

CHRISTIAN SERVICE UNIVERSITY COLLEGE

KUMASI

SCHOOL OF BUSINESS

DEPARTMENT OF ACCOUNTING AND FINANCE

**FINANCIAL PERFORMANCE OF RURAL AND COMMUNITY BANKS (RCB) IN
KUMASI METROPOLIS USING CAMEL METHOD**

**A DISSERTATION SUBMITTED TO THE SCHOOL OF BUSINESS, CHRISTIAN
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THE REQUIREMENT FOR THE AWARD OF THE DEGREE OF BACHELOR OF
BUSINESS ADMINISTRATION (ACCOUNTING OPTION)**

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DECLARATION

I hereby declare that this submission is my own work towards the Masters of Business Administration and that, to the best of my knowledge, it contains no material previously published by another person or 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. However, references from the work of others have been clearly stated.

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DEDICATION

This work is dedicated to the Almighty God for his guidance and protection throughout the undertaking of this project work, our supervisor Mr. Osei-Anim Reindolph and Mr. Appiah.

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We are extremely grateful to the Lord God Almighty for giving us the strength, wisdom and ability to carry out this study successfully.

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May the Almighty God bless him and his Family.

ABSTRACT

From the inception of Rural and Community Banks (RCBs) in 1976 the network of RCBs has experienced tremendous growth in the rural areas of Ghana. Yet, RCBs face insurmountable challenges in their operations and many are faced with financial distress. Formidable competition from other banks operating in rural areas is another major challenge RCBs face currently. Many studies were conducted on the performance of RCBs worldwide but scant in Ghana. Declining performance of RCBs require an investigation to examine their safety, soundness, and ability to mitigate the potential risks RCBs face. Studies conducted in developing countries on performance of rural banks used various financial ratios of the CAMEL model, non-financial bank specific characteristics, and other macro-factors. No such study has been conducted in recent years in the context of Ghana. This study seeks to fill this gap whiles utilizing return on assets (ROA) and return on equity (ROE) as the measure of financial performance. RCBs sampled for this study were ten (10) using annual reports for the five-year period of 2008 to 2014. Mean, standard deviation, correlation, and regression analysis were employed to measure the effect of CAMEL ratios, bank age, size of board of directors, GDP, inflation, and interest rate on the financial performance of the RCBs. Findings show that the ROA and ROE of the selected RCBs has improved over the five-year period with an average of 15.4% and 33.4% respectively. The regression analysis showed that capital adequacy, asset quality, management efficiency, and the sized of board of directors were significant determinants of financial performance. However, the size of board of directors was inversely related to performance of RCBs. The remaining variables in the CAMEL did not significantly influence their performance. Whiles the explanatory power of the ROA model is significant, it was not significant for ROE. Though RCBs in Kumasi Metropolis have good asset quality and earnings quality. There is the need for RCBs to

improve upon their liquidity and corporate governance as a way of enhancing their overall efficiency.

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CHAPTER ONE

INTRODUCTION

1.0 Background of the Study

Ghana's economic development is dependent on important factors like industrial development, foreign trade, expansion and modernization of agriculture, and improvement in internal trade. The financial, banking and monetary mechanism plays a leading role in developing the global economy. The contribution of the banking sector specifically to national development can be seen in its allocation of monetary resources through government's economic planning and policy. It has been argued that an efficient banking system is indispensable in the economic vibrancy of any country. Hence, the banking sector's performance effectively measures the performance of the economy at large. According to Misra and Aspal (2013), the performance of the banking sector can be construed as the effectiveness of economic activities in the national economy. Studies conducted have indicated that economic growth strongly correlates with banking efficiency (McKinnon, 1973; Hays, Lurgio & Gilbert, 2010; Donkor & Duah, 2013).

The report of PWC on the banking industry presented in *2014 Ghana Banking Survey* shows that the financial sector in Ghana is made up of 27 universal banks, 137 rural and community banks, and 58 non-banking financial institutions including finance houses, savings and loans, leasing and mortgage firms (PWC, 2014). Most of these financial institutions concentrate their services on urban and peri-urban parts of the country. Apart from these which constitute the formal financial sector, there are some credit unions, susu collectors, and financial nongovernmental organizations also make up the informal and semiformal financial sector.

Rural and Community Banks (RCB) are the backbone of the rural financial sector providing crucial services to the rural areas and they represent about 5% of the total banking assets, while accounting for some 50% of total banking outlets throughout the nation (IFAD, 2008). Nair and Fissha (2010) established that these Rural and Community Banks (RCBs) are critical service providers that address the deficiency of access to financial services in rural areas. With about 60% of the money supply outside the commercial banking system, the rural and community banks and other micro finance institution play a significant role in Ghana's private sector development and poverty reduction strategies. RCBs, and their agencies represent about 5 percent of the total banking assets and account for about half of the total banking outlets in the country, and they are especially significant in rural areas (IFAD, 2008). Between 2008 and 2008, the number of depositors grew at an average annual rate of 14 percent and the number of borrowers grew at an average annual rate of 27 percent (Nair and Fissha, 2010).

RCBs is a term used to denote a network of independent unit banks in Ghana (Nair and Fissha, 2010) which are under the regulation of Bank of Ghana. RCBS are unit banks owned by members of the rural community through purchase of shares and are licensed to provide financial intermediation (Obeng, 2008). Being a part of the regulated financial sector, RCBs provide critical financial services to rural dwellers. A total of 548 service delivery locations out of which are 421 branches of RCBs are dispersed in almost all rural areas in the country. Though they are considered as relatively small with average assets of GHC 3.8 million (US\$ 2.4 million), their presence and impact is felt throughout the country.

Recent developments in the financial sector show that RCBs have become formidable competitive financial service providers effectively competing against the main banks in the country. According to the Ghana Banking Survey (2014), bank executives are expecting

competition from RCBs to increase in intensity and many other bank executives have confessed that already RCBs have tightened competition in the retail and commercial deposit markets. They attributed these developments to a relaxed regulatory regime and the fast paced urbanization which has empowered RCBs and other informal financial institutions to compete favorably with established commercial banks. Further transformation in the banking sector, with respect to RCBs are expected in terms of technology, competition, regulations, and the performance of the national economy. These phenomena would lead to increasing partnerships between RCBs and established banks in the days to come.

Since 1976 when the first Rural Bank was establishment, the RCB network has seen tremendous growth and improvement as reported by Obeng (2008). Their performance has been impressive as well. With a customer base that is mostly made up of government employees, farmers, petty traders and small and micro entrepreneurs, it is estimated that RCBs have carved a relative market share of 67% and 48% of depositors and borrowers respectively in the rural areas which has addressed the crucial credit constraint that rural dwellers faced (Obeng, 2008). In terms of profitability and net worth, there has been continual improvement since 2000 where most RCBs are performing above the minimum requirement of Bank of Ghana. However, there have been cases of insolvency, loss making and liquidation of some rural banks in the country over the period. For example, Obeng (2008) noted that seven (7) RCBs became insolvent in 2008 alone and there has been general concern over the poor performance of RCBs in the country. Considering the contribution of RCBs to community development through the provision of financial services, the performance of RCBs is of interest to a lot of researchers.

The critical role of banks in Ghana's economic development should affect the rural development agenda of the country. RCBs are therefore important engines of driving the rural

areas in terms of providing financial services that are necessary to drive agricultural, production, and commercial activities in the rural areas. Studies conducted into the performance of banks are mostly carried out in terms of earning quality, management efficiency, internal control system, recovery, and assets quality (Reddy, 2012) so that the level of risk and how financially viable banks are can be regulated. Regulators and researchers alike have improved bank supervision and measured their performance by a model called CAMEL. CAMEL is an acronym which means Capital adequacy, Asset quality, Management quality, Earnings, and Liquidity. This CAMEL model is used to assess and evaluate the financial performance and soundness of banks. This model is considered as superior to other criteria that are used because it provides concentration, spread over, check and frequency that is needed in supervision of banking activities (Reddy, 2012). In the view of Barr et al. (2002) “CAMEL rating criteria has become a concise and indispensable tool for examiners and regulators”. It is a useful tool which is widely used because it provides a measurement criterion for different aspects of a bank’s operation based on diverse sources of information provided from budgets, financial statements, and macroeconomic data. CAMEL model would be applied in assessing the performance of RCBs in this study.

1.1 Statement of Problem

The contribution of the banking sector to Ghana’s economic development cannot be overstated. Bank of Ghana Annual Report (2011) indicated that there abound opportunities for significant growth in the economy which can be facilitated by the financial sector. Rural and Community Banks (RCBs) hold the fort of development in the rural areas where the opportunities for revolutionary expansion and economic growth exists. Evaluation of financial performance of the banking sector is an effective measure and indicator to check the soundness of economic activities of an economy, since the banking sector’s performance is perceived as the replica of economic activities of the economy. Hence, a study of the

performance of the rural banking sector is a reflection of the performance of the general economic condition of rural development in Ghana.

Despite the continual growth and contribution of RCBs to the rural development of the economy, these rural banks have faced several challenges in their operations. Being constrained by their capacity and operational environment, RCBs face seemingly insurmountable blockades (Donkor & Duah, 2013). In 1992, only 23 of the 123 RCBs qualified as “satisfactory”, half of them achieving “satisfactory” status by 1996, but in 1999 there was a closure of 23 distressed banks which sent a strong signal to the remaining rural banks to improve upon their performance. Since 2001, the number of satisfactory RCBs has been increasing (Obeng, 2008). According to Acquah-Hayford (2015), ARB Apex Bank has revealed that about 20 RCBs are in financial distress. According to the report as at September 2014, 54 rural and community banks had not met the minimum paid-up capital of GHC 300,000 while 31 had also not meet the Capital Adequacy Ratio requirement of 10%. The report also revealed that out of the 135 rural and community banks only 15 were classified “strong” by the Apex Bank as at September 30, 2013. One other important challenge that RCBs face in recent times is the overwhelming competition from other banks which are extending into rural areas where they target both the personnel and the customers of these RCBs. RCBs have to become more competitive without losing focus of their objective to provide financial services to rural dwellers. Important ingredients for RCBs to improve is to innovate and improve upon their efficiency.

In the light of the declining performance and crisis that many RCBs face, CAMEL (capital adequacy, asset quality, management quality, earnings and liquidity) is a useful tool to examine the safety and soundness of RCBs, and help mitigate the potential risks which may

lead to their failures (Sangmi and Nazir, 2010; Dang, 2011; Ongore and Kusa, 2013; Tesfai, 2015).

Nair and Fissaha (2010) identified that the poor performance of many RCBs is contributed by “an absence of clear prudential regulations, both financial and nonfinancial, and excessive directed lending requirements, which limit flexibility in managing risk exposure. Even when a good legal, policy, and regulatory environment is provided, a certain number of institutions will fail.” This raises a lot of concern over the impact that the failure of RCBs could potentially cause on the rural communities where they provide critical financial services, and the general economy of the nation. Understanding the financial strength and soundness of RCBs in Ghana in order to provide necessary evidence on the performance of RCBs has motivated this study.

