected in the firm's return on investment, return on assets, value added and so on. According to Harker and Zenios (1998), the performance of a bank is an economic performance which is measured in both short and long-term by a number of financial indicators such as price-to-earnings ratios, the firm's stock beta and alpha, and Tobin's q-ratios. The financial performance of RCBs is influenced by internal factors or bank-specific factors and external or macroeconomic factors. The study was silence on other nonfinancial indicators like agency expansion, technological innovations designed for the banking industry such as Auto Teller Machines (ATMs), e-Zwich, Electronic Financial Analysis and Surveillance

System (e FASS) and the Cheque Code line Clearing (CCC) as well as the Automated Clearing House (ACH), assistance offered to the people in their area of operation. The study intends to find out how these nonfinancial indicators could influence the performance of rural banks in Ghana. When the influences of these nonfinancial indicators to performance are identified to be positive, the other rural banks will embrace them and use them to assist them in their operations.

2.2 Factors underpinning effective financial performance of rural banks

Zaman (2004) and Yaron et al. (1998) in studying the factors influencing financial performance of RCBs summarized their findings as follows: visionary leadership, management autonomy in formulating operational policies, efficient staff recruitment and remuneration systems, innovative and technology-driven products; flexible low-cost delivery system, keen supervision of loan portfolio; effective management information system that promotes proper planning and enhances management ability to control operational expenses and ensures adequate internal control systems. The fundamental influence of microeconomic stability and a favorable regulatory environment on performance of rural banks did not escape them. The study aims at finding out whether the same factors could influence the financial performance of rural banks in Ghana although the countries have different financial environments and macro economic variables. The findings will serve as a good literature for the rural banks to find out possible strategies that could be adopted to manipulate these factors to impact positively on their performance.

Cost of operation could affect profitability which will eventually affects the performance of rural banks.

Padmanabhan (1988) and Agu (1998) argue that loan default decreases the resource base of a bank for further lending, weakens staff moral and affects the borrower's confidence. The high cost of managing overdue loans reduces banks profitability and hence reduces their performance. In managing default loans, certain bank managers simply shift them to other borrowers by charging high interest rates on loans.

2.3 Cost of operation and profitability of rural bank s

Generally, profitability in a firm or an institution occurs when the revenue collected exceeds the expenses incurred. The ratio of capital structure and return on equity are also important to banks, since banks have low levels of equity compared to assets and therefore are sensitive to changes in financial leverage. Higher capital translates to lower risk and higher profitability.

The literature on Rural Commercial Bank's recognizes poor financial performance and offers a host of reasons for that. According to the Addo (1998), Rural and Community Banks (RCBs) have low earning capacity. They have not been able to earn much profit in view of their policy of restricting their operations to target groups. The recovery position of RCB's is not satisfactory. There are a large number of defaulters. Their cost of operation has been high on account of the increase in the salary scales of the employees in line with the salary structure of the employees of commercial banks. In most cases, these banks followed the same methods of operation and procedures as followed by commercial banks. Therefore, these procedures have not found favor with the rural banks.

In predicting profitability, Hassan and Bashir (2003) assert that high capital and loan-to-asset ratios lead to higher profitability when the macroeconomic environment, financial market structure, and taxation remain unchanged. The study further indicates that, implicit and explicit taxes negatively influence bank performance while favorable macroeconomic conditions rather affect performance positively. The results indicated a strong positive correlation between profitability and overhead cost. What is missing out in the study is that, it was silence on how cost of operation could be reduced in order to increase the performance of a bank in terms of profitability. When this is known, it will serve as a good literature source for rural banks to know the need strategies to adopt to reduce cost of operation so as to increase their profitability.

Apart from profitability, there are other indicators that shows performance of rural banks

2.4 Other indicators of rural bank's performance apart from profitability

In evaluating the financial performance of rural banks in India, Ibrahim (2010) identified certain indicators of performance apart from profitability. These indicators include number of agencies or branches, district coverage, deposits mobilization, loans portfolio and investments. The study concluded that bank consolidation enhance financial performance of rural banks. This facilitates growth in branch network, the closure of underperforming rural banks and an increase coverage of the number of communities and districts served by the rural banks. He further discovered that growth of credit-deposit ratio indicates a remarkable deployment of credit facilities which indicates good performance of rural banks. Barry et al. (2012) showed that the liquidity challenges of rural banks are mainly due to loan delinquencies and default as well as low levels of deposits. They claimed that banks whose loan portfolios have low risk are less efficient than those with high-risk loan portfolios. The study failed to include other indicators of performance in Ghana especially, technological innovations made in the bank, assistance offered to the individuals, groups and organizations in the community, growth of customer base, growth of products and service lines such as savings, deposits, loans and investments in assets which could influence the performance of rural banks in Ghana.

Many studies have been done on the concentration of banks and their effects on the performance of other banks.

2.5 Concentration of banks and the effects on their performance

According to Molyneux et al (1992), when banks are concentrated at a place, they plan to monopolize the market and earn monopoly profits. Berger (1995) asserts that, the relationship between banks concentration and performance in the USA depend critically on the kind of factors that are held constant. On contrary, Naceur (2003), in his study of Tunisian commercial banks, discovered a significant negative relationship between concentrations of banks and their performance.

The implication of the above studies suggests that, the impact of concentration of the banking industry on the bank's profitability is not empirically conclusive. It is important to draw the conclusion on the impact of the bank's concentration, especially, the rural banks, on their profitability levels. This will enable regulators of financial institutions such as the Bank of Ghana, Rural and Community Bank (RCB) Association to come out with measures to either regulate the location of the banking industry in any given community or not.

In attaching importance to the effect of concentration on the performance of rural banks, other scholars have also expressed grave concern on how credit risk is managed to affect performance of rural banks.

2.6 Effects of credit risk management on performance of rural banks

In the mist of the current financial crisis that the world is exposed to, credit risk management in rural banks has become more important concept in determining banks' survival, growth, profitability and performance. This is because, credit granting is one of the key sources of income generating activity in rural banks, and needs to be properly managed else, it could affect their profitability and performance. According to (Sinkey 2002; Coyle 2000) credit risk is the possibility that a borrower will not make a timely payment of his or her debt or failed to make repayment at all. Conford (2000) sees credit risk as the possibility that the actual return on a loan portfolio will diverge from the expected return. Padmanabhan (1988) in differentiating between the two types of credit risk managements posits that, while loan delinquency denotes delay in payment of a loan, loan default shows nonpayment of a loan. He added that if the former is unchecked the latter is likely to follow.

In trying to identify the effects that credit risk may have on rural banking business, Coyle (2000) did not hesitate to add that the delay of repayment on loan contract or the inability of a borrower to pay its debts could cause cash flow problems and affect the liquidity position of the bank.

Cooper et al, (2003) threw their support for the previous studies by attributing the variations in bank performance to variations in credit risk when they assert that increase exposure to credit risk leads to decrease in a firm's profitability and hence, their performance. This paves way for discussions on loan not to be concentrated on the volume but the quality of loans offered. The reason offered by (Sufian and Chong, 2008; Miller and Noulas, 1997; Duca and McLaughlin, 1990) suggests that high risk loans increases the accumulation of unpaid loans and decreases performance of the bank in terms of profitability.

This study is interested in establishing whether credit risk management within the period under review influenced the performance of a rural bank in the selected region. By establishing this fact will provide a good literally material for other similar banks to see the need to manage their credit risk.

Many of the rural banks are unable to manage their credit risks effectively due to certain problems they encounter.

2.7 Causes of credit risk management problems

Coyle (2000) in a different dimension saw credit risk management as the identification, measurement, monitoring and control of risk arising from the possibility of default in payment of a loan contract. To them, credit risk in the banking industry is more often than not caused by adverse selection and moral hazards due to information asymmetry.

According to (Sandstorm, 2009; Laker, 2007; Kithinji, 2010), credit risk situation of a bank can be worsened by inadequate institutional capacity, inefficient credit guidelines, inefficient board of directors, low capital adequacy ratios and liquidity, compulsory quota-lending as a result of government interference and lack of proper supervision by the central bank.

The study aims at finding out whether the rural bank faces the same credit risk problems or not. If the rural bank is confronted with different credit risk management problem(s) apart from those stated by previous studies, it will provide a good literature for further reading.

In managing credit risks, some authors have outlined certain principles but their efficacies in solving every credit risks problem when followed have not been ascertained.

2.8 Basic principles underlying credit risk management and performance.

Various authors have comes out with a number of general principles, which should be applied when giving out loans. For instance, Santomero and Babbel (1997) identified the following principles as appropriate in managing credit risk:

- establishment of a clear risk policy and a reporting structure;
- underwriting authority and loans limit;
- allocation of responsibility and accountability;
- prioritization of the lending process and systems; and
- timely communication of risk information to top management.

According to Santomero and Babbel these principles are set up mainly “to measure risk exposure, define procedures to manage these exposures, limit exposure to acceptable levels and encourage decision-makers to manage risk in a manner which is in line with the firm’s goals and objectives”. However, Robbins and Stobaugh (2000) indicate that experienced lenders must use a mixture of technical knowledge and common sense rather than rules to guide them when lending loans because each lending case has to be treated on its own merits.

The study aims at finding out whether those principles outlined by the authors are applicable by the rural banks in Ashanti region in reducing credit risk. It will also come out with whether the rural banks have adopted other principles more efficient than those prescribed by the previous studies and how those principles could influence positively on their performance.

There is an assertion that loan default rate affects the profitability which eventually affects the performance of rural banks and as such, many financial institutions have designed their own ways of handling such situations normally at a disadvantage of borrowers.

2. 9 Loan default rate and performance of a rural bank

The literature on rural banks identifies a host of reasons accountable for their poor financial performance. Many studies have attributed poor performance of rural banks partly to poor and unsatisfactory loan recovery position. Theoretical and empirical evidence suggest that efficient credit risk management affects a bank`s performance. For instance, non-performing loans, which indicates credit risk, can trim down the value of a bank's financial position and destabilizes the credit system. For instance, Padmanabhan (1988) and Agu (1998) argue that loan default decreases the resource base of a bank for further lending, weakens staff moral and affects the borrower's confidence. The high cost of managing overdue loans reduces banks profitability and hence reduces their performance.

Nair and Fissha (2010) in a similar study of the Ghanaian rural banking industry indicated that, their financial performance can be appraised when proper and efficient loan management practices are adopted. They added their voices to the revelation made by MIX, (2008) to the fact that the percentage of loan portfolio in default in a sample of worldwide micro-banking industry for more than one month was 16% as against the global average of 3% for the worldwide micro-banking industry. This, according to Nair and Fissha, is a sign of large loan loss.

Recently, Kithinji (2010) in studying Kenyan banking industry identified an indirect relationship between non-performing loans and the bank's profitability. Outside Africa, other empirical studies have rather shown otherwise. For example, in Qatar, Achou and Tegnuh (2007) indicated a positive relationship between credit risk management and performance in a banking industry. Hosna et al (2009) in Sweden throws much supports to the findings of Achou and Tegnuh.

They said in their conclusion that, it is important for banks to practice prudent credit risk management to safeguard the asset of the bank and protect the interest of investors.

The studies however were silence on whether those measures could be applied in rural banks in this country. This is worth knowing because when those practices are known, they could be tested to see whether rural banks in Ghana can implement them to safeguard the assets of the bank and protect the interest of investors. If they are proved otherwise, then the rural banks will see the need to reject them, adopt their own ones, and practice them.

Many studies have expressed concern about the need for rural banks to manage their credit risks.

2.10 Reasons for managing credit risk

Many researchers in the likes of Froot et. al 1994; Fatemi and Glaum, 2000, have expressed the need for managers to be particularly concerned in managing credit risk. This is because (Fatemi and Glaum, 2000) posit that efficient credit risk management minimizes the volatilities of cash flow and promotes the survival of a firm through growth and profitability which invariably affects their performance.

The studies failed to highlight how credit risk could be managed especially, in rural banks. Knowing the strategies to manage risk will enable the rural banks to implement them to reduce the risk that they expose themselves to when given loans to customers.

Other risks that the rural banks may be exposed to in lending out loans to their customers include the market, operational, and legal risks that have tendencies to influence their profitability and performance.

2.11 Criteria for measuring performance of rural banks

Various research studies have been done in the measurement of performance of different financial institutions. Harker and Zenios (1998) define the performance of financial institutions as an economic performance that is measured in both short and long-term by a number of financial indicators such as price-to-earnings ratios, the firm's stock beta and alpha, and Tobin's q-ratios. However, in recent times, notable measures used in assessing the bank's profitability have been either Return on Assets (ROA) or Return on Equity (ROE). In measuring profitability, many researchers have thrown their hats for ROA instead of ROE.

Hassan & Bashir (2003) in differentiating between ROA and ROE argues that, as the former shows the profit earned per dollar of asset and reflects the management's ability to make use of the bank's financial and real investment resources to create profits, the latter, reflects on how effectively a bank's management is utilizing its shareholders funds.

Rivard and Thomas (1997) in explaining why bank profitability is best measured by ROA instead of ROE says that ROA is not distorted by high equity multipliers and as such represents a better measure of the ability of a firm to produce returns on its portfolio of assets.

Arguing from a different perspective, Heffernan and Fu (2008) suggested the need for a superior performance measures that add economic value and have net interest margin instead of a mere conventional measures of profitability using Return on Average Equity (ROAE) and Return on Average Assets (ROAA). Their study also reveals the significant of some macroeconomic variables and financial ratios with their expected signs. The study further concludes that, it is the type of bank that is important in determining its performance but not its size.

These assertions need to be investigated to find out which of the two methods is often used by rural banks in calculating profitability and reasons why that particular method is often used. This will help those who will like to do further research in the same or similar field know the most appropriate method used in calculating profitability.

2.12 Salary of workers and Rural Banks Performance

According to Addo (1998), RCBs have low earning capacity partly due to increase in the salary scales of the employees in line with the salary structure of the employees of commercial banks. Their costs of operations have been persistently high. More often than not, these banks have adopted similar methods of operation adopted by commercial banks that make them offer comparatively higher salaries to their workers which invariably affect their performance in terms of lowering their profitability. The study intends to find out how salary structure of NRB employees in line with commercial banks has affected its performance. In the opinion of many researchers, assets and liability management can influence the performance of rural banks.

2.13 Assets and liability management and rural bank's performance

Miller and Noulas (1997) showed that asset and liability management as well as the quality of assets affect performance of a financial institution. They concluded that larger banks experience poor performance due to decline in the quality of their loan portfolio. Concerning rural banks, Barry et al. (2012) realized that banks with low risk portfolio are less efficient than those with high-risk portfolio**.** The study will find out the kind of portfolio that influences the profitability of the selected rural bank within the chosen period. This will propel the bank on the need to manage their portfolio. The impact of macroeconomic determinants on the profitability of a bank has been advanced by many studies.

2. 14 Macroeconomic determinants and banks performance

Recently, prominent highlight has been given to the literature on the impact of macroeconomic variables such as Gross Domestic Product (GDP) growth, interest rate and inflation on the performance of rural banks. The performance of a bank is expected to be responsive to these macroeconomic control variables. Athanasoglou, et al. (2005), Demirgüç-Kunt and Huizinga (1999), Bikker and Hu (2002) all discovered a positive correlation between bank profitability and growth in GDP. Money supply is the amount of money available in any given economy. The kind of monetary policy such as Open Market Operation, special deposits, bank reserve ratio, moral suasion and others have the tendency to influence the volume of currency in circulation that affects inflation. The Central Bank, through expansionary monetary policy, can increase the supply of money inducing an increase in price level and vice-versa. The study of Mamatzaki et al., (2003) suggests that money supply which was used in the study as a measure of market size, significantly influenced bank's profitability. The study also found positive effect of commodity prices on bank profitability. The study asserts that the extent to which inflation affects bank profitability depends on whether future movements in inflation are fully anticipated, which, in turn, depends on the ability of firms to accurately forecast future movements in the relevant control variables. When an inflation rate is fully anticipated, it increases profits because banks can properly adjust interest rates in order to augment revenues, while an unexpected change could raise costs due to imperfect interest rate adjustment. Other studies conducted by Bourke (1989), Molyneux and

Thornton (1992), Demirgüç-Kunt and Huizinga (1999), have confirmed a positive relation between inflation and long-term interest rates with a bank's performance.

The study aims at finding out whether the macroeconomic variables mentioned above significantly influenced the performance of the selected rural bank. This will provide a comfortable platform for critics and economic analysts to advise the government on the need to control those macroeconomic variables.

Some authorities have expressed concern on fraudulent practices as a major determinant influencing the profitability and performance of rural banks especially in our part of the world.

2.15 Banking fraud and profitability

According to Olufidipe (1994), fraud refers to "Deceit or trickery deliberately practiced in other to gain some advantage dishonestly". Agu (1998) also defined bank fraud as a conscious or deliberate attempt to obtaining unlawful financial advantage at the detriment of an owner of funds or holder of accounts.

Banking fraud is an old phenomenon that manifest in different forms including money transfers fraud, fraudulent lending, cheque kitting, transaction fraud, letter of credit fraud, borrowing from the till, Anti-money laundering, credit and debit card fraud, first party fraud, internet fraud and others.

According to the study conducted by Aboagye and Otieku, (2010) on the financial performance of Rural and Community Banks (RCBs) in Ghana, 23 out of 145 RCBs had been closed down by Bank of Ghana based on poor performance. Bank of Ghana (2001), gave reasons for closure of such banks as included embezzlement and fraudulent practices, negligence and ineffective board of directors, management incompetence, ineffective accounting procedures, non-compliance with regulations in granting credits, persistent operational losses, poor loan recovery and corruption, low deposits mobilization, use of unqualified staff, non submission of prudential returns, high unearning assets and high non-performing credit portfolios.

According to Dr. Paul Acquah, former Governor of Bank of Ghana, the effects of fraud on financial institutions and their stakeholders not excluding the national economy can be devastating and the vulnerability of banks to such fraud has been raised due to technological advancements (Bank for International Settlement, 2010).

The study will like to ascertain whether fraudulent practices exist in the selected rural bank and how this affects its profitability level during the year in review.

2.16 Low deposits and Performance of Rural Banks

Asiedu-Mante (2011), asserted that very low deposits and high default rates have plunged some rural banks into serious liquidity problems making a section of the public lose confidence in them. According to him, in 1999 Bank of Ghana withdrew the banking licenses of 23 Rural Banks which were distressed. The underlying factor for the 23 distressed Rural Banks was high incidence of loan delinquency, fraud and mismanagement which led to cash squeeze to meet withdrawals by depositors.