This will lead to improved competitive advantage and performance. With the potential of providing the much needed support for investment and development of rural communities, the performance of RCBs must be evaluated so that the incidence of insolvency, loss, and failure would be reduced while providing guidelines for their continual efficiency and performance. Against this background, it is imperative to measure the soundness of the rural banking sector through a performance measurement system that provides an opportunity to assess the performances of these RCBs.

A summary of the various authors who researched on financial performance of RCBs and the scope of their study are presented in a summary in the table below.

Table 1.0 Literature on Banks Performance Measurement

Author	Scope	Country	Main Conclusion
Shukla (2015)	Analysing Financial Strength of Public and Private Sector Banks: A CAMEL Approach	India	Private banks are growing at a faster pace than public sector banks. Using CAMEL was useful in ranking banks based on their financial strength.
Reddy (2012)	Relative performance of commercial banks in India using CAMEL approach	India	Public sector banks have significantly improved indicating positive impact of the reforms in liberalizing interest rates, rationalizing directed credit and Investments and increasing competition
Khatik & Nag (2014)	Analyzing soundness of nationalized Banks in India: A CAMEL Approach	India	There is significant difference in the performances and soundness of the five nationalized banks on the basis of CAMEL Approach during the study period.
Khatik & Nag (2015)	Performance measurement system in Indian banking sector in CAMEL framework	India	Public sector banks outperformed private sector banks with regard to CAMEL framework as a method of measuring and managing performance of the bank under financial measure.
Ongore and Kusa (2013)	Assessed the determinants of financial performance of Commercial Banks in Kenya	Kenya	Capital adequacy, asset quality and management efficiency significantly affect the performance of commercial banks in Kenya but liquidity has a lesser effect on performance. This means that bank specific factors (factors under the control of managers) are the most significant determinants of the financial performance of commercial banks in Kenya
Nair and Fissha (2010)	Rural Banking: The Case of Rural and Community Banks in Ghana	Ghana	RCBs were insolvent, and the continued operation of poorly performing RCBs is one of the key issues facing the network of rural banks. The relatively high ratio of nonperforming loans is a major factor affecting financial performance. Factors causing poor operating environments include an absence of clear prudential regulations, both financial and nonfinancial, and excessive directed lending requirements, which limit flexibility in managing risk exposure.
Donkor & Duah	Relationship between Savings	Ghana	Total deposits is positively related to credits, showing that as total deposits increased the amount

(2013)	and Credit in Rural Banks at Atwima Kwanwoma rural bank		to lend also increased. Hence, rural banks need to extend their outreach as well as the size of credits.
Owusu-Antwi, Antwi, and Crabbe (2014)	Conducted a study on the performance of Rural Bank's in Ghana.	Ghana	The main drivers to rural banks profitability measurement in Ghana were investment to total asset, the total overhead cost to total asset; loan to total asset; total asset and inflation, however liquidity was identified as insignificant.
Ayam & Ahinful (2015)	Risk Management in Rural and Community Banks: The Ghanaian Experience	Ghana	Credit risk, liquidity risk, operational risk and legal regulatory risk are the major forms of risk affecting rural and community banks in Ghana. the general conclusion is that risk management practices existing in Ghanaian RCBs are ineffective.
Nkegbe & Ustarz (2015)	Banks Performance in Ghana: Trends and Determinants	Ghana	A general decreasing trend in bank performance indicated by return on equity, return on assets and net interest margin. Liquidity, market share of loan and operational efficiency were positively related to all the performance indicators. Non-performing loan is, however, significant and negatively related to only return on equity and return on assets. Non-performing loan (NPL) is becoming a key problem affecting banks performance.
Ntow-Gyamfi & Laryea (2012)	A Financial Performance Comparison of Foreign VS Local Banks in Ghana using data from 2005-2010.	Ghana	Local banks in Ghana are doing better than foreign banks in terms of both return on assets and return on equity, and the management of local banks are more efficient than that of foreign banks in Ghana. Foreign banks have/are: a higher capital adequacy ratio; more quality assets(loans); more earnings power in terms of net interest margin; more liquid; and usually larger in Ghana than the local banks.
Hays, Lurgio & Gilbert (2009).	Efficiency Ratios and Community Bank Performance using CAMEL	U.S.A.	Community banks that desire to survive and thrive should pay attention to these variables: salaries to average assets, the liquidity ratio, the equity capital to asset ratio, loan charge-offs to loans and a one-year GAP measure. Community banks must pay attention to efficiency as a potential strategic advantage.

Existing studies on measuring the performance of banks using the CAMEL model abound (Kapil & Kapil, 2005; Nurazi & Evans, 2005; Sarker, 2005; Bodla & Verma, 2006; Gupta & Kaur, 2008; Reddy & Prasad, 2011; Siva & Natarajan, 2011). However, few of those studies have been conducted in the context of Ghana (Ntow-Gyamfi & Laryea, 2012; Owusu-Antwi, Antwi, & Crabbe, 2014; Nkegbe & Ustarz, 2015). Other studies utilized bank specific non-financial variables like number of employees, number of branches, bank age, number of board of directors, level of ICT deployment, and others (Adams and Mehran, 2005; Belkhir, 2006; Staikouras et al., 2007; Tanna et al., 2007; Zulkafli and Samad, 2007; Andres and Vallelado, 2008; Adams and Mehran, 2008; Belkhir, 2009; Praptiningsih, 2009; Agoraki et al., 2010; Aygün, 2010; Adusei, 2011; Bino and Tomar, 2012; Pathan et al., 2011).

RCBs are the largest group of licensed financial service providers in rural areas with a market share of 67 percent of depositors and 48 percent of borrowers in rural areas (Nair & Fissaha, 2010). Though rural banks occupy an important part in the financial intermediation of rural development, scarce studies have been conducted to measure their performance using the internationally approved CAMEL model. The use of CAMEL model on the soundness of banks in India has gain much momentum and helped in regulatory reforms (Reddy, 2012; Khatik & Nag, 2014; Shukla, 2015; Khatik & Nag, 2015) thereby improving their performance.

Owusu-Antwi, Antwi, and Crabbe (2014) measured the performance of RCBs in Ghana for the period of 1999-2013 covering 127 RCBs. The study used Return on Equity (ROE) as the performance indicator and six other independent variables: loan to total asset, investment to total asset, total asset as a proxy to size, liquidity, total operating expense to total asset, and annual inflation. However, this study differs from theirs as it utilized return on assets (ROA) as a measure of financial performance and utilizing data from 2008 to 2014. Nair and Fissaha (2010) also studied the performance of RCBs in Ghana using only three of the variables on

the CAMEL model (asset quality, solvency and profitability) using data from 1999 to 2008. This study seeks to utilize all the five variables to measure the financial performance of RCBs in Kumasi Metropolis, and uses data starting in 2008 to make the findings more current.

Hence, though several studies have been conducted elsewhere, using the CAMEL model to strictly measure the performance of rural banks, such a study is scant in Ghana. For this reason, further studies are necessary in the area of financial performance evaluation of RCBs, particularly by using the acclaimed CAMEL model. This study sought to fill this research gap and add to the crucial need for more studies in this area.

1.2 Aims and Objectives of the Study

The aim of the study is to assess the performance of Rural and Community Banks (RCBs) in Ghana, particularly RCBs in the Kumasi Metropolis, and identify the factors and which influence their performance.

1.2.1 Specific objectives

The specific objectives that would be used to address the aim of the study are as follows:

1. To assess the extent to which the CAMEL model influences the performance of RCBs;
2. To assess the extent to which non-financial bank-specific factors influence the performance of RCBs;
3. To assess the extent to which macroeconomic factors influence the performance of RCBs;

1.3 Research Questions

This study sought to achieve the objectives through the following specific research questions:

1. To what extent does the CAMEL model influence the performance of RCBs?
2. To what extent does non-financial bank specific factors influence the performance of RCBs?
3. To what extent does macroeconomic factors influence the performance of RCBs?

1.4 Significance of the Study

The purpose of conducting research is to provide solution to society's problems. The aim of this study is to evaluate the performance of Rural and Community Banks (RCBs) in Ghana. The financial services of rural banks are crucial to national development. Among other things, this study will provide management of the RCBs under review an assessment of the performance of the banks which will help them appreciate how well they have measured with their own targets and the standards set by Bank of Ghana. The study will provide relevant information to them about areas of their operation where they can focus on in order to improve the overall performance of the banks. Also, this research will illuminate the significant challenges that the RCBs are facing in achieving their objectives and how these could be effectively addressed. The findings of this study may provide encouragement to government's efforts which are geared towards the development of rural banking in Ghana. The implications for policy makers would also involve the necessity of enhancing confidence in rural banking in order to improve upon the efficiency of financial resource transfer from savers to investors. In addition, this study will provide a solid foundation for further academic research work that will be carried out and also serve as a reference material for other studies.

1.5 Scope of the Study

The research would be carried out on RCBs which are located in the Kumasi Metropolis of the Kumasi metropolis in Ghana. This study is only focused on the performance of RCBs and would therefore be limited to financial statements and management of the banks. In addition, the study is limited to a specific sector of the economy, the banking sector, and specifically focus on rural banks.

1.6 Overview of Research Methodology

The case study approach was used as the research design for this study as it engages techniques and procedures to investigate and understand a particular phenomenon. Quantitative approach was also utilized in this study. In order to effectively address the research objective, CAMEL model was used. CAMEL is an acronym for Capital adequacy, Asset quality, Management competence, Earning ability, and Liquidity risk. This model helps to address performance evaluation from diverse aspects of a bank. There are 140 RCBs in Ghana as at April 2016 (BoG, 2016) of which 25 are located in the Kumasi metropolis. The population of this study is therefore made up of 25 RCBs in the Kumasi metropolis. By purposive sampling, ten (10) of the RCBs were used in this study. Data collection is carried out from both primary and secondary sources. Primary data is collected using questionnaire administered to management of the banks. The study is mainly based on secondary data which is collected from the financial statements and annual reports of the banks for the five-year period of 2008 to 2014. Other important information is collected from journals, conference proceedings and websites. Also, data collected through questionnaires was analysed using the Statistical Package for the Social Sciences (SPSS).

1.7 Limitations of the study

The research will be carried out despite some limitations that will be encountered. The financial performance of the banks is shown just for a five-years period from 2008 to 2014. Hence, any uneven trend before or beyond the set period will be the limitations of the study. Also, the analysis of this study is based on only monetary information, analysis of the non-monetary factors includes only bank age and size of board of directors. The time frame used for the study. Given the thorough investigation that is needed, the time available for the completion of this study will not be adequate enough. Also, there is the limitation of financing necessary for meeting the various expenses that would arise directly and incidentally from this study.

1.8 Organization of the study

The study is organized into five main chapters. Chapter One addresses the general introduction, the background of the study, the problem statement, research objectives and questions, the significance, scope and limitations of the study. Chapter Two is a presentation of review of existing literature as it discusses relevant literature that is related to the subject of this research. Chapter Three presents the research methodology used in the study and particularly addresses the research design, population, sampling, data collection and analysis techniques. Chapter Four presents the findings and discussions of findings of the study. Finally, Chapter Five presents summary of findings, conclusions and recommendations.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

The role of the banking industry is critical to economic development because it mobilizes and allocates resources in developing economies. This literature review systematically deals with the relevant and related theories and literature on the financial performance of rural and community banks. Specifically, this chapter deals with a review of the history of rural and community banking in Ghana, theoretical framework of financial performance, empirical evidence on financial performance of RCBs, the use of the CAMEL model in measuring financial performance, the state of Ghana's rural banking sector, the challenges rural banks face and the conceptual framework of this study.

2.1 Theoretical Framework on Performance

In the view of Athanasoglou et al, (2006) the performance of banks has been researched since the late 1980s with two underlying theories: The Market Power (MP) and Efficiency Structure (ES) theories. From the market power theory, the performance of banks is affected by the structure of the market in which they operate. Two approaches form the basis of the market power theory. The first is the structure-conduct-performance approach which identifies that the level at which markets are concentrated impacts on how profitable banks become due to the market power they accrue. The second approach, the relative market power hypothesis, identifies relative market share as the driver of how profitable banks become, hence, large banks determine price increments and improve their level of profitability. The Market Power theory posits that when external forces increase profitability also increases. This happens because companies which have large market share and who have

product or portfolio differentiation are more competitive, hence, they tend to make profit in a monopoly (Athanasoglou et al., 2005).

Under the efficiency structure theory, increase in profit is a result of improved efficiency in management and scale efficiency. This is because, managerial and scale efficiency help firms to concentrate on core activities and deliver them more competitively. In application, both the market power and efficiency structure theories have been used in studies which focus on the performance of banks (Athanasoglou et al., 2005; Olweny and Shipho, 2011).

Another theory that underpins the performance of banks is the balanced portfolio theory which states that the decisions that managers of banks make, the overall policy direction, and the portfolio composition of the firm leads to profitability and higher shareholder returns (Olweny and Shipho, 2011).

2.1.1 Performance Measurement

The implication of these theories is that the level at which banks perform is determined not only by internal factors but also by external factors. Risk management capability, size, age, efficiency of management, and the capital of the bank are some internal factors that impact on their performance. External factors that have been identified as influential on the performance of banks include inflation, ownership, interest rate, and economic growth (Athanasoglou et al., 2005).

It is crucial for firms to measure and manage their performance as they seek to grow. The hypothesis that using ‘balanced’ performance measures and management positively impacts on organizational performance is the basis of investments in such firms (Davis and Albright, 2004; Kennerley and Bourne, 2004; Franco et al., 2004). Performance measurement in firms is a necessary to ascertain how well the organization meets its set goals. According to Hit,

Black and Porter (2007) organizational control is the process of ensuring that organizational strategies and actions are taken and implemented so that it achieves its objectives and goals. This means that organizational strategy and control must be in resonance especially when plans are being formulated. Management control has been defined by Otley et al. (1995, pg 46) as “the process by which managers ensures that resources are obtained and used effectively and efficiently in the accomplishment of the organization’s objectives”. Likewise, Daft, Kendrick and Vershinina (2010) defined organizational control as systematically regulating the activities of a firm to ensure consistency with expected targets and standards of performance. The implication of these definitions is that effective organizational controls are possible when there is information on both the set standard of performance and the actual performance of the organization. From this information, organizational actions are taken to align those that have deviated (Daft, Kendrick & Vershinina, 2010). Three levels of control which are strategic, management and operational controls have been identified by Sims and Smith (2014).

2.1.2 Performance measurement and control in the service industry

There is much diversification in the service industry which is made up of several categories like health care, catering, transportation, financial services, and communication. Looy et al. (2003) noted these various categories in the service industry:

- “Distributive services: include transportation, communication and trade.
- Producer services: involve services such as investment banking, insurance, engineering, accounting, bookkeeping and legal services.
- Social services: include health care, education, non-profit organizations and government agencies.

- Personal services: include tourism, dry cleaning, recreational services and domestic service.”

Performance Measurement has been focused on manufacturing firms until these recent times (Fitzgerald et al, 1991). However, four main differences exist between service and manufacturing firms which influence how performance is measured: heterogeneity, intangibility, perishability, and simultaneity. Services are *heterogeneous* and that requires that performance measurement standards differ particularly with service provisions that are labor intensive. Services produce *intangible* outputs which means that measurement of performance is an issue of performance instead of products/objects. Using traditional performance measurements on services may be inappropriate because of how intangible their outputs are. Services are produced and consumed *simultaneously*, and the output are not subject to impaction, testing, counting, or measuring before the sale/delivery of the service to the consumer. The fourth aspect of services which makes it more difficult for measuring is its perishability. Services cannot be stored or inventoried (Fitzgerald et al, 1991). Service performance measurement is relatively new as the institutional arrangements and control systems are still developing as compared to manufacturing firms. This means that service industry performance measurement has not been in line with those of the manufacturing industry even though the service industry is growing rapidly.

2.1.3 Financial Performance Measurements

Management behavior and output of employees in firms is determined by the nature of the organization’s performance measurement system. This can be achieved by using financial performance measures. Cash flow, economic value added (EVA), cost, revenue, profitability, and return on capital employed are some of them. These measurements provide firms with the necessary indications of problem areas where management can concentrate its attention

and improve those aspects of business processes which may be weak (Merchant and Van der Stede, 2007). However, it has been cautioned that the use of financial measures may lead management to concentrate only on those aspects of the firm and neglect non-financial aspects which may have dire consequences (Chaudron, 2003).

Organizations where there are profit centres or divisions, the size of the division's profit should not be the focus of measurement but its return on investment (ROI). ROI expresses profit as a ratio of investment in assets employed in that division. Ratios which help firms to achieve this include return on net assets (RONA), return on equity (ROE), and return on capital employed (ROCE) (Drury, 2005). However, over-reliance on ROI measures may cause certain difficulties one of which is that it encourages sub-optimization. In the view of Merchant and Van der Stede (2007, p. 420) "ROI measures can create a sub-optimization problem by encouraging managers to make investments that make their divisions look good even though those investments are not in the best interest of the corporation." Researchers have proposed the use of residual income as a means of overcoming the challenge of sub-optimization (Burksaitiene, 2008). Residual income is derived by deducting the capital charge on net assets held up in investment from the profit generated.

Various criticisms have been laid at the root of financial measures, but that of Merchant and Van der Stede (2007, pp 413-414). They noted that accounting profit measurements are not reflective of economic income of a firm because of the following reasons.

- i. "Accounting systems are transactions oriented. Accounting profit is primarily a summation of the effects of the transactions that took place during a given period. Thus most changes in value that do not result in a transaction are not recognized in the income statement.

- ii. Accounting profit is highly dependent on the choice of measurement method. Multiple measurement methods are often available to account for identical economic events. The typical examples frequently cited are the various methods of depreciation and stock valuations where depending of the method used different amounts of profit can be computed.
- iii. Accounting profit is derived from measurement rules that are often conservatively biased. Accounting conventions require slow recognition of gains and revenues but quick recognition of expenses and losses. This is what is termed as the prudence concept in financial accounting.
- iv. Profit calculations ignore some economic values and value changes that accountants feel cannot be measured accurately and objectively.”

Most researchers while carrying out studies on bank performance employ different models in the context of the theories discussed above. The CAMEL model is one of such performance measures. CAMEL is based on utilizing financial ratios as a measure of performance of banks (Naceur, 2003; Sufian & Habibullah, 2010; Khrawish, 2011). It is one of the most popular models which is approved by regulators interested in the performance of banks (Heffernan & Fu, 2008; AlTamimi, 2010; Khrawish, 2011). In addition to its popularity in the banking industry, CAMEL has also gained a new use as a set of ratios utilized in financial analysis. It is becoming the innovation of measuring financial performance for banks (Sangmi & Nazir, 2010). CAMEL is an acronym which stands for capital adequacy (C), asset quality (A), management efficiency (M), earnings quality (E), and liquidity (L). This ratio is particularly useful because it provides indications of the likelihood of a bank’s failure where any of the variables shows an unfavorable sign. In addition to the above dimensions, the

model also uses profitability ratios such as return on equity (ROE), return on assets (ROA), and net interest margin (NIM) (Sangmi & Nazir, 2010).

In spite of the downsides of using financial performance measures, firms heavily rely on it as a major source of control measurement. In the view of Merchant and Van der Stede (2007, p253-254), the reasons why many companies continue to use financial measurements widely is due to the following.

- i. “First, profits and cash flows ensure the organizations’ survival. They also provide returns to investors and are among the primary measures outsiders use to evaluate the organizations’ performance.
- ii. Second, financial measures provide a comprehensive, summary measure of performance. They aggregate the effects of a broad range of operating initiatives into a single measure, thus reducing the possibility of conflicting signals about the importance of various operating indicators.
- iii. Third, most financial measures are relatively precise and objective. They generally provide significant measurement advantages over qualitative and subjective information.
- iv. Fourth, financial results controls can provide a relatively subtle or unassuming form of management control. They provide control while allowing those being controlled considerable autonomy. This freedom of action allows managers to adapt their operations to fit their managerial styles, and it may stimulate creative thinking.
- v. Fifth, financial results controls have wide applicability. They can be effective even when management does not know what specific actions are best, as is often the case in uncertain environments and with jobs that require considerable professional judgment.

- vi. Finally, the cost of implementing financial results controls is often small relative to that of other forms of management control. This is because the core financial results control measurement elements are largely in place.”

Advocates of financial performance measurement controls also agree that there is the need for non-financial performance measures which supplement it to provide a balanced performance measurement.

2.1.4 Non-Financial Performance Measurement

Before 1980, performance measurements in management accounting heavily relied the use of financial measures – items which are monetary were the point of consideration. There was less focus on non-monetary measures such as delivery, quality, reliability, customer satisfaction, and after-sales services of products. According to Drury (2007), it was Peter Drucker who argued that there is the need to have appropriate measurement systems which are capable of providing continuous monitoring of how an organization seeks to achieve its objectives. Henceforth, authors and researchers have identified a wide range of non-financial performance measures which can be applied in controlling and measuring performance. According to Sims and Smith (2004) when managers are fixated on the use of financial measurements, they tend to belittle non-financial measurement controls which may be more intangible in nature. Examples of such non-financial measures include the quality of a product, order lead time, product innovation lead time, customer satisfaction, production flexibility, non-productive hours, number of customer complaints, number of warranty claims, and labor development, skills acquisition, and competence over time.