CHAPTER THREE

METHODOLOGY

3.0Introduction

The research methodology involves the methods used in collecting data for the study, sample size determination and sampling technique. Data for the study was gathered from both primary and secondary sources. The primary source dealt with information gathered from twenty workers from each of the six branches of the bank. Two of the banks were not selected because they were newly formed agencies which fell outside the period under review. Primary source of data collection was achieved by the use of interview guide and questionnaire. The interview guide was used to interview a total of 230 customers from the six branches on the performance of the bank in terms of products and services offered to customers as well as projects done to support members of the community. The questionnaire was given to the 121 workers of the bank to complete on what determines their performance, measures employed to reduce the constraints in their performances and what the bank used its profit for. They also answered questions on other relevant issues obtained from literature review on the performance of the bank. The secondary data on profitability of the bank before tax, customer growth, qualification levels of staff, number of agencies established and total investments in assets made during the period under review was obtained from the banks' financial statements and data base at their headquarters. The sample frame for this study was the financial statements of Nwabiagya Rural Bank Limited for the period of 2004 - 2013. The sample size for this study was made up of 120 workers and 230 customers of the bank who provided responses on the performance of Nwabiagya Rural Bank Limited for the stated period.

The period was chosen for the study because it was during this period that the banking industry in Ghana faced a lot of competition from foreign banks. It was within this same period that Nwabiagya Rural Bank Limited Bank did so well and was given some awards.

The Information gathered from various respondents were first edited and tallied in frequency table. The values corresponding to determinants of performance were assigned codes. Microsoft Excel and SPSS were employed to facilitate comparison among the responses. The data collected were analyzed using frequency tables, percentages, bar and pie charts and trend analysis to determine how the various determinants affected the performance of the bank.

3.1 Sample and sampling technique

In conducting the study, the researcher adopted the questionnaire and interview techniques as the research instrument to solicit information from both customers and officials of the banks. Purposive sampling technique was employed in selecting employees who have worked in the bank for more than 2 years and fall within the selected period for the study to be able to complete the questionnaire. Again, Purposive sampling technique was used to select agencies or branches within the metropolis whose establishment fall within the chosen period and could provide responses for the questionnaire. In order to avoid biasness, random sampling technique also helped the researcher in selecting the number of customers from the six branches of the bank selected for the study.

3.2 Target population

The study was conducted at six different branches including the headquarters within Kumasi Metropolis in Ashanti region. The six agencies are Abuakwa, Anwiam, Bohyen, Magazine, Offinso, and Barekese where the headquarters is situated.

Ashanti region has a land area of 24,389 sq km and a total population of 4,780,380 representing 19.4% of the total population in the country. Kumasi Metropolis has a total population of 2,035,064 and an area of42.6 Sq. Km.

In all, the bank deals with more than one hundred and twenty-five thousand (125,000) customers. The bank has two hundred and one (201) employees including eight (8) branch managers.

Since the selected branches were located in Kumasi Metropolis where business activity is the major occupation, majority of their customers were engaged in all kinds of business activities ranging from petty trading to small and medium scale enterprise activities. Few of them, especially, in the branches located at the outskirt of the metropolis engaged in farming activities who cultivated all kinds of crops and foodstuffs. Few others were also employed in government and private institutions.

3.3 Sources of Data

In order to investigate the performance of rural banks using Nwabiagya Rural bank limited as a case study, information from the bank's annual financial statements for 10 years covering the period of 2004 to 2013 were used. The period of assessment has also been limited to 2004-2013 to ensure that the result reflects the current trend in the operations of the rural bank. The performance data Obtained from primary and secondary sources using a structured questionnaire and interview were analyzed using pie and bar charts as were as computer Minitab and SPSS software programs where appropriate. From their financial reports, information concerning profit before tax, total investments in assets, number of agencies established and growth of customer base were extracted for the analysis. Nwabiagya Rural bank Limited was selected because its financial statements were readily available for the period under review.

3.4 Tools for data collection

The following instruments were employed to collect first hand information:

- Interview
- Questionnaire

The questionnaires and interviews granted were structured in order to collect the appropriate information to achieve the aim and objective of the study.

Samples of the questionnaire and the structured interviews and secondary data on the bank's financial data on profit before tax, number of customers, total investments in assets and number of agencies opened are provided in appendix "i" ,"ii" and iii respectively.

3.5 Analytical tools for analysis

Various kinds of statistical tools including Trend analysis using Minitab and SPSS software programs, pie chart and bar chart were employed in determining the performance of the bank. The trend analysis was used in analyzing the performance of the bank using Minitab software and SPSS programs whilst pie and bar charts were used to analyze the effects of the various determinants on the performances of the rural bank within the period under consideration.

The study utilized both qualitative and quantitative techniques for its analysis. The qualitative technique was used to analyze nonfinancial performance such as identifying the constraints to the performance of rural banks, examining the measures used in reducing such constraints, and management practices employed to ensure high performance of rural banks.

The quantitative technique was used in assessing the financial performance of rural banks such as profitability, investment made in assets, customer growth and others. Factors influencing profitability which could also influence performance of the bank included cost of operation, favorable macroeconomic conditions, liquidity, concentration of banks at a place, credit risk management, and fraudulent practices at the various branches or agencies of the bank.

3.5.1The dependent variable for regression analysis

The dependent variable using SPSS and Minitab software programs to analyze performance of Nwabiagya rural bank was number of years.

3.5.2 Independent variables

The independent variables for measuring the performance of Nwabiagya rural banks were: Profit before tax, total investment in assets, number of customers and number of agencies formed within the period under study.

3.6 Organizational Profile

Nwabiagya Rural Bank Limited is a community owned financial institution established in August 1987 and incorporated under the Ghana Companies Code 1963 (Act 179) under the Banking Law (PNDC Law 225) and the Banking Act 673 (2004). The bank's headquarters is at Barekese in Atwima Nwabiagya district in Ashanti region of Ghana. The vision of the bank is to become the best managed and leading Rural Bank in the provision of competitive and affordable financial services in the country. The mission statement of the bank is to provide efficient and effective financial services by adopting appropriate technology, increase market share, enhance optimal realization of stakeholders’ interest, human resource development and product innovations.

CHAPTER FOUR

DATA ANALYSIS AND DISCUSSION OF RESULTS

4.0 Introduction

This chapter presents the data, analysis of data and discussions of results. In this chapter, the data obtained from the field study have been analyzed and both theoretical and practical implications of the results of the study have been connected where necessary. The chapter has six sections. Section 1 examines the socio-demographic characteristics of respondents; Section 2 examines the determinants of performance of Nwabiagya Rural Bank limited; section 3 analysis the major constraints to the performance of Nwabiagya Rural Bank Limited, section 4 explores the measures adopted by management to reduce the various challenges of the bank and section 5 analysis the effects of the various challenges on the performance of Nwabiagya Rural Bank and finally, section 6 analysis the use of Nwabiagya Rural Bank's profit and the trend of performance during the stated period.

4.1 Background Analysis of Data

A total of 121 workers of Nwabiagya Rural Bank participated in the study with an equal number of questionnaires sent out and completed by them. After the field survey, all the 121 questionnaires were returned. Out of this number, 120 were well answered representing a response rate of 99.2% of the 121 sample size. This was in good shape for discreet analysis. This showed a favourable response rate in relation to what was established by ILO (2004) that, the minimum acceptable response rate is 75%. This is the reason that made the research used the 99.2% response rate. The remaining 1 was unusable because the respondent did not complete it. Also, 230 customers of the bank representing 100% of the sample size all participated in the interview conducted at 6 of the banking halls.

4.1.0 Demographic Characteristics of Respondents

The behaviour and perception of people are to large extent influenced by their socio-demographic background. This statement reinforces the extensive argument of sociological models identified by Minoo (2011) that, where people originate from influence their socio-demographic features. Therefore, the researcher decided to give credibility to the socio-demographic features of the respondents. These include gender, age, educational background, work experience and occupation distribution of respondents. These features were considered in order to give the researcher an insight into different people's (being male or females, married or single, age, education level among others) view on performance of the bank.

4.1.1 Gender distribution of respondents

The study explored the gender distribution of respondents and the succeeding categories were identified. Among the bank officials, 70 (58.3%) were identified as males while 50 (41.7%) were females. The implication is that the work force of Nwabiagya Rural Bank Limited is male dominated. That notwithstanding, there appeared to be gender equality since the difference in the proportion is not significantly wide. Among the customer respondents, the study gathered that 118 (51.3%) were males as against 112 (48.7%) females. This means that customers of Nwabiagya Rural Bank Ltd were slightly dominated by males. Surprisingly, this finding deviates from the popular perception that majority of rural banks' customers were females because of the fact that they mostly engage in petty trading and therefore cannot save much money at the commercial banks. This is shown in the table 4.1.1 below:

Table 4.1.1: Gender of respondents

Management/Officers	**Frequency**	**Percentage (%)**
Male	70	58.3
Female	50	41.7
Total	**120**	**100**
Customers	**Frequency**	**Percent**
Female	112	48.7
Male	118	51.3
Total	**230**	**100.0**

Source: Field Survey, 2015

Table 4.2.2: Age distribution of respondents

Management/Officers age (years)	**Frequency**	**Percentage (%)**
20-45	90	75
46-59	30	25
Total	**120**	**100**
Customers age (years)	**Frequency**	**Percentage (%)**
20-45	184	80
46-59	46	20
Total	**230**	**100.0**

Source: Field data, July 2015

From the study conducted, 90 (75%) of the management and other officers of the bank were between the ages of (26-45) years. The remaining 30 (25%) of management and other officers were between the ages of (46-59) years. Similarly, 184 (80%) of customers of the bank were between the ages of (20-45). The remaining 46 (20%) of customers were between the ages of (46-59) years. The age distribution helped the researcher to differentiate between the different categories of respondents. The result showed that most of the Management/Officers and customers were young according to United Nation's definition of life status and so were mature enough to express their opinions on questionnaires and interviews appropriately.

Table 4.3.3 Marital status of respondents

Management/Officers marital status	**Frequency**	**Percentage (%)**
married	84	70
single	36	30
Total	**120**	**100**
Customers marital status	**Frequency**	**Percent (%)**
married	130	56.5
single	100	43.5
Total	**230**	**100.0**

Source: Field data, July 2015

From the table 4.3.3 above, 84 (70%) of the management and other officers were married whilst 36 (30%) were single. Similarly, 130 (56.5%) of the customers were married whilst, 100 (43.5%) were single. The results implied that most of the management and customers were adults who could reason in a more mature way and give appropriate answers to the questionnaires and interview questions respectively.

Table 4.4.4 Educational levels of respondents

Educational levels of Management/Officials	**Frequency**	**Percentage (%)**
Second Degree	15	12.5
First Degree/HND	54	45
Secondary/Senior High	51	42.5
Total	**120**	**100**
Educational levels of customers	**Frequency**	**Percentage (%)**
Second Degree	2	0.9
First Degree/HND	5	2.2
Secondary/Senior High	20	8.7
Junior High /Middle School	75	32.6
Primary/No formal education	128	55.6
Total	**230**	**100**

Source: Field data, July 2015

From table 4.4.4 above, it is seen that, 54 (45%) and 15 (12.5%) of managers and officers had obtained their first and second degrees respectively. The remaining 51(42.5%) have had their secondary education. It could be inferred that, all the managers and officers were literates with a greater percentage of them having completed tertiary or secondary education. Since all the managers and other officers were literates, they were able to comprehend the questionnaires and complete them appropriately. This enabled the researcher to come out with a reliable study. Contrary to the management and officers of the bank, majority of the customers 128 (55.6%) had no basic or formal education. Another 75 (32.6%) of customers had only basic education whilst 20 (8.7%) had secondary education. Only 5 (2.2%) and 2 (0.9%) had had their first and second degree educations respectively. It could be inferred from the table that majority of the customers were illiterates and so the interview questions had to be translated into Ashanti Twi for them to comprehend and answer the questions accordingly. This wasted a lot of time and energy.

Table 4.5.5 Occupation Distribution of customers

Occupation of Customers	Frequency	Percentage (%)
Transport	5	2.2
Farming	60	26.1
Cottage Industries	40	17.4
Trading	105	45.6
Public service	20	8.7
Total	**230**	**100.0**
Position of working staff	**Frequency**	**Percentage (%)**
Managers	12	10.0
Officers	100	83.3
Others	8	6.7
Total	**120**	**100.0**

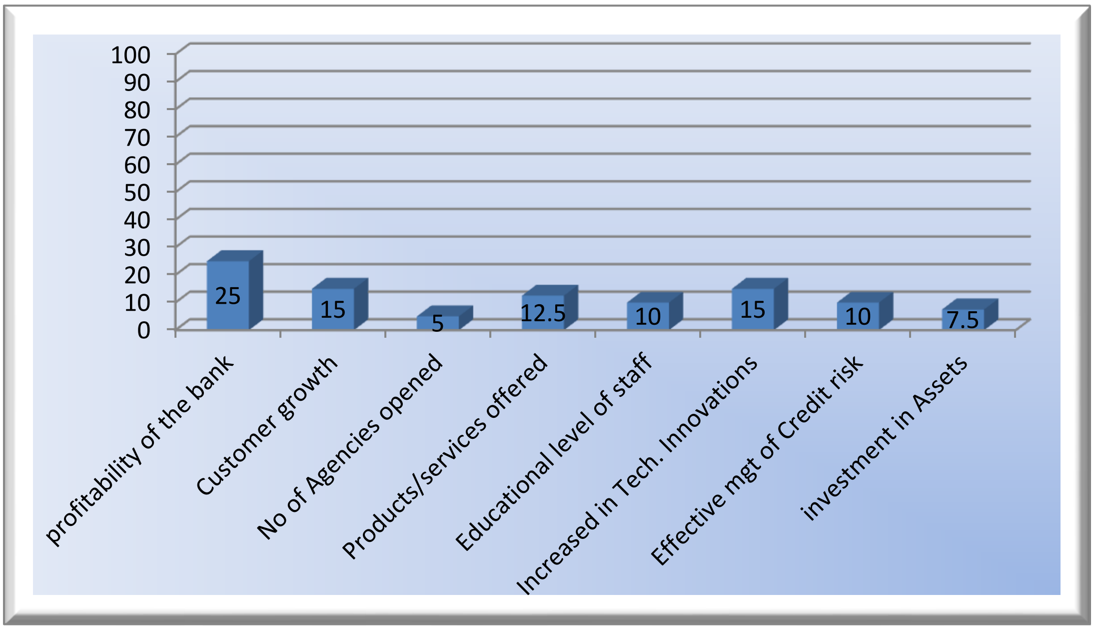
Source: Field Survey, 2015

From table 4.5.5 above, 105 (45.6%) of the customers were traders who indulged in all kinds of trades ranging from petty trading to small and medium scale enterprise activities. Also, 60 (26.1%) were farmers with majority of them being subsistence farmers who cultivated all kinds of foodstuffs. This confirms the general perception that most of the customers in rural banks are small and medium scale enterprise operators and farmers. The other 40 (17.4%) of the customers were in the cottage industry. Finally, 20 (8.7%) and 5 (2.2%) of the customers were public servants and transport business respectively. The occupation of the customers informed the researcher the kind of people who answered the questions and enabled the researcher make a proactive analysis of the data.

4.6. Determinants of performance of Nwabiagya Rural Bank Limited

From the data obtained in figure 4.6.1 below**,** in the opinions of 30 (25%) of respondents, the major determinant of the bank's performance is profitability of the bank. In determining the performance of the bank, 18 (15%) of the respondents identified customer growth as very important determinant. Again, 18 (15%) of the respondents rather identified increase in technological innovations as important determinant of the bank's performance. Again, 15 (12.5%) of the respondents were also of the opinion that number of products and services offered determine the performance of the bank. In the opinion of 12 (10%) of the respondents, education level of staff and effective management of credit risk each have the same determinant on the performance of the bank. Finally, 9 (7%) of the respondents rather identified investment in assets as a determinant of the bank's performance. These are represented in the bar chart below:

Figure 4.6.1 Determinants of Performance of NRB (%)



Source: Field data, 2015

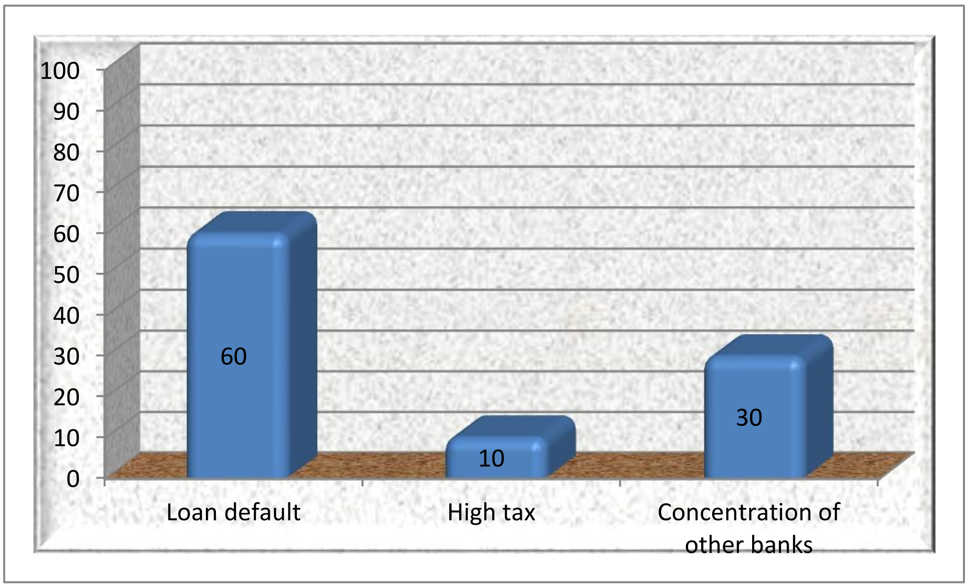
From the figure above, it could be observed that, the findings of this study are similar to the ones identified by the previous studies by Ibrahim (2010) and Okazaki and Sawada

(2006) which attributed the major determinants of performance of rural banks to only profitability, number of agencies established, number of product lines offered to customers, and policy of the bank. Additional variables found in this study which indicate performance include education of staff, Increase in technological Innovations, as well as total investments in assets. In the opinion of the respondents, increased in technological innovations contributed to increase in performance by enhancing the activities of the bank. For instance, the use of eZwich machines, money counting machines, eFASS, CCH and others contributed to their performance by reducing the time that customers spent in transacting business with the bank as well reducing the time spent for financial analysis and other operational activities carried out at the bank. Also, the respondents added the amount of investments made in assets because investments in assets show how effective a bank is performing. The major determinant was the profitability of the bank because NRB was a profit oriented financial institution and so the general expectation of its shareholders was to make profit in order induce them to continue to sustain their interest as shareholders.