Another major critic of the reliance on financial measures is Eccles (1991) who argued that the use of non-financial measures can be quickly provided for managers, even every hour. A summary of the manifesto set forth by Eccles (1991) which calls for a move away from the

use of financial performance measurements to that of non-financial measures is given by Sims and Smith (2004, p437).

- i. “Managers have tracked non-financial measures such as quality, market share, etc., for many years but these measures have not been given their appropriate status in corporate information and bonus system dominated by financial measures.
- ii. Granting additional non-financial measures on top of the financial reporting system achieves little because they often conflict and consequently the financial measures again take priority.
- iii. Financial measures are lagging indicators of performance because they show the outcomes of past investment and strategic decisions and often discourage further strategic investments.
- iv. Focusing on and rewarding achievement of financial measures alone causes managers to adopt short-termist behaviour to improve their financial performance (e.g. arbitrary cost cutting and under-investment) to the detriment of the long-run development of the firm.
- v. Modern competitive strategies based on quality and customer satisfaction, together with the development of benchmarking initiatives, and the improvement in computer power to record and transmit multiple measures, have led to the potential for a revolution in performance measurement.”

According to the official terminology of CIMA (2005), non-financial performance measures are defined as those set of performance measures which do not use financial information, used by managers for monitoring and controlling operational activities. When there is the need for timely information on the outcome of performance, non-financial measures are of a

better help than financial performance measures. Non-financial measures are also difficult to distort in the face of uncontrollable changes in the macro-environment and the forces of the market (Drury, 2007). However, researchers are of a consensus that the use of financial or non-financial performance measures alone are inadequate, and therefore they propose their combination.

2.1.5 Integration of financial and non-financial performance measurements.

Critics of the financial performance measures are of the point that it breeds problems in managerial behavior such as managerial myopia (a focus on short term results at the expense of long term objectives), behavioural displacement, and dysfunctional behavior which manifests in manipulating data and budget slacks (Merchant and Van der Stede, 2007). Researchers have called for a multi-dimensional performance measures which can address the integration of all critical factors which contribute to organizational performance. This led to the development of the balanced scorecard. The Balance Scorecard Institute (2008) stated that: “Kaplan and Norton describe the innovation of the balanced scorecard as follows: The balanced scorecard retains traditional financial measures. But financial measures tell the story of past events, an adequate story for industrial age companies for which investments in long-term capabilities and customer relationships were not critical for success. These financial measures are inadequate, however, for guiding and evaluating the journey that information age companies must make to create future value through investment in customers, suppliers, employees, processes, technology, and innovation.”

The balanced scorecard has become a strategic planning and management system tool which helps organizations to align their core activities to their long term strategy and vision. It also helps business improve upon both external and internal communication, and it provides a useful way of monitoring performance with business goals (Nanni et al., 1992; Broadbent,

1999). The balance scorecard was created as “a performance measurement framework that added strategic non-financial performance measures to traditional financial metrics to give managers and executives a more 'balanced' view of organizational performance” (The Balanced Scorecard Institute, 2008). In the view of Drury (2007, p1001) “the aim of the [balanced] scorecard is to provide a comprehensive framework for translating a company's strategic objectives into a coherent set of performance measures.... A critical assumption of the balanced scorecard is that each performance measure is part of a cause-effect relationship involving a linkage from strategy formulation to financial outcomes.”

2.2 Empirical Evidence on Performance Measurement

Based on the above theories and concepts of bank performance measurement, many researchers have conducted empirical studies to measure bank profitability and the factors which determine it. These factors have been broadly classified as endogenous and exogenous (Aburime, 2005; Athanasoglou et al, 2006; Al-Tamimi, 2010). Firm specific characteristics which influence the profitability of banks are classified as endogenous factors and these include size and composition of credit portfolio, size of deposit liabilities, liquidity, interest rate policy, management quality, risk level, asset quality ratios, state of information technology, labor productivity, and capital structure. Internal factors are affected through the internal decisions that are taken by managers and directors of the firm. Exogenous factors are those external to the bank which exerts influence on its profitability. Examples include the market concentration, ownership, the stock market development, inflation, interest rates, and other macroeconomic conditions (Athanasoglou et al, 2006). External factors are country-wide and outside the control of the firm. According to Flamini et al., (2009) macroeconomic factors influence the profitability of banks. This study however used endogenous factors as

these are expected to vary from bank to bank, while exogenous factors remain relatively the same across firms though they affect all the firms aggregately.

One of the endogenous factors which researchers have identified is the size of a bank which has been established as positively correlated with banks' profitability (Molyneux and Seth, 1998; Pilloff and Rhoades, 2002; Ramlall, 2009; Sufian, 2009). However, other researchers found that bank size was inversely correlated with profitability (Koasmidou, 2008; Spathis et al, 2002). According to Aburime (2008) banks' profitability is influenced by predicting, evading, and monitoring risks, so that the losses incurred as a result of risk is covered. Though liquidity is critical to banks, it has been noted that holding high liquidity incurs opportunity costs which could have been utilized in generating high returns (Kamau, 2009). In their study, Sufian and Chong (2008) found that firm performance is influenced by the efficiency of its management of expenses.

2.3 Measuring Financial Performance of Rural Banks

As already mentioned, internal factors which affect the profitability of banks are under the control and manipulation of banks and they differ for each bank. CAMEL, which stands for Capital Adequacy, Asset Quality, Management Efficiency, Earnings Ability and Liquidity, model has been utilized by researchers to represent those internal factors (Dang, 2011).

2.3.1 CAMEL Model

As a model, CAMEL is widely utilized in measuring financial performance of banks. It was recommended by IMF and the Basle Committee on Bank Supervision (Baral, 2005). CAMEL is reliable because it provides analysis on the financial performance, condition, soundness, and regulatory environment. Various studies have been conducted on financial performance using this model. In the view of Barr et al. (2002) "CAMEL rating criteria has become a

concise and indispensable tool for examiners and regulators”. Using this model ensures that various aspects of the financial health of the bank is reviewed using different ratios from their financial statements, and information from macroeconomic data. Asset quality and earnings quality have been seen as crucial parameters since the asset size is an indication of bank growth, while, earnings provide survival of banks. Following these, capital adequacy is viewed as the next important in the framework. Capital adequacy ensures that depositors are safeguarded and it is also an indication of how productive the bank is. Despite the necessity of liquidity, it is given the least importance because high liquidity reduces profitability and negatively affects the performance of banks (Reddy, 2012). In a nutshell, CAMEL is fundamentally a ratio-based framework which is used to evaluate banks’ performance.

Various empirical studies conducted on CAMEL have been conducted. In the work of Said and Saucier (2003), CAMEL was used for evaluating the performance of banks in Japan. Nurazi and Evans’ (2005) indicated liquidity, capital adequacy, management efficiency, asset quality, and bank size significantly explained bank failure. Another study by Gupta (2008) used CAMEL to analyze and rate the performance of Indian private banks from 2003 to 2007. Also, Olweny and Shipo (2011) used the model to assess the factors that determine the failure of banks in Kenya. In another study, Mishra (2012) used the model to provide a comparative analysis of private and public banks in India over the 2000 to 2011 period, and their findings revealed that financial soundness was better for private banks as compared with public banks. In Kenya, Ongore and Kusa (2013) used the CAMEL model in analyzing the financial performance of commercial banks and concluded that corporate governance factors were significant, but macroeconomic factors were not significant.

2.3.2 Capital Adequacy

Capital adequacy is the first dimension of the CAMEL model and indicates the absorbent capacity of banks when there are losses that have not been forecasted. Banks need capital in order to ensure that depositors are confident about their going concern (Reddy, 2012). According to (Athanasoglou et al. 2005) capital is how much own funds are accessible in supporting the operations of a bank, acting as a buffer for adverse periods. Diamond (2000) also noted that the higher the capital a bank operates with the less the chances of it becoming distressed. He also noted that, capital has the setback of becoming an inducer of weak demand for liability and cheap sources of finance. Ratios used in capital adequacy are as follows.

i. Capital adequacy ratio (CAR)

Capital adequacy ratio (CAR) has been identified as a key ratio in assessing the adequacy of capital among banks (Dang, 2011). It also indicates how strong a bank is internally in withstanding future losses, and this ratio is known to have a positive direct influence on banks' profitability as it is a determinant of how a bank can expand into risky but profitable operations (Sangmi and Nazir, 2010). In Ghana, the CAR that banks are required to maintain is 10% (Bank of Ghana, 2013). Mathematically,

$$CAR = (\text{Tier-I} + \text{Tier-II} + \text{Tier-III}) / \text{RWA},$$

where Tier-I capital is made up of equity and reserves. Also, Tier-II capital is made up of five to seven years' tenure debts, hybrid debt capital, revaluation reserves, and preference shares. The Tier-III capital is also made up of short term subordinate debts. And RWA is the aggregation of risk weighted assets.

ii. 2. Debt-Equity Ratio

It is a measure of a banks' financial leverage and an indication of the level of business operation financed from debts vis a vis equity. The ratio is calculated by dividing total deposits and borrowings by the equity and reserves of the bank. The lower this ratio the better the safeguard that depositors have.

iii. Government Securities to Total Investments

It is a measure of the risk level of investments that banks undertake. This is because investing in government securities is the safest debt instrument and yields the lowest returns. As such, the higher the ratio the higher the risk of the banks' investments. It is calculated by finding the ratio of government securities to total investment.

2.3.3 Asset Quality

Asset quality is a measure of how banks create revenue (interest income) through loans and advances, and indicates the kind of debtors of a bank. This is why firms with high credit rating are given loans at a lower rate than those with a low rating (Athanasoglou et al., 2005). Since loans occupy a major part of the assets of a bank, it is the source of its main income. Hence, the quality of a bank's loan portfolio is an indication of its profit level, and where loans become delinquent, losses accrue (Dang, 2011). As such, the appropriate proxy for asset quality has been identified as non-performing loans ratios. Where there are low non-performing loans the financial health of a bank is considered to be stronger (Sangmi and Nazir, 2010). Asset quality is determined by ratios that measure non-performing loans to total assets. Ratios used to measure asset quality are as follows (Reddy, 2012).

i. Gross NPAs to Net Advance

This measures asset quality when management made no provision for losses on non-performing assets (NPA). Thus, gross NPAs is taken as a percentage of net advances and a lower ratio is an indication of higher quality in terms of loans given out. A variant is net NPAs to net advances where management makes provision for losses on NPAs.

ii. Net NPAs to Total Assets

This asset quality ratio is taken as net NPAs to total assets and measures the quality of NPAs after provision for losses. A lower ratio is a higher indication of quality loans.

iii. Total Investments to Total Assets Ratio

As a ratio, total investment to total assets measures how much of assets are tied up in investments which are not operational revenue generating activities, and this indicates the level at which a bank has deployed its assets. A lower ratio indicates that the bank has a lower safeguard against NPAs.

2.3.4 Management Quality

The third parameter on the CAMEL model is management quality which measures the quality of managers and its impact on the profitability of a bank. Management efficiency in generating revenue is brought to view. Management quality is subjective measurement of efficiency of managers. It indicates how managers are able to efficiently deploy the resources at their disposal, reduce operational costs, and maximize income (Rahman et al. in Ilhomovich, 2009; Sangmi and Nazir, 2010). Ratios that are utilized in this dimension include deposit interest expense to total deposits, total advances to total deposits, operating expense as a percentage of total assets, profit per employee, total of risk weighted assets to total assets, and return on net worth.

i. Total advances to Total Deposits

This measures how efficiently managers have converted customer deposits into income earning loans and advances. In addition to term deposits, savings, demand deposits, other receivables are also included in arriving at total deposits.

ii. Profit per Employee

This is a measure of how efficient employees are at a bank and provides information to measure the how strong a banks' network is. It is taken as profit after tax (PAT) divided by the total number of employees, and a higher ratio provides indication of better performance.

iii. Return on Net Worth

Another ratio used for measuring management efficiency is the return on net worth which is calculated by dividing PAT by the average net worth of the bank. It is a profitability measure as well.

2.3.5 Earning Quality

The capability of banks to generate revenue on a regular basis is measured in terms of earning quality. It depicts how banks are able to sustain and grow their earnings into the foreseeable future. However, banks earnings come through non-core activities such as treasury investments. This dimension of the CAMEL model shows the income quality of the firm (Sangmi and Nazir, 2010). Ratios which are used to measure earnings quality are as follows.

i. Spread or Net Interest Margin (NIM) to Total Assets

Net interest margin measures the difference between interest income and interest expense taken as a ratio of total assets. Interest income is made up of dividend earnings as well. Where the ratio is high, it is an indication of better earnings.

ii. Net Profit to Average Assets / Return on Average Capital Employed

This ratio is a measurement of how efficient banks are able to use their assets, and the higher the ratio the better the performance of the bank. It is arrived at by taking the division of net profit and average assets.

iii. Interest Income to Total Income

For banks, their fundamental income is from the interest charges on loans. Thus, this ratio measures how banks are able to generate income from lending. Interest income is made up of income on loans advanced to customers, interests on dividends, and interest earned on deposits with other banks. It is calculated by taking operational interest as a percentage of total income of the bank.

2.3.6 Liquidity

For banking operations, liquidity is a crucial element. Investments and cash form liquid assets which are the major assets that banks have. Liquidity is the last dimension on the CAMEL framework and measures how capable banks would be in meeting financial obligations. The appropriate level of liquidity is crucial to continual growth in earnings. Profitability of banks is improved with a balanced liquidity position, and this places demand of care on managers to be maintain the right level of liquidity for investment and depositors as well. High liquidity is a sign of efficient management of banks. Empirical evidence shows that liquidity has a

positive influence on the profitability of banks (Dang, 2011), though other researchers also have found no relationship between liquidity and profitability (Said and Tumin, 2011). Ratios which are used in this category include total loans to total assets, customer deposits to total assets, liquid assets to total deposits, cash to total assets, and total deposits to total loans (Ilhomovich, 2009; Dang, 2011).

i. Liquid Assets to Total Assets

Components of liquid assets are balances with the Bank of Ghana, money at call, cash in hand, and balances with other banks. It is taking the proportion of liquid assets to total assets. This ratio measures the overall liquidity of a firm.

ii. Liquid Assets to Demand Deposits

Liquid assets to demand deposits helps to assess how a bank will be able to meet obligations within a period. To calculate this ratio, divide liquid assets by demand deposits. The higher the ratio the better the

iii. Liquid Assets to Total Deposits

This ratio is a measurement of a bank's liquid position in relation to its depositors and it is calculated by dividing liquid assets by the total deposits of customers. Total deposits are made up of term deposits, savings, demand deposits, and deposits from other banks (Joshi and Joshi, 2002; Bodla and Verma, 2006; Sisdiya et al., 2008).

2.4 History of Rural and Community Banks in Ghana

Banking activities started earlier in Ghana than in 1953, but it was in that year that Alfred Engleston of Bank of England helped the then government to set up the Bank of Gold Coast. Later, the Bank of Ghana which was a central bank, and Ghana Commercial Banks which operated as the largest monopoly of the accounts of public corporation, were developed from the splitting of the Bank of Gold Coast (Bonney, 2011). Upon the independence of Ghana, Alfred Engleston was appointed as the very first governor of the Bank of Ghana in July 1957. From this period, Bank of Ghana issued the first national currency, cedi, and quickly grew. On the other hand, Ghana Commercial Bank took over the function of acting as the government's bankers and operated the accounts of public corporations and government departments. It opened several branches and moved into new markets all across the country (Anti, 2012). Within the first decade several banks such as Ghana Investment Bank, Agricultural Development Bank, and the Social Security Bank were incorporated and operated as state-owned banks.

However, unfavorable economic conditions in the country in the late 1960s into the 1980s led to the privatization of the banking industry through the joint effort of the government and the IMF by introducing the Economic Recovery Programme (ERP). Liberalization and privatization of institutions and government policies increased economic development because import licenses were discarded and a new Investment Code was issued which provided for the relaxation of restrictive financial and investment policies as a bait to attract private investors (Agwe and-Todd, 2008). New policies were developed and the new legislations such as the Banking Law was enacted in 1989. This paved the way for the incorporation of local bodies which could apply for a banking license. This led to the incorporation of such banks as CAL Bank, Merchant Bank, Allied Bank, ECOBank, and

Metropolitan Bank (Bonney, 2011). Under the Financial Institutions Law 1993 (PNDC Law 328), non-banking financial companies such as finance houses, leasing companies, hire-purchase firms, discount houses and others were also allowed to operate. These non-banking financial institutions provide different kinds of financial assistance and accommodation to small scale business enterprises (Vidal, 1999).

The Banking industry in “Ghana has since 1957 undergone various legislative changes. The Bank of Ghana Ordinance (No.34) of 1957 was repealed by the Bank of Ghana Act (1963), Act 182. This Act was subsequently amended by the Bank of Ghana (Amendment Act) 1965, Act 282). The Bank of Ghana Law, 1992 PNDCL 291 repealed Acts 182 and 282. The current law under which the Bank operates is the Bank of Ghana Act, 2002 (Act 612).” The banking industry has since seen positive development as a result of the Financial Sector Reform Program of 1988. Whereas there were only nine (9) banks in 1988, there are twenty-six (26) licensed banks now, all operating competitively? Ghana has witnessed the establishment and incorporation of new banks like the Ecobank Ghana Limited, the First Atlantic Bank, the Prudential Bank Limited, the Trust Bank and many other foreign banks.

In addition, the introduction of Rural and Community Banking concept by the then Government has added up to the number of financial institutions in the country and these rural and community banks are under the management of ARB Apex Bank, which is the umbrella body for the Rural and Community Banks, thus it supervises and provides administrative support for the 123 rural banks. The number of non-bank financial institutions (NBFIs), especially the deposit taking NBFIs has also increased considerably, offering an ever increasing number of banking products to the public. The 1989 Banking Law (PNDC Law 225) and its successor have helped in no small measure to strengthen the licensing,

regulatory and prudential supervisory powers that the Bank of Ghana has over the banks (Andah and Steel, 2003).

To safeguard the interest of depositors (customers), Bank of Ghana has under Act 673, (the bank Act 2004), been given very extensive powers over all banks in the country. Rural banking concept started in Ghana in 1976 with the establishment of the first rural bank at Agona Nyarkrom in the Central region of Ghana. Since then many rural and community banks have been established across the country in all the ten regions. The concept of rural banking was borrowed from the Philippines as the Government's way of finding solution to the development gap between rural and urban Ghana. The rural and community banks were to provide banking services to the rural dwellers at the country side, where the indigenous commercial banks were reluctant to go, because of the nature of the business operations in these areas (Andah and Steel, 2003). The RCBs were to inculcate the culture of savings and investment in the inhabitants in their areas of operations and also provide lending to entrepreneurs who will want to invest in the following sectors of the economy; mechanized farming, Agro processing, rural industry and the other sectors of the economy where funding was lacking.

2.5 The Role of RCBs in Ghana since Independence

The promotions of rural banking in Ghana has been on every government's agenda since her independence in 1957. The objective has been to improve the standard of living of rural dwellers (Kudiabor, 1974). In the view of Brown (1986), the rural development agenda in Ghana has faced several challenges including the inability of government agencies to coordinate their activities, the high cost of living among rural dwellers, power lobbying groups and others. Recent governments have established new policies geared towards the

provision of sources of funding for rural development and productivity. Investment programs have been instituted to alleviate rural poverty.

The establishment of providing financial services for rural dwellers started in the 1920s with the establishment of cooperatives. These were changed into new forms such as government finance loan schemes in the 1950s, and later the incorporation of special banks like the Agricultural Development Bank in 1960s. However, by the 1970s, concerns about informal financial service providers like moneylenders who were viewed as harmful began to grow. In addition, the failure of providing intermediate credit facilities to rural areas in order to drive economic development was not measuring up to its set standards (Kwawukume, 2003).

Initially, Ghana Commercial Bank and other commercial banks were involved in providing credit facilities to rural areas. However, over time, it was discovered that these commercial banks were accumulating the savings of rural folks for investments in commercial and real estate housing projects in urban areas at the expense of providing rural credits (Kwawukume, 2003). The perception that large banking institutions lack the structural flexibility to meet the banking and investment needs of rural areas led the Bank of Ghana to institute rural and community banking which was already a fast growing phenomenon in other developing countries such as India and Philippines in Asia. Thus, the formation of the first rural bank in July 1976 was a major move towards the development of rural financial service provision. Rural and community banks grew quickly to about 123 in Ghana by the end of 1992 (Kwawukume, 2003).

Formal banking institutions are concerned about providing financial services in the urban areas where they target the middle income group. RCBs on the other hand provide commercial banking services to rural dwellers and their clientele is made up of merchants, traders, farmers and other group of workers who reside in rural communities. RCBs are not

licensed to undertake foreign exchange operations, and their capital requirements are also lower than those of formal banks. Commercial banks are able to provide the financial service needs of some 5% of Ghanaian households which are able to afford high minimum deposits that the few macro banks require. On the other hand, RCBs are able to provide about 60% of the banking needs of households and businesses which lie beyond the operations of the commercial banking sector even though RCBs only account for about 4%. This means that RCBs are crucial in the economic development of Ghana, and their role in poverty alleviation cannot be overemphasized (Steel & Andah, 2003).