4.7.2 Major constraints to the performance of Nwabiagya Rural Bank Limited

From the data obtained in figure 4.3.2 below, there were three major constrains to the performance of NRB. In the opinion of 72 (60%) of the respondents, prominent among them was high loan default rate. Another group of respondents totaling 36 (30%) held the view that, concentration of other banks in their catchment areas of operation has affected the performance of the bank. The remaining 12 (10%) were of the opinion that the performance of the bank is held back by high tax rate charged by Bank of Ghana. These are represented in figure 4.7.2 below:

Figure 4.7.2Major constraints to performance of NRB

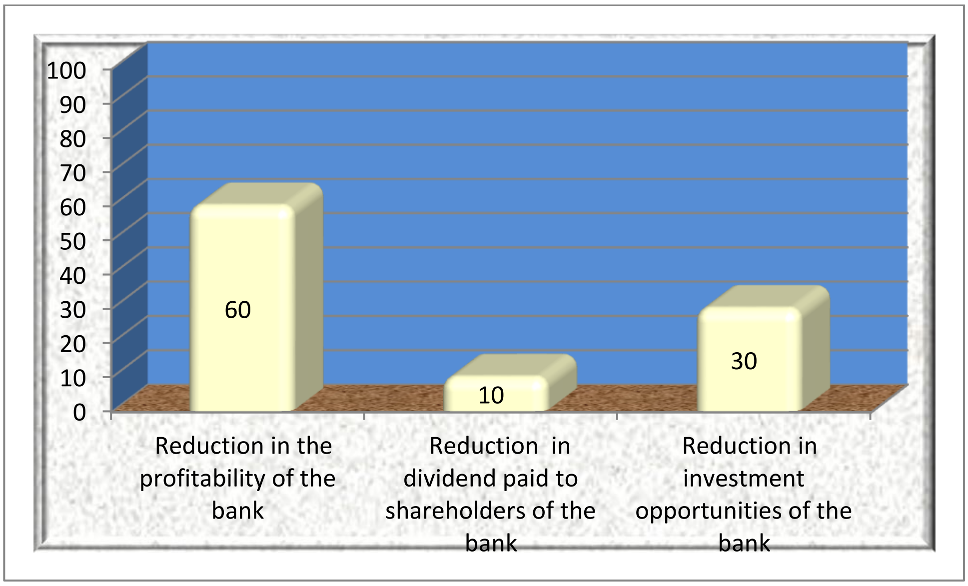


Source: Field data of NRB, 2015

From the bar chart above, loan default rate was identified as a major challenge to the performance of the bank which occurred due to ineffective monitoring of loans, poor economic conditions prevailed in the country, difficult and inflexible conditions attached to payment of loans and diversion of loans to some unprofitable activities by some customers. This finding vindicates Cooper et al, (2003) who asserted that increased exposure to credit risk leads to decrease in a high volume of a firm's profitability which eventually affects its performance.

Concentration of other banks was a major challenge because the finding is in close relation to Naceur (2003), who posited an inverse relationship between concentration of banks and their performance. Tax rate charged by Bank of Ghana was the least challenge faced by Nwabiagya rural banks so far as their performance was concerned. This is due to the fact that when higher taxes are charged, it would serve as a disincentive to work and may dwindle the vision of the previous and current governments' administrations who have charged the rural banks with the responsibility of translating the government policies of the "Golden Age of Business" to create wealth and reduce poverty among the people in the rural communities.

Figure 4.8.3 Effects of Loan Default on the Performance of NRB

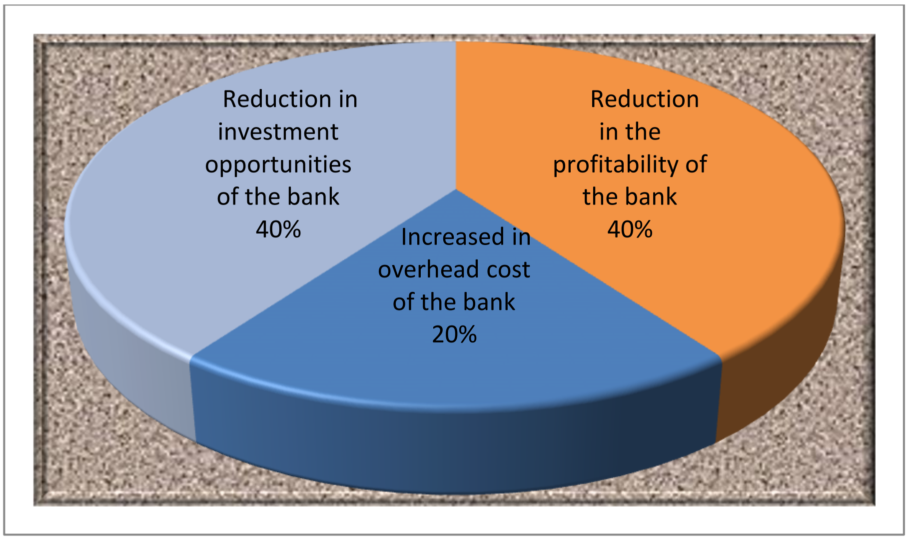


Source: Field data of NRB, 2015

From the bar chart above, it could be seen that, the major effect of loan default on the performance of the bank according to 72 (60%) of the respondents was reduction in profitability of the bank. Another effect of loan default on performance, in the opinion of 36 (30%) of the respondents was reduction in investment opportunities of the bank. Reduction in dividend paid to shareholders of the bank because of credit risk reduced the performance of the bank as claimed by 12 (10%) of the respondents.

Credit risk management in rural banks serves as a revolving wheel around which the survival, growth, profitability and performance of the bank spin around. Theoretical and empirical evidence suggest that efficient credit risk management affects a bank`s performance. For instance, credit risk can trim down the value of a bank's financial position and destabilizes the credit system. From the figure above, the major effects of credit risk on performance of the bank arranged in descending order were: a reduction in the profitability, investment opportunities, and dividend paid to shareholders of the bank. These findings are different from those of Padmanabhan (1988) and Agu (1998) who claimed that, the major effects of credit risk included weakening the staff moral and affecting the borrower's confidence. The study only agrees with their finding that managing overdue loans reduced banks profitability which eventually reduces their performance. The differences in the effects of credit risk between this study and the previous one conducted by Padmanabhan and Agu is due to the differences in economic conditions that prevailed in the countries where the studies were conducted.

Figure 4.9.4Effects of High Tax on the Performance of NRB

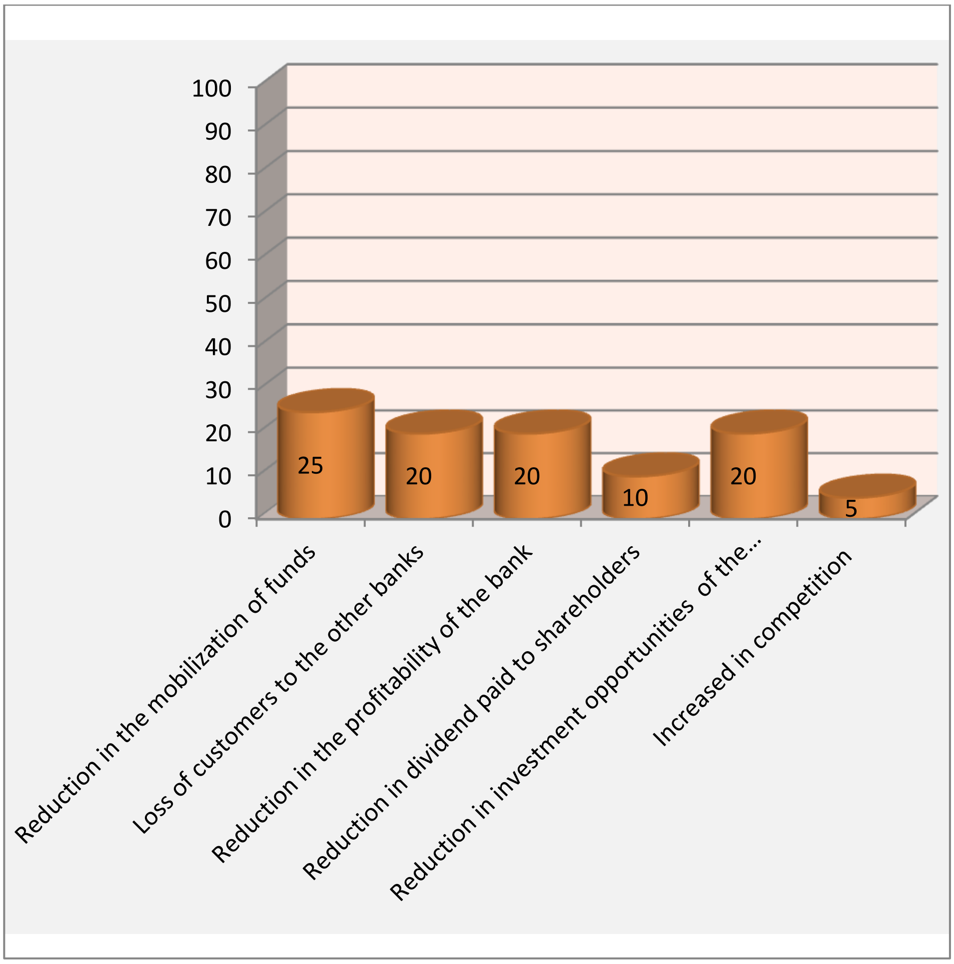


Source: Field data of NRB, 2015

From figure 4.9.4 above, in the opinions 48 (40%) each of two groups of respondents, the two important effects of tax on the performance of NRB were reductions in profitability and investment opportunities of the bank. The other effect according to 24 (20%) of the respondents was increased in overhead cost of the bank. This finding is similar to the study conducted by Hassan and Bashir (2003) who asserted that implicit and explicit taxes affect overhead cost and invariably influence a bank's performance negatively.

According to the respondents, taxes paid by rural bank are levied by Ghana Revenue Authority (GRA) and so the management of the rural bank has no direct control over how much to pay. All that management could do is to plead with GRA through Bank of Ghana to reduce their taxes in order to encourage perspective investors to invest in rural and community banks.

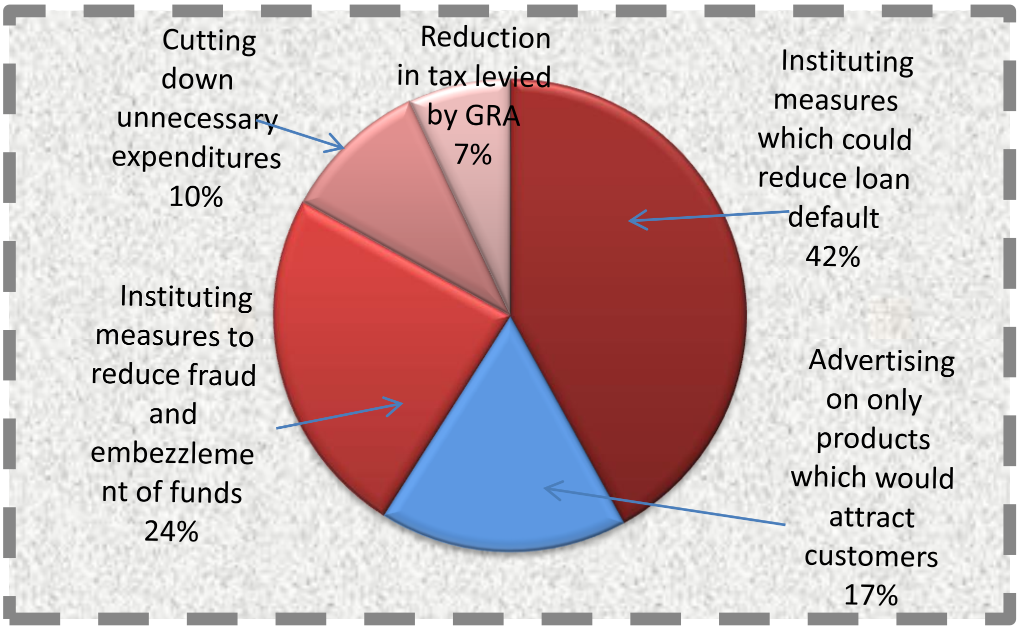
Figure 4.10.5 Effects of Concentration of other Banks on the Performance of NRB



Source: Field data of NRB, 2015

From the figure above, in the opinion30 (25%) of the respondents, reduction in mobilization of funds constituted the major effect of concentration of other banks on the performance of NRB. The next major effects were loss of customers, reductions in profit and investment opportunities which in the opinion of 24 (20%) of the respondents had the same effect on a bank when other banks are concentrated around it. The remaining effects were reduction in dividends to shareholders and increased in competition according to the views of 12 (10%) and 6 (5%) of the respondents respectively. The utmost effect of concentration of banks at a place was reduction in mobilization of funds because the general perception is that when banks are concentrated at a place, there is competition for customers which eventually leads to a reduction in mobilization of funds. The least but important effect was increased in competition which resulted from increased in rural and other community banks around the location of NRB. This finding is in close relation to Naceur (2003), who claimed an existence of a significant negative relationship between concentration of banks and their performance. The finding of this study is similar to the previous one conducted by Naceur op cit because the two countries (Tunisia and Ghana) where the studies were conducted have similar socio-economic conditions. The reason for the inverse relationship between the concentration of a bank and its performance was that, if banks are concentrated at a place, there is the possibility of competition arising among themselves in their attempts to get more customers and savings/deposits. This competition for survival reduced the profitability of the bank which negatively affected their performance.

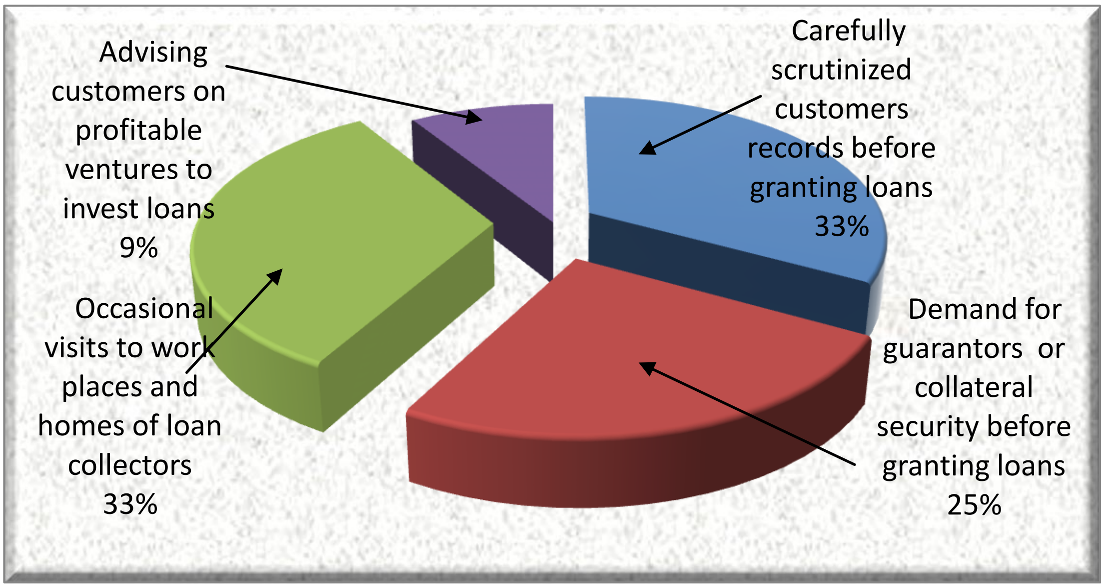
Figure 4.11.6: Minimizing cost of operation and its impact on performance of NRB



Source: Field data of NRB, 2015

From the pie chart above, 50 (42%) of the respondents were of the view cost of operation of the bank could be reduced if measures were instituted by management of the bank to reduce loan default by customers. Similarly, 29 (24%) of the respondents held the opinion that cost of operation could be reduced if measures were employed by management of the bank to reduce fraudulent practices. The respondents indicated measures such as regular auditing of accounts and installation of CCT cameras at vantage points at the bank's premises to record all activities that went on in and around banking hall as a means of reducing fraudulent practices. In the view of 20 (17%) of the respondents, advertising on only attractive products could reduce cost of operation. Cutting down unnecessary expenditures by spending within the budgeted funds and reducing tax levied by GRA according to 12 (10%) and 8 (7%) of the respondents respectively could reduce cost of operation and increase its performance. The study has revealed that loan default constituted the major cost of operation to the bank and as such management of the bank should institute measures to reduce it.

Figure 4.12.7: Measures employed by management of NRB Ltd to manage credit risk

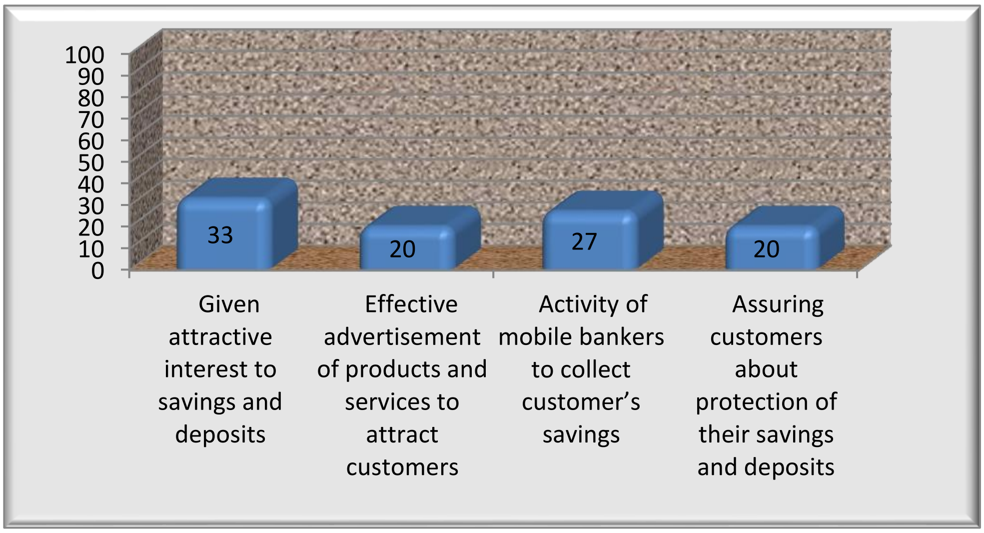


Source: Field data of NRB, 2015

From the pie chart above, in the opinion of two groups each consisting of 40 (33%)of respondents, the two important measures employed by the management of Nwabiagya Rural Bank limited to manage credit risk were careful scrutinization of customers' records before granting loans to them and occasional visits to workplaces and homes of loan collectors. The next important measure employed to manage credit risk in the opinion of 30 (25%) of the respondents was the demand for collateral security before approval of loan to customers. Another measure to reduce loan default in the view of 11(9%) of the respondents was to advise customers on profitable ventures to invest loans taken from the bank.

From the figure above, it could be seen that, the most effective measures employed by management of NRB limited to reduce credit risk involved scrutinization of customers loan records before granting loans and occasional visits to the homes and workplaces of customers after given loans to them. Demanding for guarantors or collateral security depending on the amount of loan demanded was an important measure used to secure the loan. The least measure that prevented loan default was advice given to customers on profitable ventures to invest the loan. This measure in the opinion of the respondents was the least because the pieces of advice could be taken or ignored as customers were not obliged to take them. These findings are similar to those found by Robbins and Stobaugh (2000) whose position in the management of credit risk was that, experienced lenders must use a mixture of technical knowledge and common sense rather than adopting somebody's rules to guide them when lending loans because each lending case has to be treated on its merits depending on the economic system of the area. It is therefore not surprising that different measures in dealing with credit risk have been identified by NRB limited instead of been enslaved to principles of managing risk that other previous studies came out with.