2.5.1 Regulatory Framework for RCBs

According to Obeng (2008) “the regulatory framework for the governance and supervision of the rural banks was reformed with the passage of the Association of Rural Banks (ARB) Apex Bank Regulations 2006, (L.I.1825). This framework specifies the core functions of the ARB Apex Bank and provides for the ARB Apex Bank to perform a role similar to a “central bank” for the rural banks subject to the overall supervisory authority of the Bank of Ghana (L.I. 1825) also provides detailed guidance on the relationship between the Bank of Ghana and ARB Apex Bank and the rural and community banks, Association of Rural Banks, government, and micro finance institutions.” The Bank of Ghana also introduced a number of rural banking reforms in February 2008 covering the ownership structure and governance. Minimum reserve requirements, secondary reserve requirements, the loan ratification (Bawumiah, 2010).

2.5.2 Products and Services

Rural and Community banks are unit and autonomous entities set up with the specific objective of meeting the banking needs of the rural people. Broadly speaking, they are:

- i. Mobilize saving in the rural areas
- ii. Provide lending facilities to the rural communities;
- iii. Act as catalyst for rural development with respect to the establishment of rural based industries;
- iv. Promotion of socio-economic infrastructure;
- v. Promotion of commercial activities;

2.5.3 The Need for the Rural Credit

As a nation, the 1992 Constitution provides for a national commitment towards implementing programs and strategies that will help develop the rural areas of the country. A decentralized approach to rural development has been devised to mitigate the challenges that come as a result of lack of effective coordination between government agencies. This is achieved through a decentralized political and administrative jurisdiction in the Ghana from districts to regional levels. This process has enhanced the diffusion of development to rural areas (Obeng, 2008). Evidence points to the difference that this system is making in the lives of rural dwellers as there is the improvement on the amount of resources which are deployed to build schools, market centers, water treatment facilities, health centers, feeder roads, and public places of convenience. In spite of this, there is the need for more rural credit to accelerate development and drastically reduce poverty. Where rural dwellers have access to

credit facilities, they are able to participate in the development of their own areas and communities through business and investment activities (Obeng, 2008).

This means that a policy for the mobilization and redistribution of rural credit has the potential of enhancing their development. Traditional providers of rural credit include non-institutional sources such as borrowings from friends, relatives, moneylenders, commission agents, traders, distributors of production inputs, cooperatives, and consumers as well. According to FAO (1994), rural credit mostly come from friends and relatives. Yet, the amount of credit that non-institutional sources provide is inadequate for implementing the level of rural development needed. This requires that larger institutions that are capable of generating rural credit be explored. Thus, the need to develop rural and community banks in addition to the effort of commercial and investment banks in order to satisfy the needs of rural dwellers.

Commercial and investment banks do not have the necessary motivation to venture into rural credit service provision due to the high administrative costs involved as they would need to distribute small credit facilities across a large area, with the risk of facing high default rate of non-payments which often result from small credits. Also, rural dwellers are unable to provide security that will adequately mitigate the high risk of borrowing. Another challenge is the overreliance of rural credit in its use for agricultural purposes which are very unreliable. These factors push commercial banks to concentrate on urban commercial and industrial credit facilities (Obeng, 2008). The situation has not been different with the creation of Agricultural Development Bank as they too began to concentrate their activities to urban centers at the expense of the rural areas. In combating these numerous challenges, the Bank of Ghana instituted rural and community banks. According to the Association of Rural Banks (1992), “The aims of Rural Banks are:

- i. to stimulate banking habits among rural dwellers;
- ii. to mobilize resources locked up in the rural areas into the banking systems to facilitate development; and
- iii. to identify viable industries in their respective catchments [areas] for investment and development.”

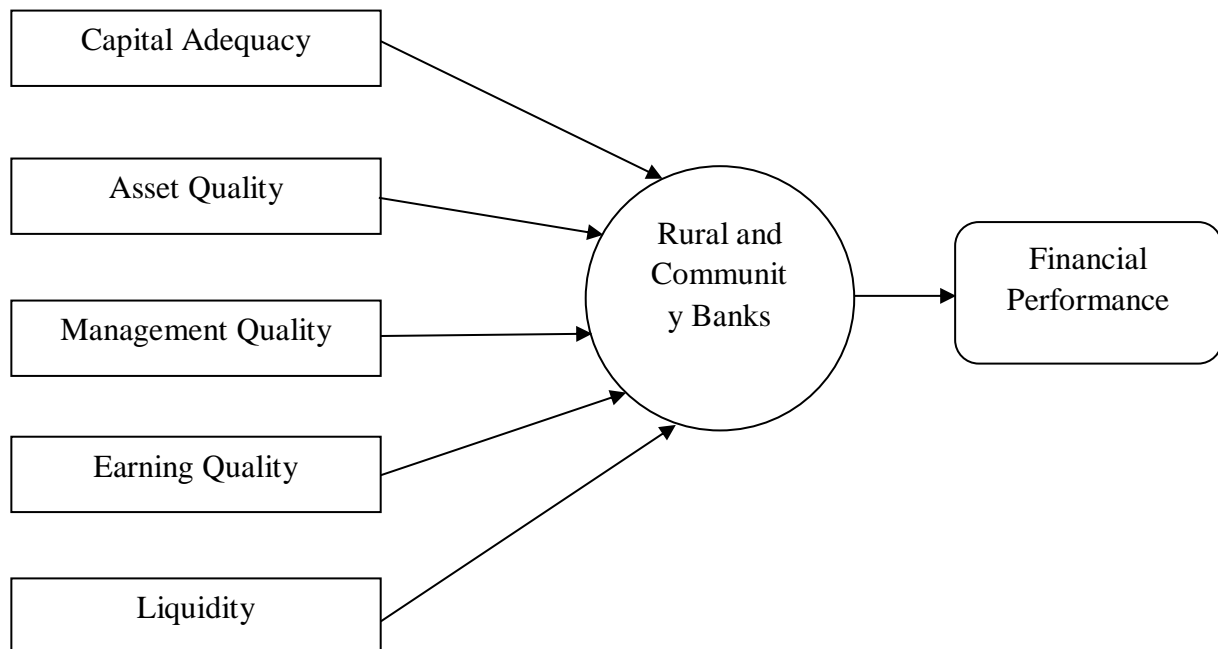
2.6 Problems Facing Rural Banks in Ghana

The institution of rural banking in Ghana has not been without challenges. According to Tetteh and Frempong (2006), though rural banks exist, most entrepreneurs depend on different kinds of credit for their business financing decisions including personal savings, bank loans, trade credit, support from family and relatives, susu schemes, money lenders, and sale of assets. According to the findings of Tetteh and Frempong (2006), SMEs’ major source of funding is from personal savings (32%), followed by family and relatives (12%), and only 3% of their funding comes from formal bank borrowing. Their findings pointed out the inadequacy of the formal banking industry in providing credit relief to SMEs, but it also unveils the failure of the rural banking industry which was meant to address the shortcomings of the formal banking industry. RCBs are unable to support the credit needs of SMEs and this raises a concern about how relevant they are. Tetteh and Frempong (2006) concluded that SMEs have a poor perception about RCBs because they have been considered as having poor customer relations, being bureaucratic and having high interest rates. RCBs are ineffective because they lack access to institutional credit they need to support the activities of SMEs.

2.7 Conceptual Framework

The conceptual framework is developed from the review of literature discussed above and presented in the following diagram (Figure 2.1). It shows the relationship between the independent (Capital Adequacy, Asset Quality, Management Quality, Earning Quality, and Liquidity) and dependent (RCBs financial performance) variables.

Figure 2.1. Conceptual Framework of Financial Performance of RCBs using the CAMEL Model.



Source: Fieldwork, 2019

2.8 Conclusion

From the above literature review, it is clear that the financial performance of RCBs is a critical concern not only for individual households in developing countries, but it is also of concern to entrepreneurs and governments. RCBs occupy an important facet in economic development, as such, measuring the performance of RCBs by means of an internationally acclaimed model such as the CAMEL, is crucial in addressing the efficiency gaps in their operations and this would lead to improved performance. The next chapter presents the framework of methodology within which this study was carried out.

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction

The focus of this chapter is to present the research methodology which identifies the techniques and procedures the study employs in carrying out the study. It details the design of the study, population, sampling method, sample size, data collection techniques, validity and reliability of data, and data analysis techniques. In particular, the methodology defines and governs the parameters within which the study is conducted on the basis of scientific principles.

3.1 Research Design

Research design has to do with the comprehensive plan which highlights the methods used in collecting and analyzing data based on the research objective and questions (Leedy & Ormrod, 2005). The design employed is the blueprint of the study and should be relevant to the purpose of the study and economical in the procedures adopted (Saunders, Lewis and Thornhill, 2009). Research purpose classification include the explanatory, exploratory and descriptive research of which any one can be selected based on the features of the problem of study (Saunders et al, 2000; Yin, 2003; Babbie, 2004). This study seeks to explore the financial performance of RCBs, hence, the exploratory research design was adopted.

In terms of approach, a study could either be qualitative or quantitative. This study utilized the quantitative approach where quantitative data was collected and statistically tested for associations and effect in order to provide insight on the research problem (Sullivan, 2001). Quantitative approach utilizes quantitative techniques, quantifies data and puts them through

statistical analysis but qualitative approach fundamentally seeks to explore unstructured data to produce new understanding of a phenomenon (Malhotra and Birks, 2006).

3.2 Research Population

In the view of Chinsall (1981), population is defined as the group of objects or individuals possessing similar characteristics for which the researcher is interested in surveying. Population represents the complete set of events, individuals or objects with commonalities that are the subject of an investigation (Ngechu, 2004). The purpose of this study is to investigate the financial performance of Rural and Community Banks (RCBs) the Ashanti Region. The population of the study therefore encompass all the RCBs in the Ashanti Region which number up to 25.

3.3 Sampling Technique and Sample Size

The process of selecting a target number of subjects from a population which are used for statistical testing with the view of drawing inferences and conclusions on the entire population supposing the sample size is representative enough (Bryman, 2007). According to Punch (2000) a sample is the section of the entire population drawn randomly and is representative of the population. Sampling is crucial in the process of data collection especially from primary source. The sampling technique employed in this study was the purposive sampling. This method is very useful when there is the need for the researcher's judgement in selecting case selection in order to appropriately address the research questions, and it is good for use with small samples which are purposely selected because they are informative (Saunders, Lewis & Thornhill, 2009). For this research, the sample size is made up of ten RCBs in the Ashanti Region and this represents 40% of the entire population.

3.4 Research Instrument

The data were basically drawn from primary source by administering questionnaires to the teaching staff of the school. The nature of the research required that data be gathered from a primary source. Primary data is defined as consisting of materials that you have gathered yourself through systematic observation, information from archives, the results of questionnaires and interviews and case study which you have compiled (Jankuwics, 2002). Primary data has not been published yet and is more reliable, authentic and objective. Primary data has not been changed or altered by human beings and therefore its validity is greater than secondary data.

3.4.1 Secondary Data

Unlike primary data, secondary data is the data that is derived from different materials like books, annual reports, conference proceedings, and research reports. Secondary data has already been collected by another person and may have been collected for a different purpose other than the one currently under study (Cnossen 1997). This study was based primarily on secondary data.

3.4.2 Data Collection Methods

This study relied heavily on secondary data obtained from the financial statements of the selected RCBs. Particularly, the Statement of Comprehensive Income, the Statement of Financial Position and the Statement of Cash Flow of each of the RCBs was used to collect financial data for the study. Financial statements were reliable sources for this kind of data. In the view of Balgati (2005), the use of cross-sectional data which involves time series generate a robust set of data. For the sake of time limits, ten RCBs out of the 25 covering 40% of the population was used. Data was collected from their annual financial statements for a period

of five-years (2010 to 2014). In total, a balanced panel dataset of 75 firm year observations for ten firms between 2010 and 2014. Thus, a comprehensive and reliable study was conducted.

3.5 Validity of the Research Instrument

In accordance with the purpose of this study, it is crucial to avoid the likelihood of obtaining data that is wrong, hence, Saunders et al (2009) validity and reliability of the instruments should be considered as they determine how credible the study is.

According to Joppe (2000) validity is the extent to which research instruments measure what it purports to measure in producing truthful results. Also, DeVaus (2002) also views validity as the degree at which research instruments measure that which they claim to measure. In order to establish the validity of the study, there is the need to ensure that there are no logical errors when conclusions are drawn (Trochim, 2005). For this study, the validity was ensured as data was gathered directly addresses the research questions. Using financial ratios with universal acceptance to measure performance, the findings of the study reflect the general financial condition of RCBs in the Ashanti Region.

3.5.1 Reliability

Reliability is the degree to which the results which are obtained in a study are consistent over time and how accurately it represents the population of the study (Joppe, 2000). Using similar methodology, once the study can reproduce similar results the research instrument is said to be reliable. Reliability is also a measure of internal and external consistency of a research instrument (Neuman, 2006). Cronbach's alpha would be used to measure the internal consistency. That is, how closely related a set of items are as a group. In social science research like this study, a reliability coefficient of .70 or higher is considered "acceptable".

The validity and reliable of this study is also derived from the fact that the set of data used in calculating the financial ratios are taken from financial statements duly audited by professional accountants regarding the true and fair view of the financial performance and financial position of the RCBs.

3.6 Data Analysis Technique

According to Bernard (1998), data analysis consists of systematically looking for patterns in recorded observations and formulating ideas that account for those patterns. The quantitative data was analyzed with the Statistical Package for Social Science (SPSS) 20.0. The results were presented using descriptive statistics (mean, standard deviation, minimum and maximum). A multiple regression analysis was conducted to determine the impact of independent variables (CAMEL) on the dependent variable (performance). The analysis of data allowed the researcher to provide meaningful information out of the data collected during the study.

In accessing the financial performance of RCBs in the Ashanti Region, the CAMEL model was applied consistent with other such studies (Barr et al., 2002; Baral, 2005; Reddy, 2012; Mishra & Aspal, 2013). In all, six ratios were calculated. The dependent variable was financial performance which was measured by the Return on Assets (ROA). The independent variables of the CAMEL model are listed together with their measurements in Table 3.1 below.

Table 3.1 Variables and Measurements

Variable	Measurement	Expected Sign
<hr/>		
Dependent Variable:		
Return on Assets	Total income to total assets	+ (the higher the better)
Independent variables:		
Capital Adequacy	Total Capital to Total Asset	+ (the higher the better)
Asset Quality	Non-performing loans to total loans	+ (the lower the better)
Management Efficiency	Total Operating Revenue to Total Profit	+ (the higher the better)
Earnings Quality	Operating Expense to Operating Income	+ (the lower the better)
Liquidity	Total Loans to Total Customer Deposit	+ (the lower the better)
<hr/>		

SOURCE AUTHOR 2019

CHAPTER FOUR

PRESENTATION OF FINDINGS AND ANALYSIS

4.0 Introduction

This chapter presents the findings of the financial performance of Rural and Community Banks (RCBs) the Kumasi Metropolis. Descriptive statistics of the independent variable (Return on Assets) is discussed in Section 4.2. Section 4.3 of the chapter presents the descriptive statistics for the independent variables (CAMEL ratios) and this is followed up with correlation results and multiple regression analysis in Section 4.4 and 4.5 respectively. The financial data used in this study was obtained from the annual reports of ten (10) RCBs that were selected for the study. The annual reports covered a period of five years from 2008 to 2014,

4.1 Descriptive Statistics of Dependent Variable

The dependent variable used in the study was financial performance which was measured by the Return on Assets (ROA). Return on Assets was measured by taking total income as a proportion of total assets.

Table 4.1: Descriptive statistics of the dependent variable (ROE)

Dependent Variable	Mean	Std. Dev.	Min	Max
ROA	0.154	0.053	0.100	0.480

ROA represents return on Assets

Source: Fieldwork, 2020

The results in Table 4.1 indicate that the ROA of RCBs in the Ashanti Region averaged 15.4% with a minimum of 10% and a maximum of 48%. According to the results, ROA for these rural banks was highest in 2014 with 20.1%, which was followed by 17.1% in 2013,

and 13.9% in 2012, Return on assets was lowest in 2011 when it decreased by 3% from 13.2% in 2010 to 12.9% in 2011. These findings indicate that the ROA of RCBs in the Ashanti region have been increasing since 2011. Meaning that there has been general improvement in the financial performance of rural and community banks in the region. This finding is consistent with the ROA of local banks in the study of Ntow–Gyamfi and Laryea (2012) was 6.12%; Sangmi and Nazir recorded (2010) 19.36% in India; and Ongore and Kusa (2013) realized 9.5% in Kenya. Flamini et al. (2009) noted that the average ROA in Sub-Saharan Africa (SSA) was about 2%. Thus, the average ROA of RCBs in the Ashanti Region is above the average of the SSA.

Table 4.2: Return on Assets of RCBs for five years

Year	Mean	Std. Dev.	Minimum	Maximum
2010	0.132	0.012	0.116	0.150
2011	0.129	0.017	0.100	0.150
2012	0.139	0.018	0.111	0.175
2013	0.171	0.021	0.155	0.225
2014	0.201	0.099	0.143	0.480
Total	0.154	0.053	0.100	0.480

Source: Fieldwork, 2020

Table 4.3: Descriptive Statistics of Dependent Variables (ROA) for each RCB

Rural Bank	Mean	Std. Dev.	Minimum	Maximum
Amansei Rural Bank	0.131	0.023	0.111	0.157
Atwima Kwanwoma Rural Bank	0.134	0.030	0.100	0.173
Bosomtwe Rural Bank	0.151	0.016	0.133	0.171
Juaben Community Rural Bank	0.147	0.026	0.119	0.180
Kumawuman Rural Bank	0.144	0.011	0.128	0.158
Nwabiagya Rural Bank	0.142	0.017	0.126	0.162
Odotobri Rural Bank	0.213	0.150	0.127	0.480
Okomfo Anokye Rural Bank	0.172	0.043	0.116	0.225
Otuaseken Rural Bank	0.161	0.023	0.141	0.187
Sekyere Rural Bank	0.150	0.017	0.123	0.166

Source: Fieldwork, 2020

The specific financial performance of the individual rural banks is presented in Table 4.3 above. It can be observed that the highest ROA was recorded by Odotobri Rural Bank, followed by Okonfo Anokye Rural Bank and Otuaseken Rural Bank with mean ROA of 21.3%, 17.2%, and 16.1% respectively. However, Amansei Rural Bank, Atwima Kwanwoma Rural Bank and Nwabiagya Rural Bank were the least performing rural banks in terms of their return on assets as these recorded 13.1%, 13.4%, and 14.2% respectively.

4.2 Descriptive Statistics of Independent Variables

The independent variables of the CAMEL model used in the study were: Capital Adequacy measured with total capital to total asset; Asset Quality measured with non-performing loans to total loans; Management Efficiency measured with total operating revenue to total profit; Earnings Quality measured with operating expense to operating income; and Liquidity measured with total loans to total customer deposit. The results of the descriptive statistics for these variables are presented in Table 4.5 below.

Table 4.5: Descriptive Statistics of the independent variables of the CAMEL model

Variables	Mean	Std. Dev.	Minimum	Maximum
<i>Dependent variable: ROA</i>	0.154	0.053	0.100	0.480
<i>Independent variables:</i>				
TC/TA	0.466	0.122	0.225	0.760
NPL/TL	0.073	0.035	0.010	0.150
OR/TP	6.773	1.847	4.578	15.513
OE/OI	0.155	0.031	0.064	0.218
TL/TD	0.715	0.106	0.545	0.971

ROA represents return on assets

TC/TA = total capital to total asset;

NPL/TL = non-performing loans to total loans;

OR/TP = total operating revenue to total profit;

OE/OI = operating expense to operating income;

TL/TD = total loans to total customer deposit.

Source: Fieldwork, 2020

The results indicate that the mean for Capital Adequacy (represented by TC/TA) for the period between 2008 to 2014 was 46.6% with a standard deviation of 0.122. Also the mean for Asset Quality (represented by NPL/TL) was 7.3% and standard deviation was 0.035. According to Vijayakumar (2012), the norm which is accepted internationally is a ratio of 1%. Even though there have been improvements in this ratio, it does not conform to the accepted norm. In addition, Management Efficiency (represented by OR/TP) had a mean of 67.7% and standard deviation of 1.847; Earnings Quality (represented by OE/OI) had a mean of 15.5% and standard deviation of 0.031; and Liquidity (represented by TL/TD) had a mean of 71.5% and standard deviation of 0.106.

From the results presented in Table 4.6 it can be seen that Capital Adequacy was highest in 2013 and lowest in 2011 as the mean was 50.1% and 42.8% respectively. Asset Quality was also best in 2013 and worst in 2011 with 6.1% and 8.1% respectively (the lower the ratio the better the performance). In terms of Management Efficiency, the highest mean was in 2012 (7.51) and the lowest was in 2014 (6.20). For Earnings Quality, the best performance of the RCBs occurred in 2012 with a mean of 14.7% whereas the worse performance occurred in 2014 with a mean of 16.5% (for operating expense to operating income, the lower the ratio the better the performance).

Table 4.6: The Mean and Standard Deviation (SD) of CAMEL ratios of RCBs for five years

Year	TC/TA		NPL/TL		OR/TP		OE/OI		TL/TD	
	Mean	SD.	Mean	SD.	Mean	SD.	Mean	SD.	Mean	SD.
2010	0.439	0.088	0.078	0.038	6.232	1.123	0.165	0.026	0.665	0.076
2011	0.438	0.141	0.081	0.034	7.019	1.994	0.152	0.037	0.680	0.094
2012	0.494	0.148	0.066	0.040	7.508	3.058	0.147	0.041	0.752	0.121
2013	0.501	0.127	0.061	0.035	6.904	1.293	0.149	0.023	0.742	0.095
2014	0.457	0.108	0.078	0.030	6.201	0.968	0.165	0.027	0.735	0.124
Total	0.466	0.122	0.073	0.035	6.773	1.847	0.155	0.031	0.715	0.106

TC/TA = total capital to total asset;

NPL/TL = non-performing loans to total loans;

OR/TP = total operating revenue to total profit;

OE/OI = operating expense to operating income;

TL/TD = total loans to total customer deposit.