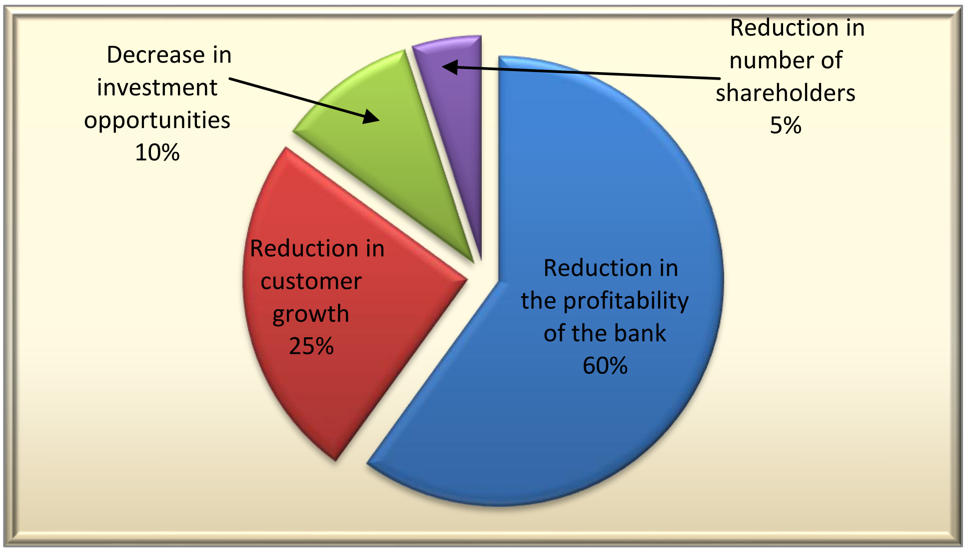
Figure 4.13.8 Measures instituted by management of NRB to mobilize deposits and savings from customers



Source: Field data of NRB, 2015

From the bar chart above, 40 (33%) of the respondents are of the opinion that given attractive interest rates to customers who save with the bank is the most effective measure that could be used to mobilize deposits and savings from customers. This finding is rather different from that of Okazaki and Sawada (2006) who spelt out the role of bank's interest as being able to play a significant downward pressure on capital and liquidity and wipes off profits which invariably affect the performance of a bank negatively. The study inclines to this new finding because the ability to use attractive interest rate to get more customers increased the deposits and savings which increased profitability and performance. From the figure above, it could also be observed that, 32 (27%) of the respondents were of the view that, the employment of mobile bankers led to increase in mobilization of more savings and deposits for the bank. This measure was very effective and yielded positive result on the performance of the bank because many customers were willing to save with the bank but proximity disadvantage and time constraint prevented them from doing so. This measure led to an increase in the savings and deposits base of the bank which were channeled into loans and investments in other profitable ventures and eventually increased the performance of the bank. Again, 24 (20%) of respondents were of the view that, advertising effectively on the products and services of the bank and giving assurance to customers about the protection of their savings/deposits are equally effective in the mobilization of deposits and savings from the bank's customers. Using persuasive advertisement encouraged those who did not want to save their idle funds to have a change of mind set and did so with the bank.

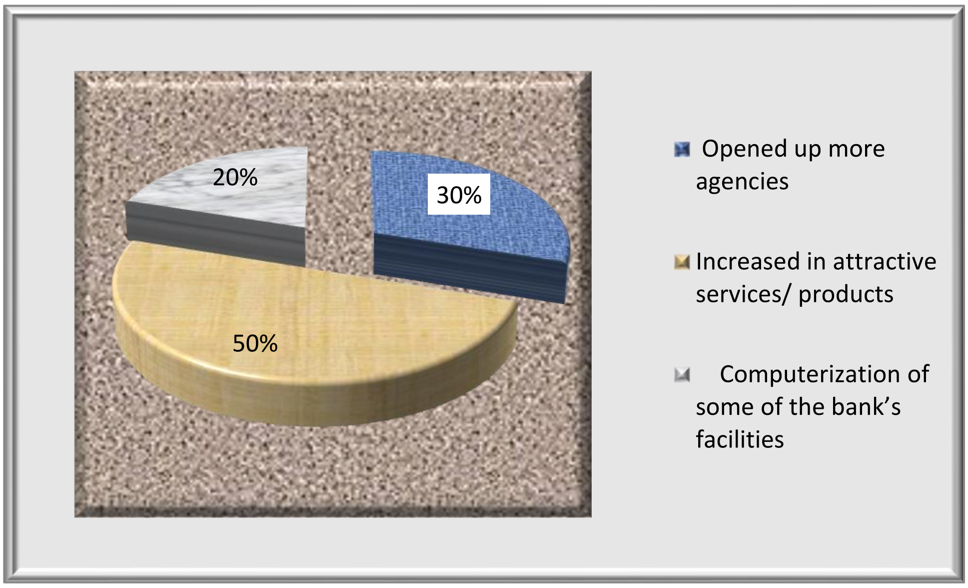
Figure 4.14.9: Banking fraud and its effects on performance of Nwabiagya Rural Bank limited



Source: Field data of NRB, 2015

From the pie chart above, it could be seen that, 50 (60%) of the total respondents were of the opinion that fraudulent practices in NRB led to a significant reduction of the bank's profitability during the period under review. Again, 30 (25%) of the respondents were also of the opinion that fraudulent practices such as money transfers fraud, fraudulent lending, cheque kitting, transaction fraud, letter of credit fraud, borrowing from the till, Anti-money laundering, credit and debit card fraud, first party fraud, internet fraud just to name but a few could result in a decrease in customer growth. Similarly, 12 (10%) and 6 (5%) of the respondents believed that fraudulent deals could respectively lead to decreased in investment opportunities and number of shareholders. These findings clearly were analogous to the claim made by Sadia (2010) that, bank fraud has negative impact on the performance of banks. Although the bank experience several fraudulent acts among some of the workers during the period under review, the general impact was minimal and that accounted for the reason why the bank was not closed down as it occurred to other banks indicated by Aboagye and Otieku, (2010).

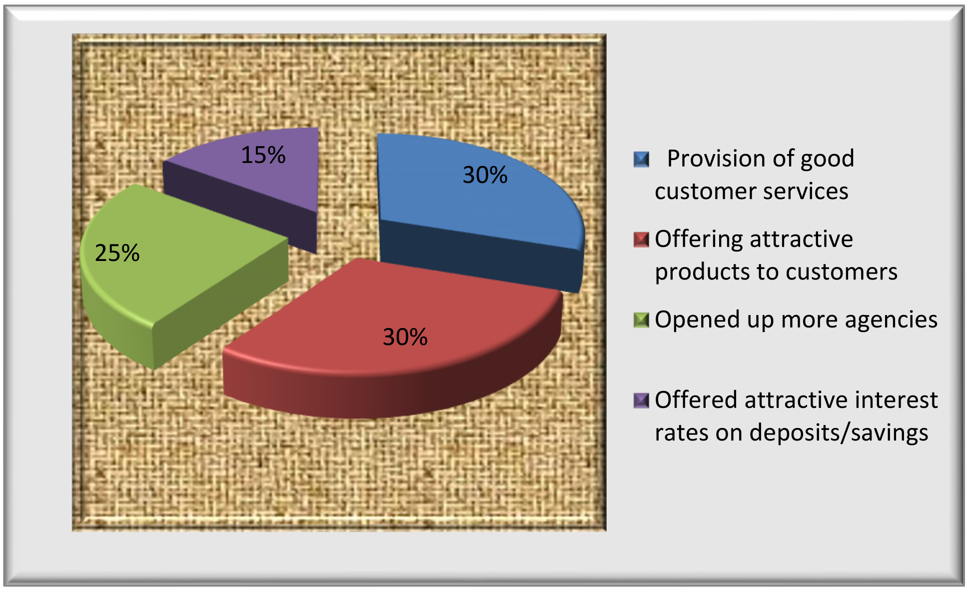
Figure 4.15.10: Measures instituted by management of NRB to ensure high profitable portfolio investment



Source: Field data of NRB, 2015

From the pie chart above, 60 (50%) of the respondents were of the opinion that the major investment of NRB was geared towards increased in attractive products and services for its customers. Another 36 (30%) of the respondents were of the view that, opening up more agencies was important measure adopted by management to enhance the investment portfolios of the bank. Other respondents, 24 (20%) rather thought that computerization of some of the bank's facilities to meet the current demand of technological innovations introduced into the banking system was an important measure instituted by management to enhance investment. This is the reason why the bank used facilities like e-Zwich and money counting machines, eFASS, CCC and ACH software programs in their banking activities. Investments in these portfolios yielded positive results for the bank which made it receive gold and silver awards for being the best rural bank in (Loan disbursement) and (Deposit Mobilization) respectively, organized by Ashanti Financial Services Excellence Awards, under the auspices of Manhyia Palace, held on 29th July, 2011. Customers rather expressed concern about frequent net work challenges they encounter at the bank and demanded for ATM to enable them withdraw money at their own convenient times and during the weekends.

Figure 4.16.11: Measures instituted by NRB management to increase number of customers

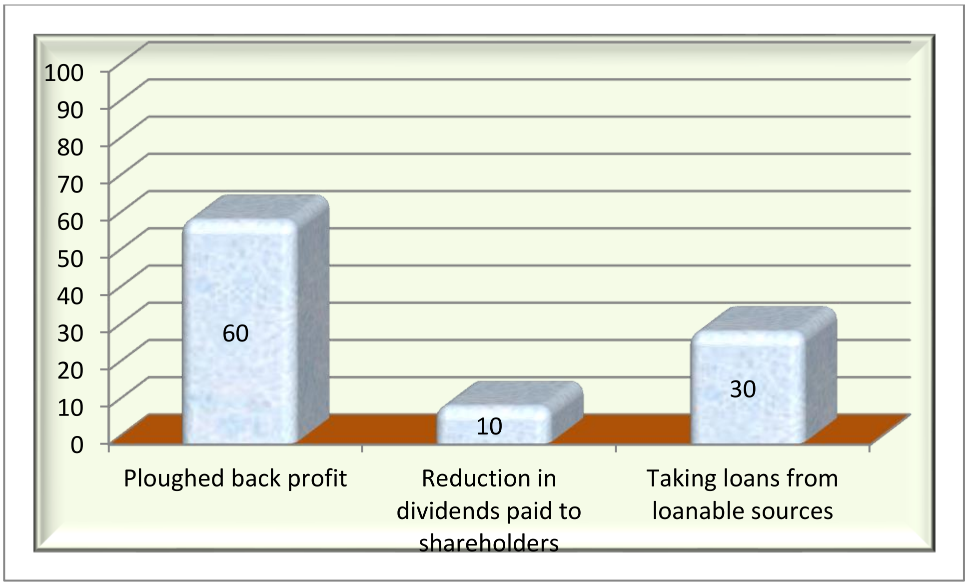


Source: Field data of NRB, 2015

The two most important measures that enabled management of NRB to increase the number of customers were provision of good customer services and offering attractive products to customers, each constituting 36 (30%) in the opinion of respondents. Majority of the respondents held this view because of the general perception that every customer wants to be treated as a king or queen. When customers are well treated in terms of respecting their views, providing them with much comfort, providing their needs in time and so on attracted them to the bank. Similarly, the ability of the bank to provide customers with attractive products such as group lending, loan for small and medium scale enterprises, individual and cooperative Susu all succeeded in drawing more customers to the bank. These products and services were confirmed by the customers of the bank.

The other two measures representing 30 (25%) and 18 (15%) of the respondents respectively involved opening up more agencies and offering attractive interest rates on savings and deposits. Generally, lower interest rates paid on savings deposited in customers' account discouraged customers from saving with banks but rather encourage them to invest in other viable ventures. In contrast, lower interest rate paid on savings enabled the bank to get more revenue. As confirmed by customers, the interest rate on savings was below the average expectation of the customers. This is the major reason why few of the respondents considered it as the least effective in drawing customers to the bank. This finding is similar to the one found by Mamatzaki et al., (2003) who asserted that banks can properly adjust interest rates downwards in order to increase revenues.

Figure 4.17.12: Measures instituted by management of NRB to establish more agencies

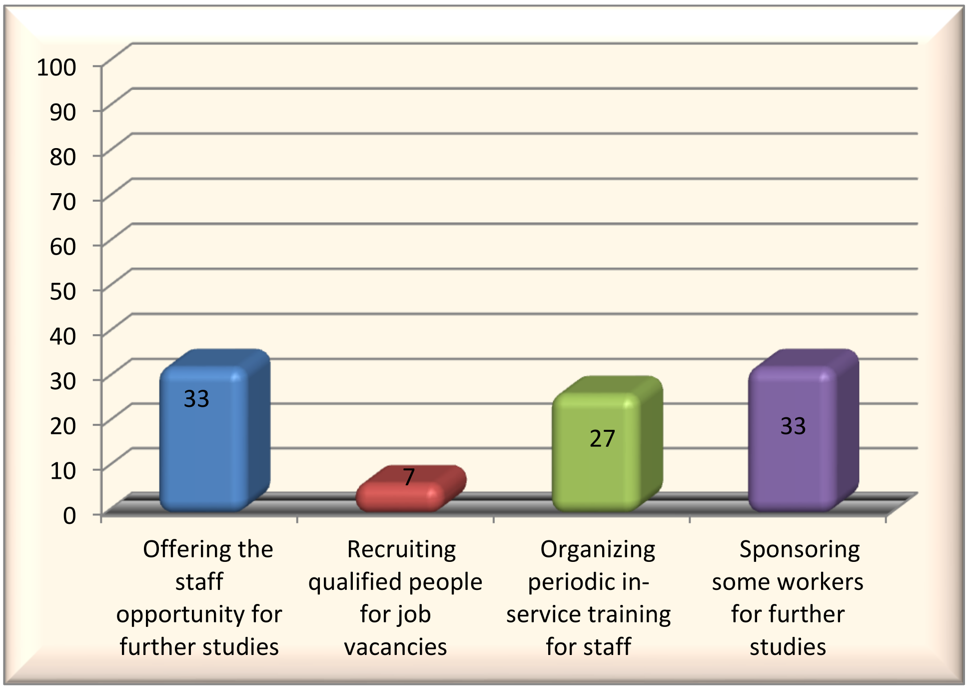


Source: Field data of NRB, 2015

From the figure above, 72 (60%) of the respondents were of the view that ploughing back profit obtained by the bank was the most effective measure to establish more agencies. Majority of the respondents held this view because of the fact that investing the profit in other agencies was more profitable than investing in other assets. This was because there was no interest charge on the bank's own fund when ploughed back in investment. Other respondents, 36 (30%) were rather of the opinion that taking loans from loanable sources such as bank of Ghana, Commercial banks and other loanable institutions was used to establish more agencies. Taking loans from other sources attracted higher interest which invariably affected their profitability and performance as well.

Comparatively, few of the respondents 12 (10%) preferred financing other agencies using a reduction in dividends paid to shareholders. Few of the respondents held this view because some of the shareholders disagreed when management decided to reduce their dividends in an attempt to establish new agencies.

Figure 4.18.13: Measures used by management of NRB to increase the education level of its staff

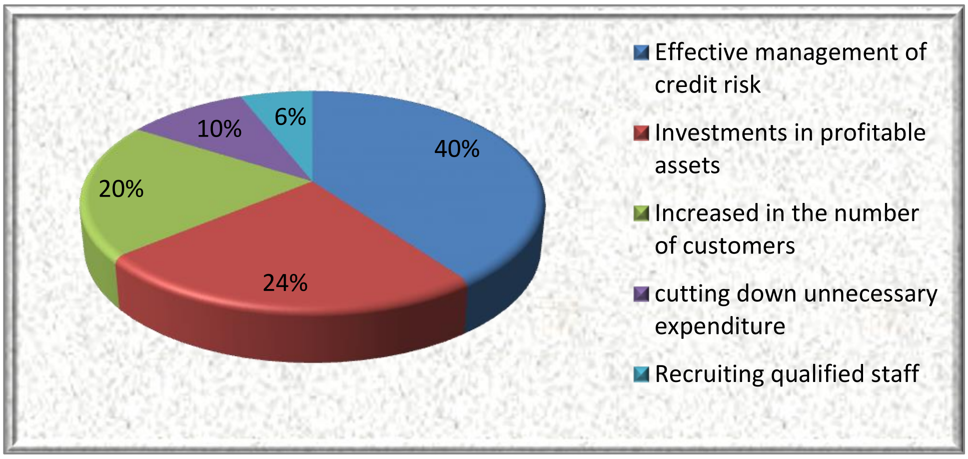


Source: Field data of NRB, 2015

From the figure above two groups of respondents, 40 (33%) each were of the opinion that, the two most important measures adopted by management of Nwabiagya Rural Bank limited to increase the education levels of their staff were to offer them opportunities to further their educations and sponsored some workers for further studies. In the view of the respondents there is a perception that when people upgrade their education and skills, their performance increase (when other factors are held constant). The management of the bank knew that when members of staff were offered the opportunity to further their education, they acquired new skills and knowledge which were used to improve the performance of the bank.

The other two measures involved organizing periodic in-service training for their staff and recruiting qualified literates for job vacancies, each representing 32 (27%) and 8 (7%) of respondents views respectively. These findings are related in to those found by Zaman (2004) and Yaron et al. (1998) who in studying the factors influencing financial performance of RCBs outlined efficient staff recruitment as one of them.

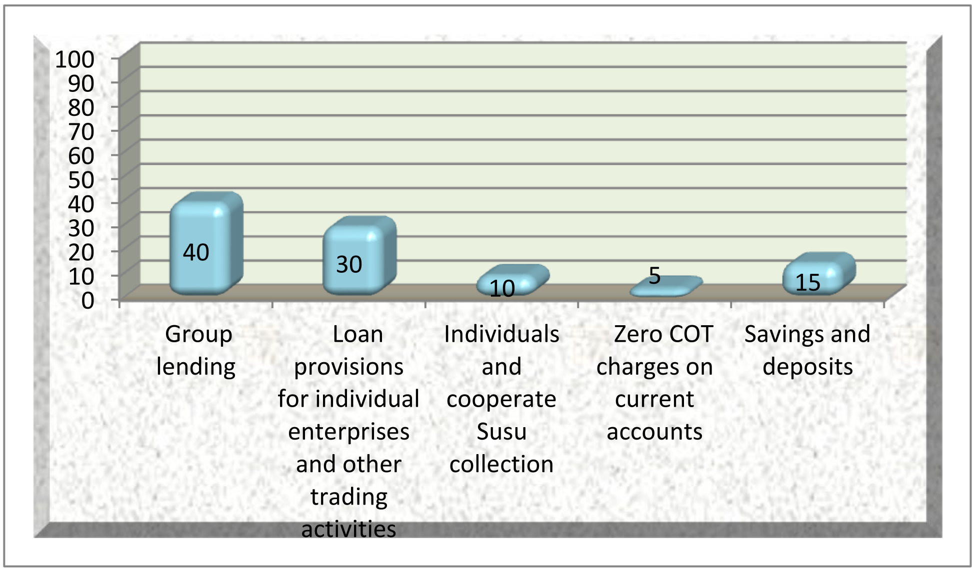
Figure 4.19.14: Measures put up by management to increase Profitability of the Bank



Source: Field data of NRB, 2015

From the pie chart above, 48 (40%) of the respondents held the opinion that good (profitable) investment made contributed immensely to the profitability of the bank. This was because investments in good assets yielded good returns which increased the profitability of the bank. The other 29 (24%) of the respondents in their opinion held that effective management of credit risk also increased the performance of the bank. When credit risk was effectively managed, more funds were available to the bank as dividends for shareholders or reinvested in other profitable ventures. Whenever credit risk is high, profitability goes down as confirms by Kithinji (2010) who identified an indirect relationship between non-performing loans and the bank's profitability especially in Africa countries. Another group of respondents representing 24 (20%) in their opinions rather attributed the performance of the bank to increase in the number of customers. The other respondents 12 (16%) and 7 (8%) respectively were of the opinion that cutting down unnecessary expenditure and recruiting qualified workers rather accounted for profitability of the bank. This finding is analogous to the one made by Zaman (2004) and Yaron et al. (1998) who in studying the factors influencing financial performance of RCBs identified efficient staff recruitment as very essential.

Figure 4.20.15: Products offered to customers which boosted up the bank's performance

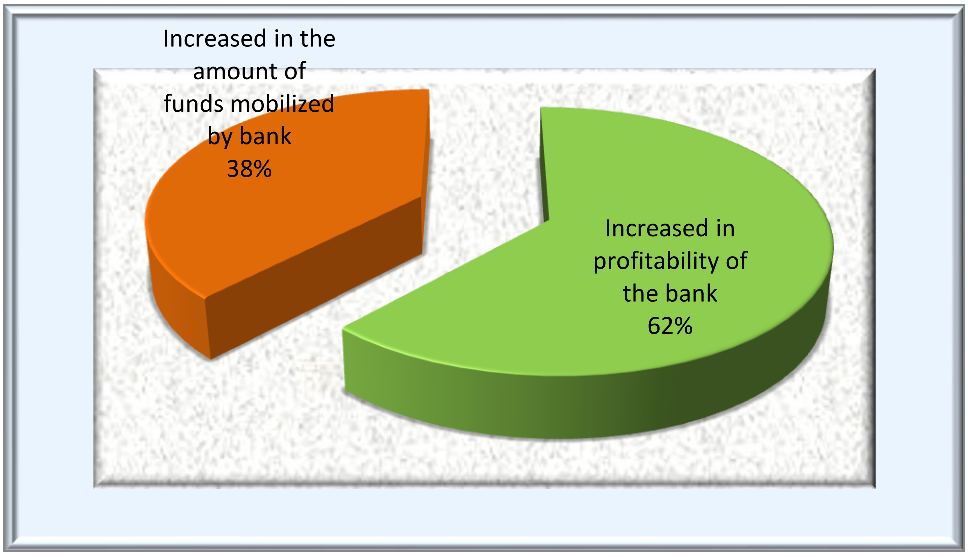


Source: Field data of NRB, 2015

From the bar chart above, 48 (40%) of the respondents were of the opinion that group lending was the major product which enhanced the performance of the bank within the period under review. The reason for this response was that when a group of people were given loans, the possibility of defaulting was minimal. The second product identified by 36 (30%) of the respondents which increased the performance of the bank was loan provisions for individual enterprises and other trading activities. When such loans were invested in profitable trading activities, customers found it easier to pay which enhanced the financial performance of the bank. Customers who diverted their loans for other uneconomic activities like buying expensive clothes for funerals, attending social programs and eating expensive food found it difficult to pay. Such behaviour negatively affected the financial performance of the bank. This finding is similar to the one identified by Rose (1999) who stated that loan accounted for half or more of total assets and about half to two-thirds of the revenues of most banks.

In the view of18 (15%) and 6 (5%) of the respondents, Savings and deposits as well as Zero COT charges on current accounts respectively increased the performance of the bank. The interview conducted on customers revealed the knowledge and satisfaction derived in the consumption of those products. The finding is comparable to those found by Asiedu-Mante (2002) who asserted that very low deposits and high default rates have plunged some rural banks into serious liquidity problems making a section of the public lose confidence in them. These products positively affected the performance of the bank during the period under review.

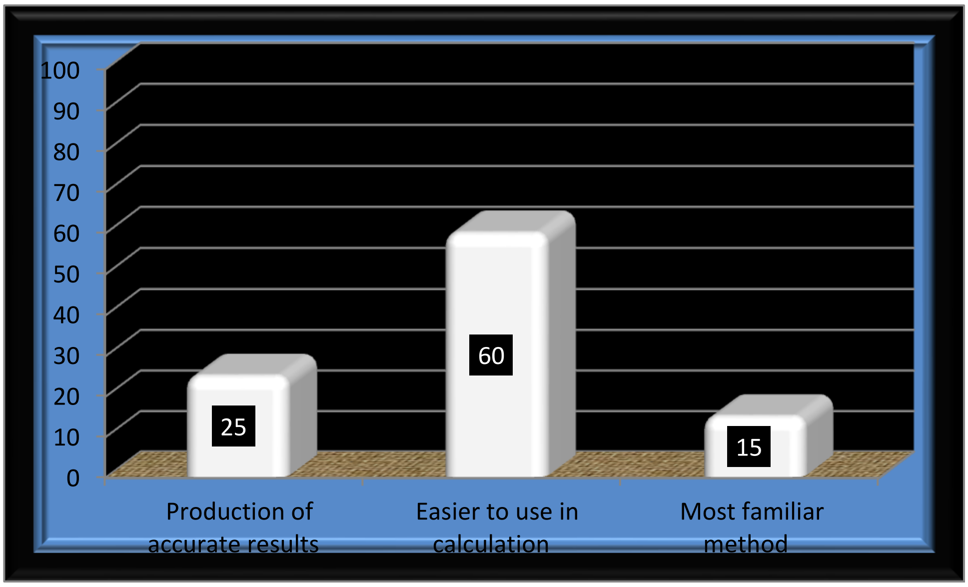
Figure 4.21.16: Effects of investments and loan portfolios on the performance of NRB



Source: Field data of NRB, 2015

From the pie chart above, 74 (62%) of the respondents were of the view that investments and loan portfolios increased the profitability of NRB. On the other hand, 46 (38%) of the respondents in their opinions believed that increased in the amount of funds mobilized by the bank is the effect that an investments and loan portfolios would have on the performance of Nwabiagya Rural Bank limited. This finding validates the one found by Miller and Noulas (1997) who posit that performance of a bank is negatively influenced by the decline in quality of loan portfolio. This presupposes that loan portfolio needs to be properly managed to influence positively on the performance of the bank.

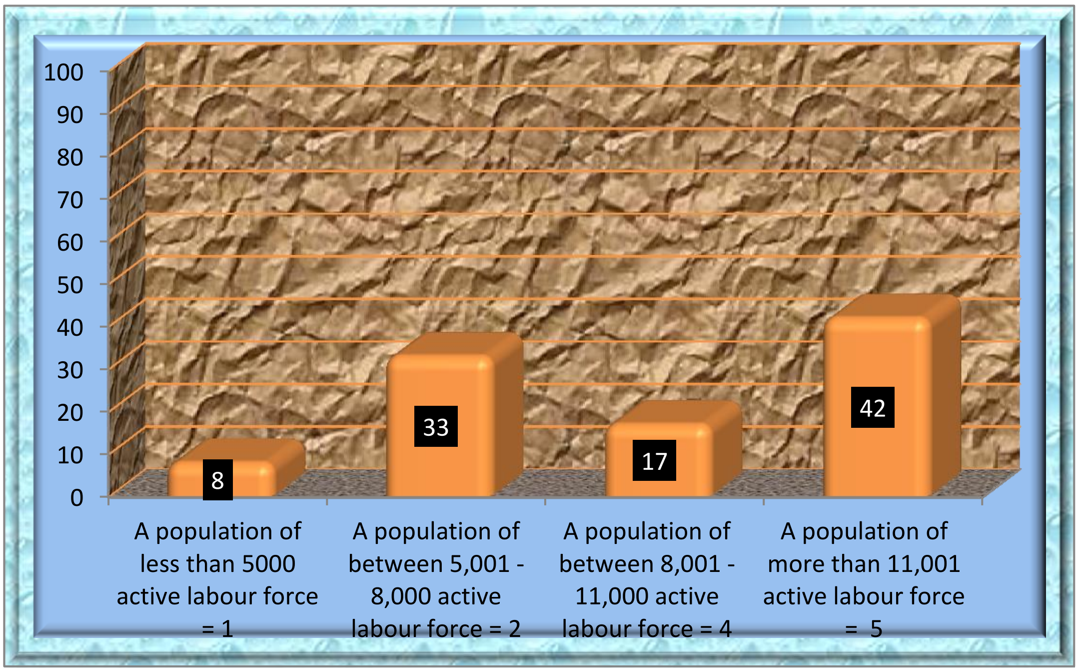
Figure 4.22.17 Reasons why NRB often used ROE to calculate profitability



Source: Field data of NRB, 2015

From the figure above, (72) 60% of the respondents in their views gave the reasons why NRB bank often used ROE to calculate profitability as being the fact that, it is easier to use when calculating profitability. Other respondents, 30 (25%) in their views said, the use of ROE in calculating profitability of the bank is due to the fact that it produced accurate results. The remaining 18 (15%) of the respondents in their opinion said that, ROE is often used to calculate profitability of the bank because of the fact that the method is the most familiar one. This finding justify the one found by the previous researchers, namely, Rivard and Thomas (1997) who doff their hats for ROA as the best in measuring profitability of a bank but gave different reason for its use as not being distorted by high equity multipliers

Figure 4.23.18: Number of rural and community banks that should be located among a given Population

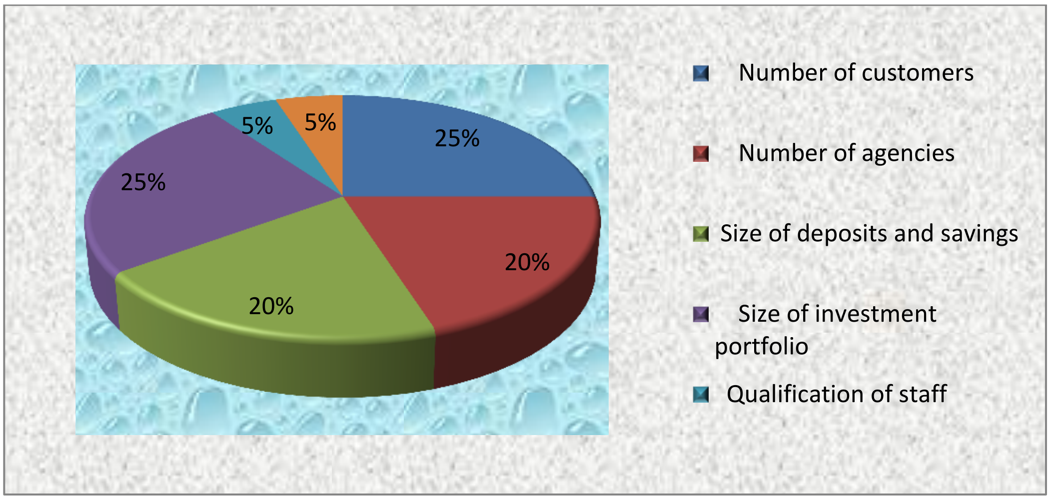


Source: Field data of NRB, 2015

According to figure 4.18.26 above, 10 (8%) of the respondents in their opinion expected one bank to be located among a working population of less than 5000 people. In a working population of between 5001-8000 people, 40 (33%) of respondents expected 2 banks to be located among that community. Also, in a working population of 8001-11,000, 20 (17%) of the respondents expected 4 rural banks to be located among them. Finally, 50 (42%) of the respondents expected more than 5 banks to be located among a working population of more than 11,001 people.

The general perception is that when more than one bank is located among a working population of less than 5000 labour force, there will be unhealthy competition among the banks which will reduce their profitability. One bank is expected to provide efficient services for a working population of less than 5000 people. The only problem is that, when one bank is allowed to serve a population bigger than the stated figure, they will either monopolize the market to their advantage or unable to provide an expected service to their customers. This suggestion is in conformity with the finding of Short (1979) and Molyneux et al (1996) who linked the concentration of banks at a place to the ability of the banks to monopolize the market to earn monopoly profits at the detriment of customers. Bank of Ghana should therefore come out with a policy to regulate the concentration of banks at a given place.

Figure 4.24.19: Determinants of the size of Nwabiagya Rural Bank

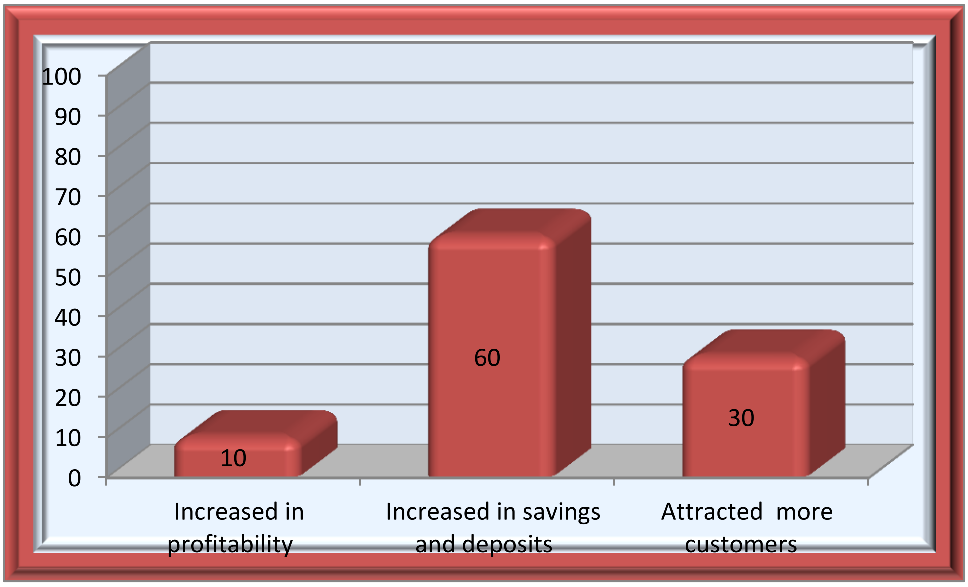


Source: Field data of NRB, 2015

From the pie chart above, 30 (25%) each of the respondents in their views considered number of customers and size of investment portfolio of Nwabiagya Rural Bank as the major determinants of the bank's size. Similarly, two groups each representing 24 (20%) of the respondents held the view that the number of agencies and size of deposits determine the size of the bank. another group of respondents 6 (5%) each identified qualification of staff and number of attractive products as determinants of the size of the bank.

Generally, customers prefer to save their monies with larger banks because such banks are perceived to be safer despite the fact that such banks offer lower interest rates on savings and deposits. This reduces their cost of operation and enables them to gain higher profits on condition that they do not operate in a very competitive environment. In relative terms, Nwabiagya rural bank limited is a big financial institution that has so many agencies, customers, attractive products, sizeable deposits, savings and investment portfolio as well as qualified staff. These determinants of size of a bank account for the increase in performance of the bank.

Figure 4.25.20: The influence of size of bank on its performance

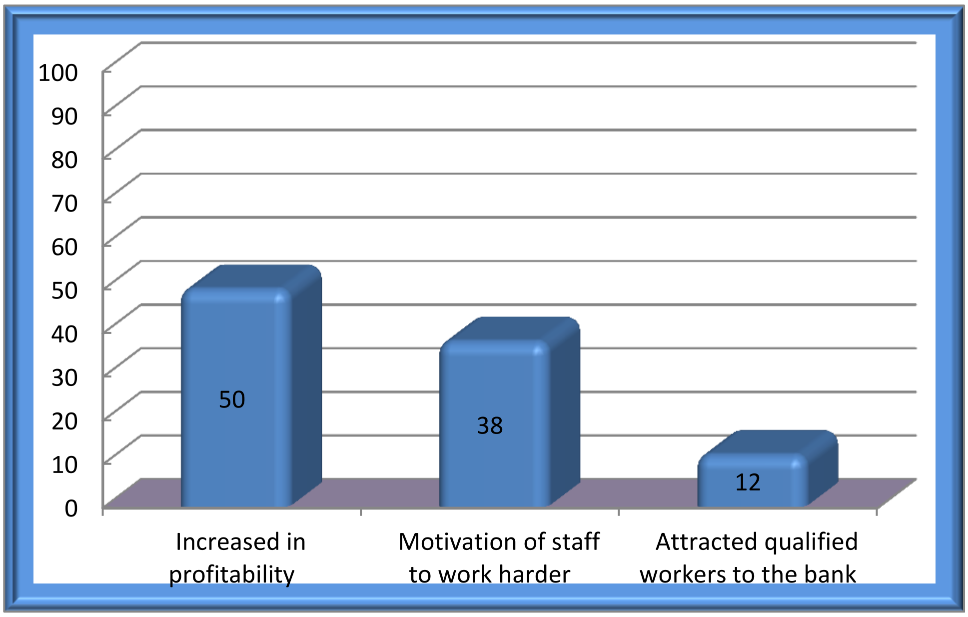


Source: Field data of NRB, 2015

From the bar chart above, in the opinion of 72 (60%) of respondent, increased in savings and deposits was an important factor which influenced the bank's size and its performance. Other respondents, 36 (30%) were rather of the opinion that attracting more customers to the bank could increase the size of a bank and invariably increase its performance. The bank therefore used many strategies such as individual and cooperate Susu collection, offering attractive interest on savings, assuring customers about the protection of their savings and deposits and other measures to attract more customers. This finding is related to what Okazaki and Sawada (2006) who in their opinions associated the kind of banks policies to their deposits mobilization and performance. The remaining 12 (10%) of the respondents rather linked increased in profitability to the size of a bank.

Some banks had many customers but were smaller in size in terms profitability. This was due to lack of prudent measures to increase savings and deposits which could lead to increase in performance in terms of profitability.

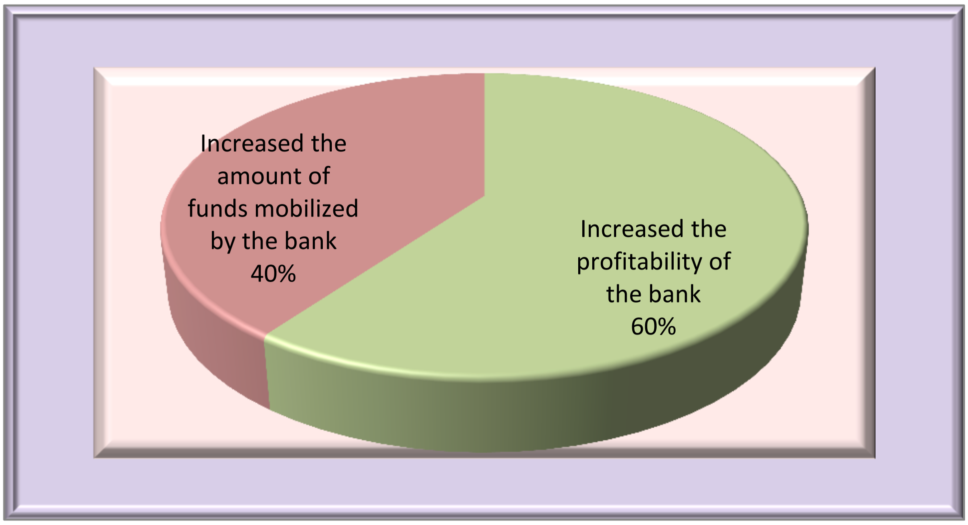
Figure 4.26.21: Effects of salary structure of employees of commercial banks on the performance of NRB staff



Source: Field data of NRB, 2015

From the bar chart above, 60 (50%) of the respondents were of the view that paying the employees of NRB limited based on the salary structure of employees of commercial banks motivated the staff to work harder which eventually brought improvement to the performance of the bank. In the opinion of 46 (38%) of the respondents, paying the staff of NRB in line with the salary structure of employees of commercial banks could lead to increase in profitability of the bank. In the view of the remaining respondents 14 (12%),they said that, the payment of employees of NRB in line with the salary structure of commercial bank attracted more qualified workers to the bank to enhance their performance. This finding is different from what Addo, (1998), found that the payment of employees of rural banks in line with salary structure of commercial banks would increase their cost of operation and hence, result in lower performance in terms of profitability.

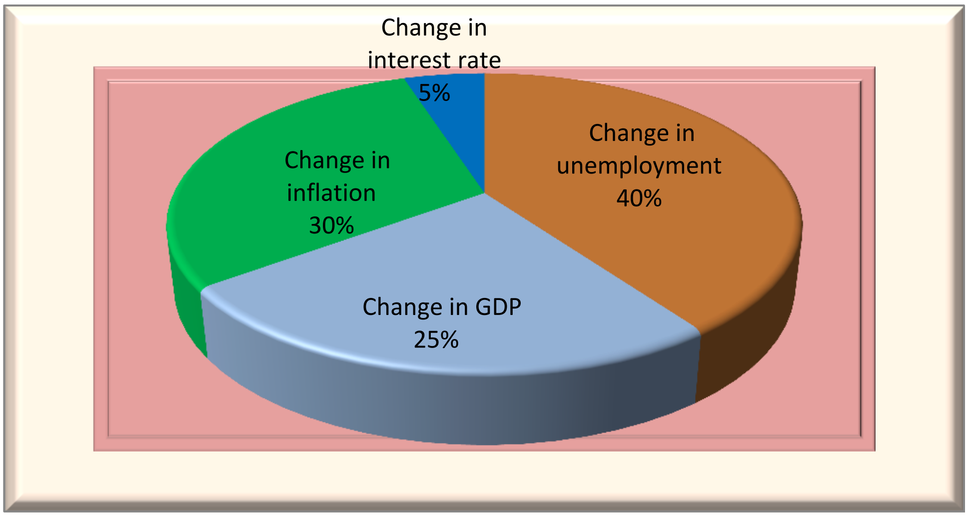
Figure 4.27.22: Effects of increased in number of agencies and savings/deposits mobilization on the performance of NRB



Source: Field data of NRB, 2015

From the pie chart above, increased in the amount of funds mobilized by the bank as well as increased in the profitability of the bank respectively representing 72 (60%) and48 (40%) of respondents responses on the effects of increased in number of agencies and savings/deposits mobilizations on the performance of NRB. As a profit oriented financial institution, management of NRB occasionally established other agencies to increase its performance. This finding is analogous to the claim made by Ibrahim (2010) who identified number of agencies that a bank has as one of the indicators of the performance of the banks in India. However, in the opinion of the respondents, if other variables such as loan default rate, unnecessary expenditure, poor location of the bank and others are not controlled, number of agencies may impact negatively on the performance of the bank.

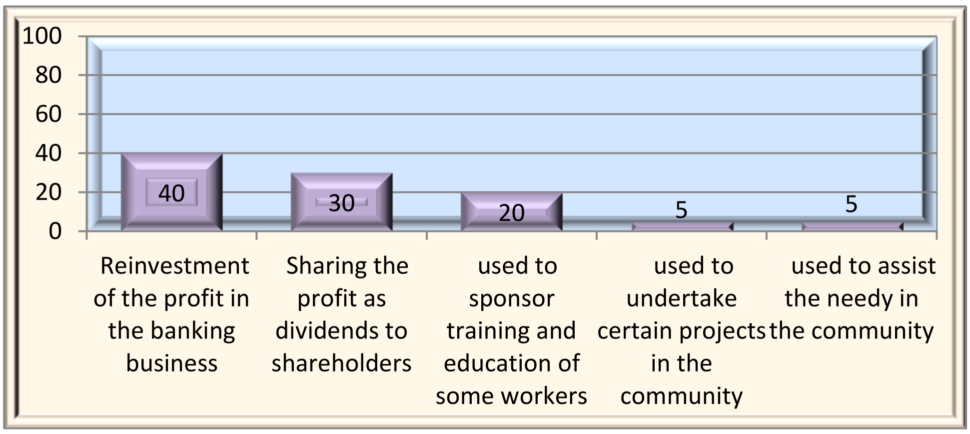
Figure 4.28.23: Effects of macroeconomic variables on performance of NRB



Source: Field data of NRB, 2015

From the pie chart above, 48 (40%) of the respondents were of the opinion that change in unemployment could affect the performance of the bank. For instance, increase in unemployment rate could adversely affect savings which would influence performance negatively. The reverse was true. The bank solely could not do anything to influence this macroeconomic variable. The only thing the bank could do was to continue to expand its products and agencies to create employment for people. In the view of 36 (30%) of the respondents, change in inflation could influence the performance of the bank. For instance, increased in inflation discouraged savings which influenced performance negatively. The reverse was also true. In the view of 30 (25%) of the respondents, changed in Gross Domestic Products (GDP) influenced the performance of NRB limited. For instance, other things being equal, an increased in GDP increased savings and deposits, reduced loan default and increased the returns of the bank which will eventually increased its performance. The opposite was also true. A decline in GDP especially, during the period of economic recessions in business cycle led to deterioration in credit quality and increase in loan default rates. This invariably reduced bank returns and hence, its performance. This finding is similar to the finding of Demirgüç-Kunt and Huizinga (1999), and Bikker and Hu (2002) who identified a positive correlation between GDP and profitability of a bank. Finally, 6 (5%) of the respondents rather believed that, change in interest rate affected the performance of NRB. For example, increased in interest rate in the country induced people to save their money with the bank which positively influenced the performance of the bank. This finding is also related to the one found by Bourke (1989), Molyneux and Thornton (1992), Demirgüç-Kunt and Huizinga (1998), who established a positive relation between inflation and long-term interest rates with the performance of a bank.

Figure 4.29.24: The use of NRB's profit



Source: Field data of NRB, 2015

From the figure 4.29.24 above, 48 (40%) of the respondents were of the view that, a chunk of the bank's profit was reinvested in the banking business to increase their future profit. In the opinion of 36 (30%) of the respondents, the bank shared the profit as dividends to shareholders. According to the view expressed by 24 (20%) of the respondents, the profit of the bank was used to sponsor the training and education of some of its workers. According to the respondents, although this add more cost to the bank, it impacted positively on its performance especially when the knowledge and skills gained after training and education were used to improve the performance of the bank. In the views of the remaining 6 (5%) each of the respondents, the profit of the bank was used to undertake certain projects and offered assistance to some needy people in the community. Projects identified by the customers in the community included a purchase of school bus for Barekese Senior High School, Renovation of Achiase Methodist Junior High School block (near Barekese in Kumasi Metropolis) and offering scholarship to some brilliant but needy students in the community. A greater percentage 207 (90%) of the respondents saw this as a judicious but inadequate use of the bank's profit.

Table 4.30.6 Effects of other market risk on the performance of NRB

Effects on performance of the bank	**Market risks**			
	Foreign exchange risk	**Liquidity risk**	**Interest rate risk**	**percentage (%)**
Reduction in profitability	50	30	20	**100**
Reduction in saving/deposit	10	50	40	**100**
Reduction in investment opportunities	10	80	10	**100**

Source: Field data of NRB, 2015

From the table above, 60 (50%) of the respondents hold the view that, foreign exchange rate risk can reduce the profitability of the bank. Again, 36 (30%) of the respondents hold the views that liquidity risk could reduce the profitability of the bank while 24 (20%) of the respondents also think that interest rate risk can decrease profitability of a bank.

Similarly, 60 (50%) of the respondents hold the view that, liquidity risk can reduce savings and deposits whilst 48 (40%) of respondents expects interest rate risk to reduce performance of NRB through a reduction in savings and deposits. The other respondents 12 (10%) expects foreign exchange rate risk to reduce savings and deposits which will reduce the overall performance of the bank. Also, 96 (80%) of the respondents are of the view that Liquidity risk accounted for reduction in investment opportunities of the bank whilst 12 (10%) of respondents are of the opinion that foreign exchange and interest rate risks each reduced investment opportunity which eventually reduced the performance of the bank. From the table above, it could be deduced that each of the market risks reduced the performance of the bank in one way or the other. This clearly epitomizes the finding by Asare-Bekoe et al. (2010) and Cooperman et al. (2000) who asserted that market risk can influence the profitability of rural banks.

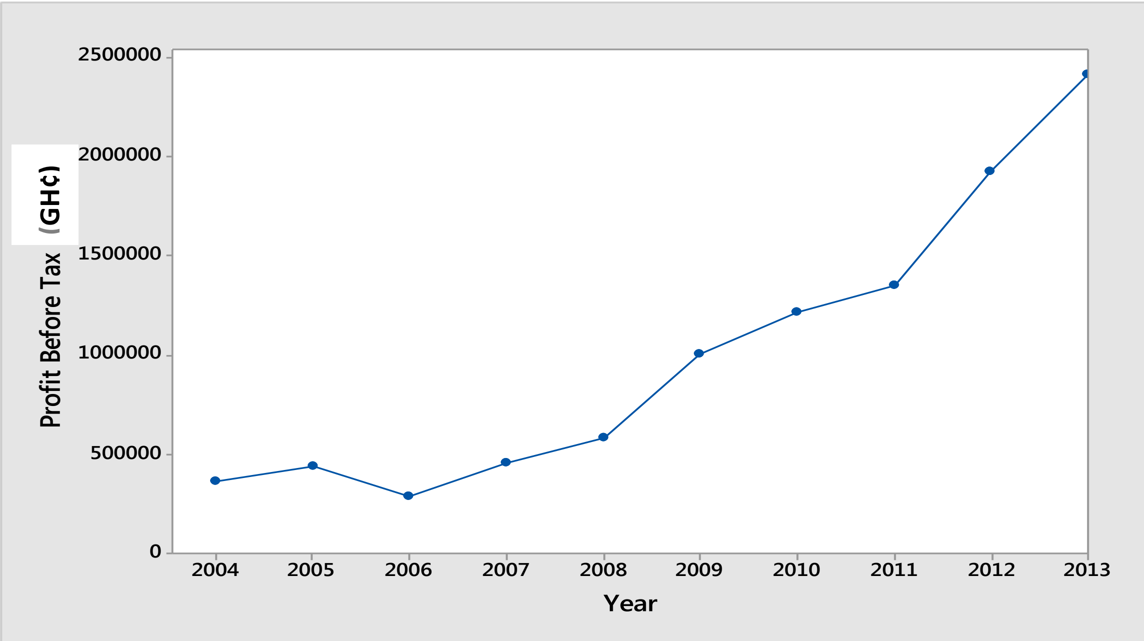
Table 4.31.7 Major Technological facilities used by Nwabiagya Rural bank ltd.

Technological facilities used by NRB	Responses (in percentages)
Money transfer	22
e-Zwich machines	17
Electronic Financial Analysis and Surveillance system (eFASS)	10
The Cheque Code line and Clearance (CCC)	17
Money Counting Machines	17
Automated Clearing House (ACH)	17
Total	**100**

Source: Field data of NRB, 2015

From the table above, in the opinion of 26 respondents (22%), the major technological facility used by Nwabiagya Rural Bank was money transfer. This technology allowed the bank to transfer money from one person, institution or agency to another. When this was done, some charges or commissions were made which provided funds for the bank. The negative side of this technological innovation in the bank's operational system was the money transfer fraud which negatively affected the image, operation and profitability of the bank. In the opinion of 20 (17%) of respondents, other technological innovations such as e-Zwich machines, the Cheque Code line and Clearance (CCC), Money Counting Machines and Automated Clearing House (ACH) technology each were equally important technological innovations which enabled the bank to perform well. Again, 12 (10%) of the respondents also identified the use of Automated Clearing House (ACH) as an important technology used in the operation of the bank. In the opinion of the respondents, these innovations facilitated the operation of the banking staff and reduced the number of hours that customers spent at bank which eventually increased the performance of the bank. The only problem associated some of those technological facilities was the network problem which sometimes rendered almost all of them useless and brought almost the whole banking activity into a standstill until the network was restored. That notwithstanding, the advantages associated with them far outweighed their disadvantages.

Figure 4.32.25: plot of profit before tax

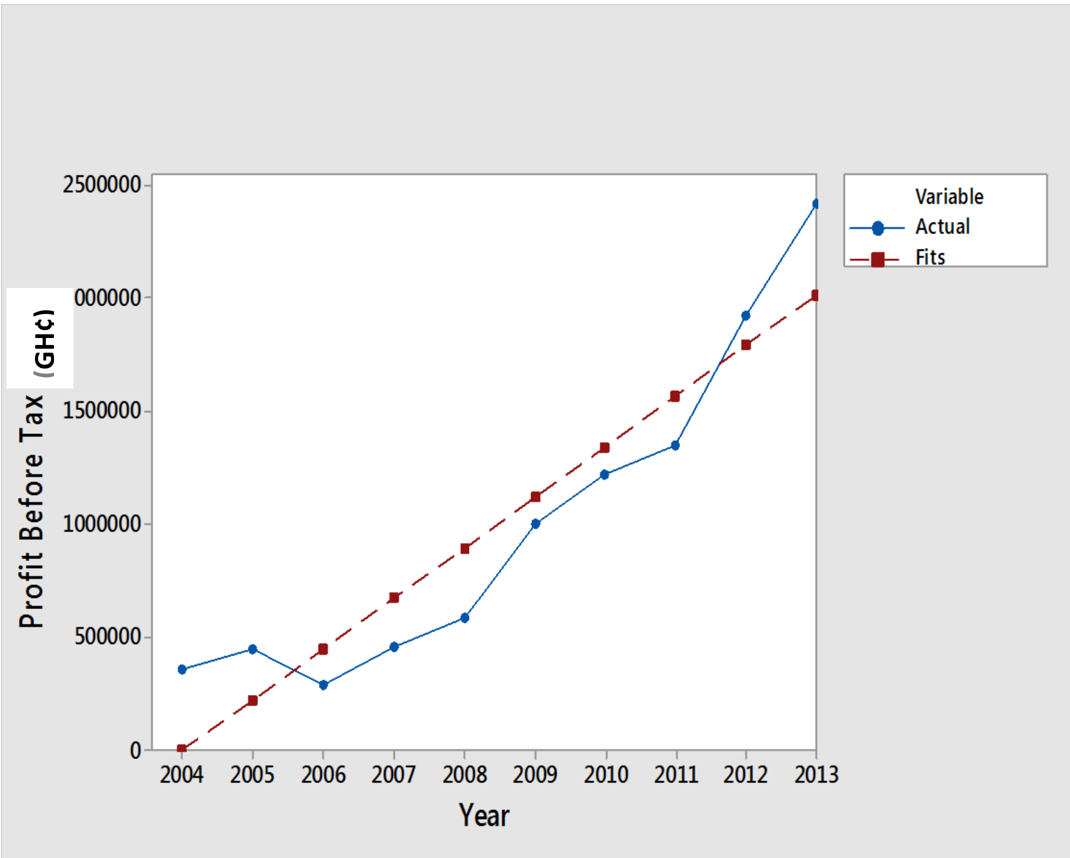


Source: Data base of NRB (2004-2013)

From the plot in figure 4.32.25, the bank profit increased slightly from 2004 to 2005. Unfortunately, after a promising performance between 2004 and 2005, there was a downward trend afterwards which is indicated by a slight drop in profit after 2005. This in the opinion of the respondents was due to high loan default and concentration of other banks in their areas of operation which took away some of their customers. High loan default characterized the credit department of the bank because of ineffective monitoring of loans, poor economic conditions which prevailed in the country, difficult and inflexible conditions attached to payment of loans and diversion of loans to some unprofitable activities by some customers. There was an overall fair increased in trend which occurred from 2006 to 2011 and a very sharp increased in profit afterwards. The sharp increased in profit was due to intensification of measures to reduce loan default, increased in technological innovations such as the use of ezwich and money transfer technology which attracted customers; offered attractive products such as individual and group lending, corporate susu collection and zero COT charges on money transfer for receivers using effective advertisements and mobile bankers to mobilize more savings for the bank.

Profit was neither cyclical nor fluctuating after the drop in second year. The overall performance in terms of profitability over the ten year period was great and impressive.

Figure 4.32. 26: Trend of Profit before Tax



Source: Data base of NRB (2004-2013)

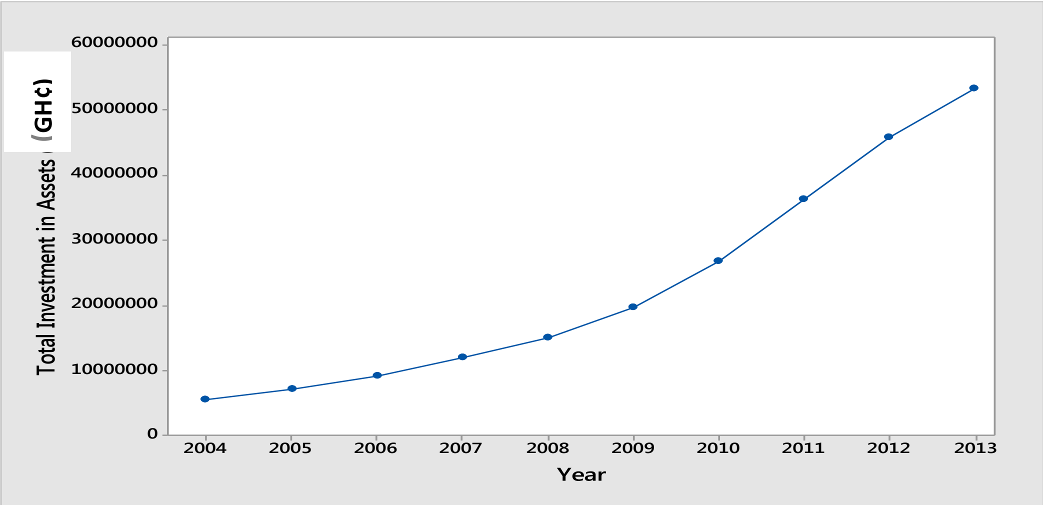
In this study, a linear model in the form Yt = $\propto t + \beta$ was used

Where: Yt = performance in year t from 2004 to 2013, $\propto$ = slope of the line and β = intercept on the profit before tax axis.

After running the regression using the data on the profitability before tax and the period under review, the following model was obtained: $Y_t = 223498t - 225133$ .The gradient is 223498 means that, on average, the profitability of the bank increased by 223498 per year. The figure -225133 is also an intercept on the profitability before tax axis. This figure (-225133) means that at year zero (t = 0), when the bank has not started operation, it was losing GH ¢ 225133. This loss was due to the investment in assets such as buildings, furniture and interest on funds borrowed as startup capital for the bank which was not given them any profit because the bank has not started operating. This is a loss because the shareholders could have invested it in ongoing investment opportunities to gain profit in the form of dividends.

The overall increased in profitability before tax as indicated on the figure 4.32.26 above is an indication of a good performance of the bank.

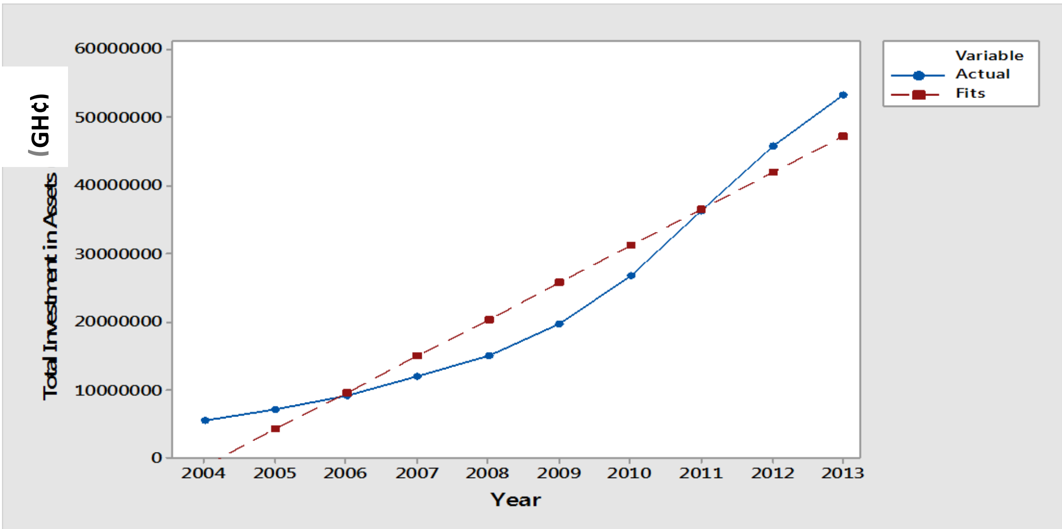
Figure 4.33.27Plot of Total Investment in Assets



Source: Data base of NRB (2004-2013)

Figure 4.33.27above shows a plot of total investment in assets of the bank over the ten year period. It is clear that, total investment has an overall increasing trend over the period. At early stage of the years, there was a fair increased in total investments in assets between 2004 and 2008 and thereafter, increased tremendously up to 2013. In the opinion of the respondents, the great increased in investment in assets after the fifth year was due to the fact that, during the early years, there were not much competition in the banking system but after five years, other banks were established within the catchment areas of NRB which induced management of the bank to invest in assets such as human resource base, technology, agencies and others in order to outwit their competitors. A move in this direction caused total investment to grow rapidly after the fifth year as seen on the graph. An overall increased in total investment in assets of the bank is an indication of good performance.

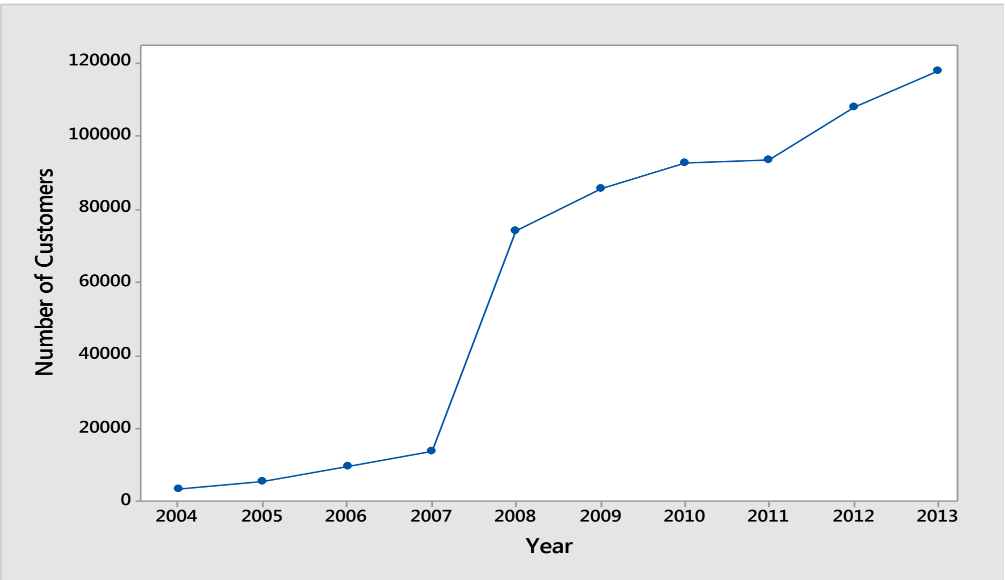
Figure 4.33.28: Trend of Total Investment in Assets



Source: Data base of NRB (2004-2013)

After a careful comparison of different trend models, a linear trend model in the form: $Yt = \propto t + \beta$ where Yt = performance after Year t, $\propto =$ slope of the model and $\beta =$ intercept on total investment in assets axis at year t = 0 was used. After running a regression using total investments in assets data for the period under review, the model became: $\text{Yt} = 5385915t - 6539776$. The slope of the relation is $5{,}385{,}915$.This translates into the statement that the total investment of the bank increased at a rate of 5, 3 85,915 per year. The intercept in total investment assets axis is -6,539,776 which is interpreted as the value in the bank's total investments in assets at year, t = 0. This means that, at year zero when the bank has not yet started operating, the bank lost a total amount GH ¢6,539,776. This lost was due to the startup capital which was invested in acquisition of land, buildings and furniture. At year zero, when the bank was not operating, investments in these assets were considered as a lost to the bank because the bank could have invested this amount in a moving business for profit.

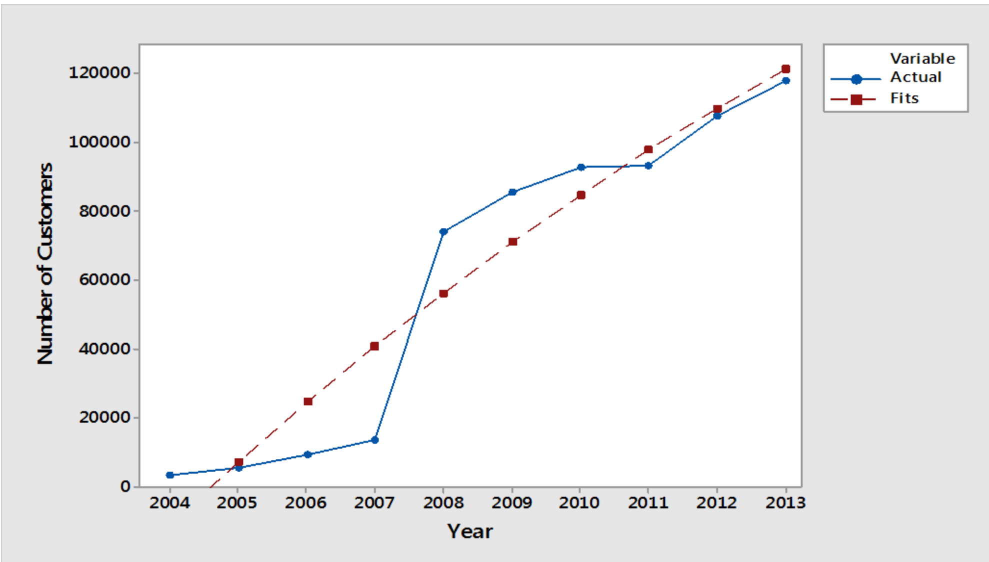
Figure 4.34.29: Plot of Number of Customers



Source: Data base of NRB (2004-2013)

The figure 4.34.29 above shows a fair increased in the number of customers of the bank from 2004 to 2007 and then after experienced a sharp increased in number of customers for the subsequent year. The sharp increase in the number of customers was due to intensification of advertisements made in products such as group lending, activity of mobile bankers, technological innovations, increased in interest rates and number of agencies which attracted customers to the bank. Before 2007, the increase in number of customers was fairly low. This was due to inability of the bank to sell its products to the public and the effects of unfavourable macroeconomic variables such as low interest rates, high inflation, high unemployment rate and low GDP growth in the country which contributed to fairly participation in the public consumption of the banking products. After 2008, the bank also witnessed another fair increased in number of customers due to the reasons assigned for the previous fair increased in customers between 2004 and 2007. Again, between 2011 and 2013, there was another strong increased in the number of customers. In the opinion of managements and officials of the bank, the sharp increased in customer growth was due to reactivation of the previous measures such as intensification of advertisements made in marketing their products like group lending, activity of mobile bankers, technological innovations, increased in interest rates and number of agencies established by management which attracted customers to the bank.

Figure 4.34.30 Trend of number of customers



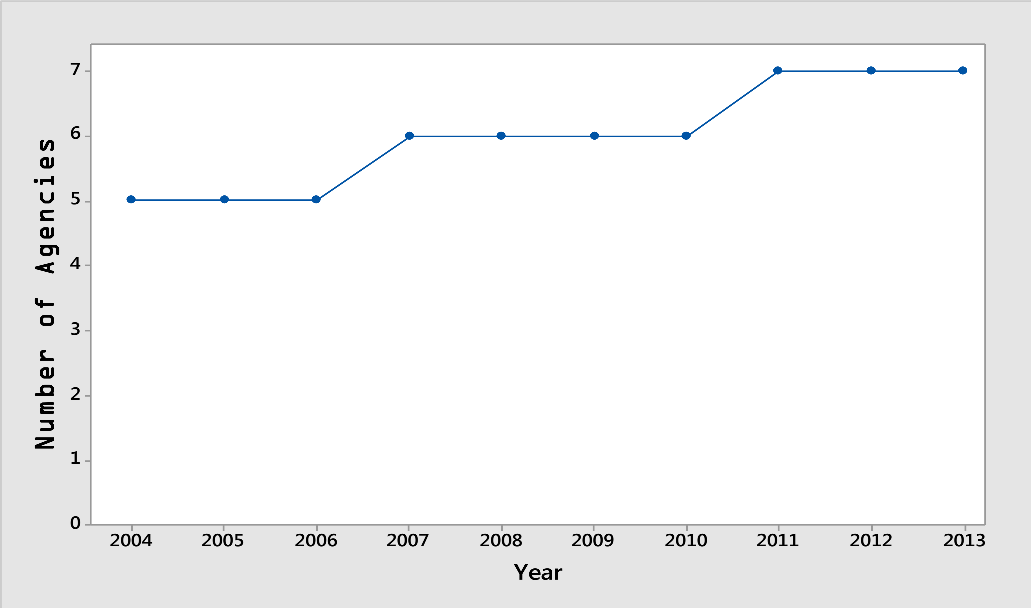
Source: Data base of NRB (2004-2013)

The trend model for number of customers of the bank is a quadratic model in the form: Yt = $\propto t^2 \ -\beta t + \gamma$. Differentiating the model with respect to "t" gives $\frac{dy}{dt}$ = 2∝t$-\beta$. This gives a change in Y per unit change in "t". β is the effect of a unit change in "t" on Y for a special case when t = 0. If "t" is factorized out, the model will be written as:

Yt = t ($\propto t - \beta) + \gamma$. Also, $\propto$ can be interpreted as the rate of change of the coefficient of "t" which is ($\propto t - \beta$) per unit change in "t". Again, γ has a conventional interpretation which is the value of Y when t = 0. Apparently, there will be a distortion if t = 0 lies outside the data range. Similarly, the same type of distortion can happen with the estimate of β.

After running the regression, the model obtained became: Yt $= 408t^2 + 19138t - 29195$. The intercept on the number of customers' axis is -29195.This shows that at year t = 0, there were 29195 customers who were not transacting business with any bank due to proximity disadvantage or lack of interest to transact business with the existing banks for reasons best known to them. These customers could be available to the bank when management instituted measures to reach them. Again, the figure -29195 also means that when the bank has not even started operation (year t = 0), the bank was losing these customers to the other banks. However, after the bank began operation there was an overall fairly increased in the number of customers of the bank which indicated good performance.

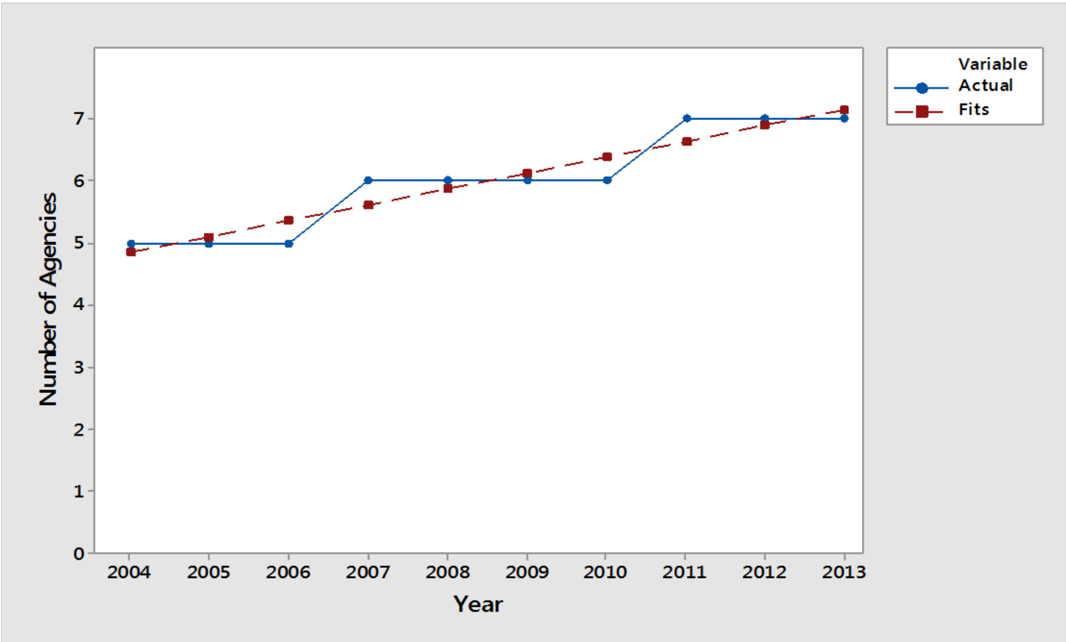
Figure 4.35.31Plot of Number of Agencies Established



Source: Data base of NRB (2004-2013)

The graph above shows that, between 2004 and 2006, the bank had only five (5) agencies. Between 2006 and 2007, the bank was able to add one additional agency to what they already had. Then afterwards, the bank maintained their number of agencies up to 2010. After that year, an additional agency was established which increased the total number of agencies up to seven (7). This was maintained up to 2013.

Figure 4.35.32: Trend of number of agencies established



Source: Data base of NRB (2004-2013)

The trend for number of agencies shows a linear model in the form: Yt = $\propto t+\beta$ after running the regression using the data on the number of agencies establishes and the period under review, the following model was obtained: Yt$= 0.2545t\ + 4.6$. The gradient is 0.2545which means that, on average, the number of banks increased by the stated figure per year. The figure 4.6 is also an intercept on the number of agencies axis which also means that at year zero (t = 0), approximately 5 agencies had been established. Increased in the number of agencies within the stated period indicates a good performance of the bank.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.0Introduction

This final chapter involves the key findings, conclusions and recommendations made for further studies. In this chapter, a brief summary of findings based on the objectives set has been outlined. Also, the conclusion based on the summarized versions of the findings and recommendations obtained in the research activity.

5.1 Summary of findings

Below are the various findings which are in line with the objectives set in this study. For easy identification, the results have been organized under their respective subheadings.

The study has revealed that, the major determinants of performance of rural banks in order of importance are profitability of a bank, customer growth, technological innovations, number of Products and services offered, education level of staff, increase in effective management of credit risk, investment in assets and number of agencies opened .

The study has shown that Nwabiagya rural bank limited is bedeviled by major challenges such as loan default rate and concentration of other banks in their area of operation which reduced the performance of the bank.

Measures for reducing the challenges to performance include carefully scrutinizing customers' records and demanding for guarantors or collateral security before granting loans. Other measures include occasional visits to work places and homes of loan collectors and advising customers on profitable ventures to invest loans. These measures were able to reduce loan default which eventually increases the performance of the bank. The respondents suggested that bank of Ghana should regulate the concentration of banks at a place by allowing one bank to be located in the working population of less than 5000 people, two (2) banks in 5001- 8000 people, four (4) banks in 8001-11000 people and five (5) or more banks should be located among a working population of more than 11,000 people. This regulation of banks concentration according to respondents was to address the problem that concentration of banks such as unhealthy competition, reduction in number of customers and so on could have on their performance.

The study further found that cost of operation could be reduced if management only advertised on products which could attract customers to the bank, spending within the budgeted amount for the year and recruiting qualified staff through proper interview conducted by human resource management. All these measures reduced cost of operation and increased performance.

The study also found that nonfinancial indicators like agency expansion and technological innovations could be manipulated to enhance performance of the bank. For instance, the study showed that management of the bank sometimes ploughed back profit, reduced the dividends paid to shareholders or took loans from loanable sources to establish new agencies. It also showed that the bank instituted technological measures such as the use of money counting machines, eZwich, eFASS and CCC which reduced the number of hours that customers spent in transacting business with the bank. The study also showed that by cutting down unnecessary expenditure and spending within the budgeted amount, recruiting qualified people for work were among the strategies that the bank used to reduce cost of operation which led to improvement in their performance.

The study also found that NRB often used ROE to calculate the profitability of the bank mainly because it is easy to use in calculation.

The study further showed that, the payment of employees of NRB in line with the salary structure of commercial banks motivated staff to work harder, attracted qualified workers to the bank to increase its profitability which eventually increased its performance

Furthermore, the study found that opening up more agencies, investment in attractive products and computerization of some of the banks facilities induced more customers to transact business with the bank and increased its performance.

The influence of macroeconomic variables on performance of the rural bank: The study further found out that increased in GDP and interest rates increased the performance of the bank whilst a decreased in unemployment and inflation rather reduced profit which also reduced performance.

Finally, the bank sometimes reinvested its profit in the banking business, shared the profit as dividends to shareholders and used to sponsor training and education of some workers. They also sometimes undertook certain projects like renovation of basic schools and purchased of vehicles for Barekese SHS.

5.2 Conclusions:

The study has revealed that the overall performance of Nwabiagya Rural Bank limited during the period 2004 to 2013 has been great. Factors indicating performance include increased in customer base, agencies, total investments and profitability. That notwithstanding, there have been challenges that mitigated against their effort to exhibit good performance. Prominent among them include loan default, concentration of other banks in their catchment areas of operation. The bank sometimes shared its profits among its shareholders, reinvested it or used it to renovate classroom buildings or purchase vehicles for certain schools in their areas of operation.

5.3 Recommendations

Based on the findings, the following recommendations were made.

- There were few projects done to assist the people in the community using the bank's profit. The bank should therefore do more projects to assist the people in the community.
- The bank did not use Automated Teller Machines (ATM) where customers could withdraw cash at their own convenient times, especially during the week ends and after the bank has closed. The use of ATM according to respondents would attract more customers to the bank.
- The bank should engage the services of experts to restore the network challenges confronting their technological facilities which sometimes brought the whole banking activity into a standstill until the network was restored as this waste the precious times of customers and reduced the performance of the bank.

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APPENDIX (I)

KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY (KNUST)

MASTER OF BUSINESS ADMINISTRATION (MBA) PROGRAMME

RESPONDENTS: MANAGERS AND OTHER OFFICIAL STAFF OF NRB

The questionnaire forms part of a research on performance of Rural Banks in Ashanti Region using Nwabiagya Rural Bank Limited as a case study for (2004 - 2013) for the production of MBA thesis at the Accounting and Finance Department of the KNUST School of Business.

The questions are being asked to enable me gather information for the study. It's purely for academic purpose and therefore the accuracy of your answers is very much anticipated. Thank you for your co-operation.

1. What is you sex? A. Male ☐ B. Female ☐

2. What is your age? A. less than 20 years ☐ B. 20 – 45 ☐
   C. 46 -59 ☐ D. Above 60 years ☐

3. Marital status A. married ☐ B. Single ☐

4. What is the highest Educational level you have obtained?
   A. Second Degree ☐ B First degree/HND ☐ C. SSS/SHS ☐
   D. Below SSCC /SHS ☐

5. What position do you hold at the bank?
   A. management ☐ B. Official position ☐ C. Other positions ☐

A. The determinants of performance of rural banks in Ghana

6. Which of the following have been the major determinants of the bank's performance within the period of 2004 – 2013? Tick the appropriate one(s).

   (**You may tick more than one)**

   A. Profitability of the bank ☐
   B. Customer growth ☐
   C. Number of agencies opened u ☐
   D. Number of product /service lines offered ☐
   E. Staff turnover ☐
   F. Education level of staff ☐
   G. Increased in technological innovations ☐
   H. Effective management of credit risk ☐
   I. Investment in Assets ☐
   J. All of the above ☐
   K. Others ☐

   ……………………………………………………………………………………

B. Major constraints or challenges to the performance of rural banks

7. What are the major constraints or challenges to the performance of Nwabiagya rural bank Ltd. in Ashanti region within the period of 2004 – 2013?

   (**You may tick more than one)**

A. High Loan default /delinquency rate (credit risk) ☐ B. High tax rate ☐

C. Concentration of other banks ☐ D. Poor location of the bank ☐

E) All of the above ☐ F. Others ☐

If there is/are other(s), name it/them below …………………………………………

(**Answer only those you ticked above)**

8. How did loan default/delinquency affect the performance of Nwabiagya rural bank Ltd. within the period of 2004 – 2013?

   (**You may tick more than one)**

A . Reduction in profit of the bank ☐ B. Reduction in dividend to shareholders ☐

C .Reduction in investment opportunities ☐ D. All of the above ☐

E. No effect ☐ F. Others ☐

If there is/are other effect(s) apart from those ticked above, name it/them below. ……………………………………………………………………………………………

9. How did high tax rate affect the performance of the bank from 2004 – 2013?

   A . Reduction in profit ☐ B. Reduction in dividend to shareholders ☐

   C .Reduction in investment opportunities ☐ D. All of the above ☐

   E. No effect ☐ F. Others ☐

   If there is/are other effect(s) apart from those ticked above, name it/them below.

   ……………………………………………………………………………………………

10. How did the concentration of other banks around the immediate communities of Nwabiagya Rural Bank influence its performance within the period of 2004 – 2013?

A . Reduction in mobilization of funds through savings and loans ☐

B. loss of customers to other banks ☐ C. Reduction in profit ☐

D . Reduction in dividend to shareholders ☐

E .Reduction in investment opportunities ☐ F. All of the above ☐

G. No effect ☐ H. Increased in competition which improved performance ☐

I. Others ☐

If there is/are other effect(s) apart from those ticked above, name it/them below.

…………………………………………………………………………………

C. Minimizing cost of operation and its impact on performance of NRB

11. Which measures did management employ to minimize cost of operation in order to boost up performance of the bank within the period of 2004 – 2013?

    (**You may tick more than one)**

    A- Instituting measures which could reduce loan default
    B- Advertising on only products which would attract customers
    C- Instituting measures to reduce fraud and embezzlement of funds
    D- Cutting down unnecessary expenditures
    E- Reduction in tax levied by GRA
    F- Other effects

    ……………………………………………………………………………………………

12. What measures did management put in place from 2004 – 2013 to manage credit risk?

    (You may tick more than one)

    A. Carefully scrutinized customers loan records before granting loans ☐
    B. Demanded collateral security from customers before granting loans ☐
    C. Occasional visits to work places and homes of loan collectors ☐
    D. Advising customers on profitable ventures to invest loans ☐
    E. Others ☐

    ……………………………………………………………………………………

    ……………………………………………………………………………………

13. What measures did management put in place from 2004 – 2013 to mobilize deposits and savings effectively from their customer?

    (You may tick more than one)

A. Given attractive interest rates to savers/depositors ☐
B. Making effective advertisements which attracted savers and depositors ☐
C. Customers assurance of protection of their savings with the bank ☐
D. Activity of mobile bankers who visited customers at their work places for their savings ☐
E. Others ☐

……………………………………………………………………………………

……………………………………………………………………………………

D Banking fraud and its effects on performance of Nwabiagya Rural Bank limited

14. What were the effects of fraudulent practices on the performance of the bank from 2004 – 2013?

    A. Reduction in the profitability of the bank ☐ B. Reduction in customer growth ☐

    C. Decrease in investment opportunities ☐ Reduction in number of shareholders ☐

15. What measures did management put in place from 2004 – 2013 to ensure high profitable portfolio Investment?

(**You may tick more than one)**

A. Consultation of investment experts ☐

B. Opened up more agencies ☐

C. Increase in attractive services/product lines ☐

D. Computerization of some of the bank's facilities ☐

E. Others …..…………………………………………………………

16. What measures did management put in place from 2004 – 2013 to increase the number of customers?

(**You may tick more than one)**

A. Provision of good customer service ☐ B. Offering attractive products to customers ☐

C . Opening up more agencies ☐ D. decreased interest rate on loans ☐

E . Offered higher interest rates on deposits/savings ☐

F. Others ☐…………………………………………………………

17. What measures did management put in place from 2004 – 2013 to establish more agencies?

A. Ploughed back profit ☐ B. Reduction in dividends paid to shareholders ☐

C. Taking loans from loanable sources ☐ D. Invited more shareholders from the public ☐ E. Others …………………………………………………

18. What measures did management put in place from 2004 – 2013 to improve the education level of their staff?

(**You may tick more than one)**

A. Offered staff the opportunities for further studies ☐

B. Recruited only qualified literates for job vacancies ☐

C. Organized periodic in-service training for workers ☐

D. Sponsored some workers for further studies ☐

E. Others …………………………………………………………………

19. What measures did management put in place from 2004 – 2013 to increase profitability of the bank?

(**You may tick more than one)**

A. instituted measures to reduce loan default rate ☐ B. Good investments ☐ made C. Coming out with product/services that attracted customers ☐

D. Technological innovations made ☐ E. Recruitment of qualified staff ☐

F. Cutting down unnecessary expenditure ☐

G. Others……………………………………………………………………

20. What major products did the bank offer to its customers during 2004 -2013?

A. Group lending ☐

B. Loan provision for Micro enterprise and trading activities for customers ☐

C. Individual and Co-operative Susu (daily customer savings) ☐

D. Zero COT charges on current accounts ☐

E. Zero-balance accounts ☐

F. High interest on savings ☐

G. Flexible loan facilities ☐

H. others ☐ ……………………………………………………………………

21. How did investment and loan portfolios influence the performance of the bank between 2004 – 2013?

(**You may tick more than one)**

A. They increased the profitability of the bank ☐

B. They decreased the profitability of the bank ☐

C. They increased the amount of funds mobilized by the bank ☐

D. They decreased the amount of funds mobilized by the bank ☐

E. They did not influence the performance of the bank in any way ☐

F. Others ☐ ………………………………………………………

F. Formula used to calculate the profitability of the bank

22. (a) Which formula did the bank use to calculate its profitability between 2004 – 2013? **(Tick the one you usually used)**

A. Return on Capital Employed (ROE) ☐ B. Return on Assets (ROA) ☐

C. Average Return on Capital Employed (AROE) ☐

D. Average Return on Assets (AROA) ☐

E. Other formula used by the bank ☐

…………………………………………………………………………………………

(b) Why did the bank decide to use the method identified in (22a) to calculate profitability?

A. Because it produced an accurate results ☐

B. It is comparatively easier to use in calculation ☐

C. It is the most familiar method ☐

D. It is the only method known ☐

E. Other reason(s)

…………………………………………………………………………………………

23. (a) Does Bank of Ghana or Rural and Community Banks Association need to regulate the location of the banking industry in any given community?

A. Yes ☐ B. No ☐ C. No idea ☐

(b) If yes, how many rural and community banks should be allowed to be located among a community with a working population of:

A. Less than 5000 labour force? …………………………………

B. 50001 - 8000 labour force? …………………………………

C. 8001 – 10,000 labour force? …………………………………

D. More than 10001 labour force? …………………………………

F. Determination of the size of the bank

24. What determines the size of a bank?

A. Number of customers it has ☐

B. Number of agencies it has ☐

C. Number of technological facilities it has ☐

D. Size of deposits and savings it has ☐

E. Number of investment portfolios it has ☐

F. Qualification of working staff ☐

G. Number of helpful products it has for customers ☐

H. All the above ☐

I. Other determinations of the size of bank ☐

…………………………………………………………………………………………

25. How did the size of the bank influence its performance between 2004 – 2013?

(**You may tick more than one)**

A. It reduced the profitability of the bank ☐
B. It increased the profitability of the bank ☐
C. It reduced savings/deposits of the bank ☐
D. It increased savings/deposits of the bank ☐
E. It attracted more customers to the bank ☐
F. It discourage customer growth ☐
G. No effect ☐
H. Other effect(s) ☐

…………………………………………………………………………………

G. Salary of workers and Rural Bank's Performance

26. How did the salary of employees of the bank in line with salary structure of employees of Commercial banks influence the performance of the bank?

(**You may tick more than one)**

A. It reduced the profitability of the bank ☐
B. It increased the profitability of the bank ☐
C. It motivated workers to work harder ☐
D. No effect on the performance of the bank ☐
E. Other effect(s) ☐

27. How did increase in number of agencies and deposit mobilizations influence the performance of the bank from 2004 – 2013?

(**You may tick more than one)**

A. They increased the profitability of the bank ☐
B. They decreased the profitability of the bank ☐
C. They increased the amount of funds mobilized by the bank ☐
D. They decreased the amount of funds mobilized by the bank ☐
E. They did not influence the performance of the bank in any way ☐
F. Others ☐

…………………………………………………………………………………

……………………………...

H. Macroeconomic determinants and banks performance

28. (a) Which of the following other macroeconomic variables **(if any)** influence the performance of the bank between 2004 – 2013?

(You may tick more than one).

A. Increased in Gross Domestic Product (GDP) ☐ B. Declined in GDP ☐

C. Increased in inflation ☐ D. Decreased in inflation ☐

E. Decreased in unemployment rate in the country ☐

F. Increased in unemployment rate in the country ☐

(b) Which of the macroeconomic variables you ticked above **(if any)** reduced the profitability of the bank between 2004 – 2013?

(A ☐ B. ☐ C. ☐ D. ☐ E. ☐ F. ☐)

(c) Which of the macroeconomic variables you ticked above reduced the savings/deposits of the bank between 2004 – 2013?

(A ☐ B. ☐ C. ☐ D. ☐ E. ☐ F. ☐)

(d) Which of the macroeconomic variables you ticked above increased the savings/deposits of the bank between 2004 – 2013?

(A ☐ B. ☐ C. ☐ D. ☐ E. ☐ F. ☐)

(e) Which of the macroeconomic variables you ticked above attracted more customers to the bank between 2004 – 2013?

(A ☐ B. ☐ C. ☐ D. ☐ E. ☐ F. ☐)

(f)Which of the macroeconomic variables you ticked above discouraged customer growth of the bank between 2004 – 2013?

(A ☐ B. ☐ C. ☐ D. ☐ E. ☐ F. ☐)

(g) Which of the macroeconomic variables you ticked above attracted more customers to the bank between 2004 – 2013?

(A ☐ B. ☐ C. ☐ D. ☐ E. ☐ F. ☐)

(h) Which of the macroeconomic variables you ticked above did not have any effect on the performance of the bank betweene2004 – 2013?

(A ☐ B. ☐ C. ☐ D. ☐ E. ☐ F. ☐)

I. The use of the bank's profit

29. What did the bank use its profit to do between 2004 – 2013?

A. Reinvested the profit in the banking business ☐ B. Given to shareholders as dividends ☐ C. Used to assist people in the community ☐

D. Used to sponsor training and education of workers ☐

E. Used to undertake important projects in the community☐

Eg……………………………………………………………………………………

F. Others…………………………………………………………………………….

J. Effects of other risk apart from credit risk on performance of the bank

(i) foreign exchange risk

30. (a) What is the effect of foreign exchange risk on performance of the bank?

(**You may tick more than one)**

A. It reduced the profitability of the bank ☐

B. It increased the profitability of the bank ☐

C. It reduced savings/deposits of the bank ☐

D. It increased savings/deposits of the bank ☐

E. No effect ☐

F. Other effects ☐ ………..…………………………………………………………

(ii)Liquidity risk

(b)What is the effect of liquidity risk on the performance of the bank?

(**You may tick more than one)**

A. It reduced the profitability of the bank ☐

B. It increased the profitability of the bank ☐

C. It reduced investment opportunities of the bank ☐

D. It increased investment opportunities of the bank ☐

E. No effect ☐

F. Other effects☐…………………………………………………………

(iii) Interest rate risk

(C) What is/ are the effect(s) of interest rate risk on the performance of the bank?

(**You may tick more than one)**

A. It reduced the profitability of the bank ☐

B. It increased the profitability of the bank ☐

C. It reduced savings/deposits of the bank ☐

D. It increased savings/deposits of the bank ☐

E. No effect ☐

F. Other effects ☐

……………………………………………………………………………………………

31. (a) Does the bank have any technological facilities in the head office or any of its branches?

A. Yes ☐ B. No ☐ C. No idea ☐

(b) If yes, tick those the bank used from 2004 – 2013

(**You may tick more than one)**

a) Money Transfer ☐

b) e-Zwich ☐

c) Automated Teller Machines (ATM) ☐

d) Electronic Financial Analysis and Surveillance System (e FASS) ☐

e) The Cheque Code line Clearing (CCC) ☐

f) Automated Clearing House (ACH) ☐

g) Money counting machines ☐

h) Any other technological facility(ies) of the bank apart from those ticked above ☐

……………………………………………………………………………………

……………………………………………………………………………………

Thank you for the time spent in answering this question. May God richly bless you.

APPENDIX (II)

INTERVIEW

KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY

(KNUST)

MASTER OF BUSINESS ADMINISTRATION (MBA) PROGRAMME

RESPONDENTS: CUSTOMERS OF NWABIAGYA RURAL BANK LTD.

The structured interview forms part of a research on performance of Rural Banks in Ashanti Region using Nwabiagya Rural Bank Limited as a case study for (2004 - 2013) for the production of MBA thesis at the Accounting and Finance Department of the KNUST School of Business.

The questions are being asked to enable the researcher gather information for the study. It's purely for academic purpose and therefore the accuracy of your answers is very much anticipated. Thank you for your co-operation.

1. What is you sex? A. Male ☐ B. Female ☐

2. What is your age? A. less than 20 years ☐ B. 20 – 45 ☐
   C. 46 -59 ☐ D. Above 60 years ☐

3. Marital status A. married ☐ B. Single ☐

4. What is the highest Educational level you have obtained?
   A. Second Degree ☐ B First degree/HND ☐ C. SSS/SHS ☐
   D. Junior High /Middle School ☐ E. Primary/No formal education ☐

5. What is your occupation?
   A. Transport ☐ B. Farming ☐ C. Cottage Industries ☐
   D. Cottage Industries ☐ E. Public service ☐
   F. Others ……………………………………………………………………

6. How long have you transacted business with Nwabiagya rural bank Ltd.

   A. Less than 1 year ☐ B. 1-3 years C. 4 - 6 years ☐ D. More than 7 years ☐

7. What kind of service(s) do you obtain from Nwabiagya Rural Bank Ltd that you are proud of?

8. Respect given to customers ☐ B. Addressing problems of customers concerning their accounts ☐ C. Respecting the views of customers ☐

   D. Enjoying the comfort of the bank premises ☐

   E. Quick response to loans demanded by customers ☐

   F. Others …………………………………………………………………………

9. What project has the bank done in the community that you are aware of?

………………………………………………………………………………………………

………………………………………………………………………………………………

………………………………………………………………………………………………

10. Are you aware of any product(s) that Nwabiagya Rural Bank offered to customers?

    Yes ☐ B. No ☐

    If yes, tick those you are aware of.

A. Group lending ☐
B. Loan provision for Micro enterprise and trading activities for customers ☐
C. Individual and Co-operative Susu (daily customer savings) ☐
D. Zero COT charges on current accounts ☐
E. Zero-balance accounts ☐
F. High interest on savings ☐
G. Flexible loan facilities ☐
H. others ☐ …………………………………………………………………………

Thank you for your time spent in responding to this interview. May God richly bless you.

APPENDIX (III) : Secondary data of Nwabiagya Rural Bank Limited

Year	Profit/Loss Before tax Gh¢ Question(32)	Total Investment in Assets Gh¢ Question (33)	Number of Customers Question (34)	Number of Agencies established Question (35)
2004	360,930	5,396,527	3,208	5
2005	441,317	7,076,464	5,531	5
2006	289,438	9,133,210	9,536	5
2007	453,912	11,979,152	13,526	6
2008	586,254	15,093,943	74,158	6
2009	1002,098	19,739,621	85,648	6
2010	1,219,407	26,770,023	92,796	6
2011	1,347,653	36,414,513	93,441	7
2012	1,924,452	45,830,908	107,911	7
2013	2,415,570	53,393,199	117,899	7

Source: Data base, Nwabiagya Rural Bank Limited, 2004 - 2013