Source: Fieldwork, 2020

Table 4.7: Descriptive Statistics of the independent variables (CAMEL ratios) for each RCB

Rural and Community Bank	TC/TA		NPL/TL		OR/TP		OE/OI		TL/TD	
	Mean	SD.	Mean	SD.	Mean	SD.	Mean	SD.	Mean	SD.
Amansei Rural Bank	0.384	0.043	0.066	0.030	5.388	0.507	0.187	0.019	0.602	0.070
Atwima Kwanwoma Rural Bank	0.263	0.008	0.088	0.043	5.940	0.743	0.171	0.022	0.655	0.077
Bosomtwe Rural Bank	0.471	0.046	0.068	0.043	10.213	3.391	0.106	0.032	0.738	0.072
Juaben Community Rural Bank	0.530	0.083	0.064	0.027	5.797	0.667	0.174	0.019	0.832	0.137
Kumawuman Rural Bank	0.551	0.053	0.098	0.041	6.776	0.992	0.150	0.024	0.706	0.068
Nwabiagya Rural Bank	0.583	0.061	0.084	0.031	5.909	0.809	0.172	0.027	0.746	0.079
Odotobri Rural Bank	0.435	0.008	0.060	0.029	6.700	0.345	0.150	0.008	0.825	0.041
Okomfo Anokye Rural Bank	0.649	0.089	0.050	0.042	6.658	1.196	0.154	0.026	0.649	0.089
Otuaseken Rural Bank	0.390	0.097	0.072	0.029	8.535	0.711	0.118	0.010	0.678	0.041
Sekyere Rural Bank	0.405	0.047	0.078	0.035	5.810	0.302	0.173	0.009	0.721	0.133
Total	0.466	0.122	0.073	0.035	6.773	1.847	0.155	0.031	0.715	0.106

TC/TA = total capital to total asset;

NPL/TL = non-performing loans to total loans;

OR/TP = total operating revenue to total profit;

OE/OI = operating expense to operating income;

TL/TD = total loans to total customer deposit.

Source: Fieldwork, 2020

As presented in Table 4.7 above, the capital adequacy of the RCBs the five-year period shows that Okomfo Anokye Rural Bank had the highest mean of 0.649 and Atwima Kwanwoma Rural Bank recorded the lowest mean of 0.263. In terms of asset quality, Okomfo Anokye Rural Bank recorded the lowest mean for non-performing loans to total loans at 0.050 whereas the highest mean of 0.098 was registered by Kumawuman Rural Bank. For management efficiency measured by total operating revenue to total profit, Bosomtwe Rural Bank has the highest mean of 10.21, and the lowest mean of 5.39 was by Anansei Rural Bank. Earnings quality of RCBs was best for Bosomtwe Rural Bank which recorded the lowest operating expense to operating income of 0.106, while Amansei Rural Bank had the highest operating expense to operating income of 0.187. Finally, Juaben Community Rural Bank had the highest mean of 0.832 for total loans to total customer deposit which represented Liquidity, while Amansei Rural Bank had the lowest mean of 0.602.

4.3 Correlation between Independent Variables

The study utilized the Pearson and Spearman rank correlations to examine whether there was any possibility of multicollinearity between the independent variables used to assess the performance of RCBs in the Ashanti Region. The results presented in Table 4.8.

The findings indicate that earnings quality (represented by operating expense to operating income) and management efficiency (represented by total operating revenue to total profit) had the highest level of correlation in the independent variables at 1% level -0.929 and 1% level -1.000 for Pearson and Spearman respectively. Following this is the correlation between liquidity (represented by total loans to total customer deposit) and asset quality (represented by non-performing loans to total loans) at 1% level 0.389 and 1% level 0.410 for Pearson and Spearman respectively. Also, the third highest correlation can be observed between liquidity and ROA at 5% level 0.329 and 1% level 0.422 for Pearson and Spearman respectively. This

study also reports that all the other independent variables used are related with no pairwise correlation exceeding 0.8, indicating the non-likelihood of multicollinearity problem with the multiple regression results interpretation (Kennedy, 2003; Gujarati, 2003) for both Ghanaian and Kenyan listed firms.

Table 4.8: Correlation between Dependent and Independent Variables (i.e. Pearson and Spearman)

	ROA	TC/TA	NPL/TL	OR/P	OE/OI	TL/TD
ROA	1.000	.322*	-0.099	.400**	-.400**	.422**
TC/TA	0.159	1.000	-0.123	0.181	-0.181	.410**
NPL/TL	-0.002	-0.211	1.000	-0.012	0.012	-0.212
OR/P	0.082	0.097	-0.131	1.000	-1.000**	0.278
OE/OI	-0.155	-0.138	0.074	-.929**	1.000	-0.278
TL/TD	.329*	.389**	-0.197	0.198	-0.230	1.000

* Correlation is significant at the 0.05 level (2-tailed).

** Correlation is significant at the 0.01 level (2-tailed).

Pearson correlation is shown below and from the left of the diagonal; Spearman correlation is shown above and from the right of the diagonal.

TC/TA = total capital to total asset;

NPL/TL = non-performing loans to total loans;

OR/TP = total operating revenue to total profit;

OE/OI = operating expense to operating income;

TL/TD = total loans to total customer deposit.

Source: Fieldwork, 2020

4.4 Multiple Regression

This study sought to determine the effect of CAMEL variables on the financial performance of RCBs in the Ashanti Region. In doing this, multivariate regression analysis was employed to investigate the extent to which CAMEL ratios influence RCBs' financial performance and the results are presented in Table 4.9 below.

The results from the study shows that CAMEL variables used in the study had a significant influence on financial performance ($F = 3.120$, $p > F = 0.017$) for the selected RCBs in the Ashanti Region. The p-value which indicates the reliability of the firm characteristics (independent variables) in predicting the financial performance of RCBs is lower than 0.05 and therefore shows that there exists a statistically significant relationship them.

The R^2 shows the amount of variance of the dependent variable (Return on Asset) explained by the independent variables (CAMEL model). It can be seen that the CAMEL model explains 38.53% of the variations in the financial performance of the selected RCBs in the Ashanti Region. This means that the remaining 61.47% of the variations depend on other variables which were not accounted for in this study. The explanatory power of the model is therefore 38.53%. However, the work of Ongore and Kusa (2013) obtained an R^2 of 63.88 in the context of Commercial Banks in Kenya. Also, Awo and Akotey (2012) obtained an R^2 of 99.2% when they studied the financial performance of Naara Rural Bank in Ghana.

Table 4.9: Results of Regression Analysis of Dependent and Independent Variables

ROA	Coef.	Robust Std. Err.	z	P>z	[95% Conf. Interval]	
TC/TA	0.012	0.061	0.190	0.846	-0.111	0.135
NPL/TL	0.069*	0.201	0.340	0.734	-0.336	0.473
OR/TP	-0.011	0.006	- 2.000	0.052	-0.022	0.000
OE/OI	-0.747**	0.329	- 2.270	0.028	-1.410	-0.085
TL/TD	0.151	0.125	1.210	0.232	-0.100	0.403
__cons	0.227***	0.084	2.710	0.010	0.058	0.395

*, ** and *** stand for significance at 10%, 5% and 1%, respectively.

Number of Observ. = 50 F (5, 44) = 3.120 Prob. > F = 0.017

R-squared = 0.3853

ROA represents return on assets;

TC/TA = total capital to total asset;

NPL/TL = non-performing loans to total loans;

OR/TP = total operating revenue to total profit;

OE/OI = operating expense to operating income;

TL/TD = total loans to total customer deposit.

Source: Fieldwork, 2020

4.5 Results of Research Questions

The study seeks to determine how the financial performance of RCBs in the Ashanti region is influenced by the capital adequacy, asset quality, management efficiency, earnings quality, and liquidity (CAMEL model).

4.5.1 Capital Adequacy

As a measure of capital adequacy, this study employed the total capital to total assets ratio. Capital adequacy is a measure of how much capital is needed by RCBs to help them endure risks they face, absorb potential losses, safeguard their debtors and withstand crises (Dang, 2011; Ongore and Kusa, 2013). This study found that capital adequacy had a positive relationship with ROA, however, the relationship was not statistically significant. The findings of this study are in line with those of Tesfai (2015), Ongore and Kusa (2013), and Sangmi and Nazir (2010) who have also identified a positive relation between ROA and capital adequacy. Ongore and Kusa (2013) also established that capital adequacy was significantly related to bank performance. These findings agree with Poudel's (2012) argument that capital adequacy ratio influences Return on assets. This may be an indication that the RCBs selected for this study are non-volatile in their earnings due to leverage.

4.5.2 Asset Quality

Asset quality was measured using non-performing loans to total loans. This ratio is expected to be low as it indicates the financial health of RCBs, hence, the lower the ratio the better the performance (Sangmi and Nazir, 2010; Ongore and Kusa, 2013). According to the findings of this study the relationship between asset quality and ROA was positive and statistically significant ($p < 0.10$). This indicates that good asset quality or low non-performing loans to total assets influences good bank performance. This is consistent with the work of Sangmi and Nazir (2010). However, Ongore and Kusa (2013) noted a negative relationship between ROA and asset quality, though it was significantly related. Tesfai (2015) also found non-performing loans to significantly influence return on assets. Thus, asset quality has significant influence on the financial performance of selected RCBs in the Ashanti Region.

4.5.3 Management Efficiency

The ratio employed in this study to measure management efficiency was total operating revenue to total profit which is consistent with other researchers (Rahman et al. in Ilhomovich, 2009; Sangmi and Nazir, 2010; Ongore and Kusa, 2013). The higher this ratio is, the better the operational efficiency of management in generating income. It can be seen that management efficiency has an inverse relationship with ROA, though the relationship is not statistically significant. This finding is consistent with Ongore and Kusa (2013) who found that management efficiency is positively related ROA. However, the findings of this study is contrary to the findings of Sufian and Chong (2008) who established that management efficiency was strongly related to banks performance.

4.5.4 Earnings Quality

Earnings quality was measured by operating expense to operating income. This study identified that earnings quality is inversely related to RCBs financial performance and the relationship is statistically significant ($p < 0.05$). The findings of this study are contrary to those of Sangmi and Nazir, (2010) and Tesfai (2015) who identified that earnings quality was positively related with financial performance of banks. Also, Vijayakumar (2012) identified that earnings quality was a significant influence on financial performance.

4.5.5 Liquidity

As part of the CAMEL model, liquidity was measured by total loans to total customer deposit. This ratio is a measure of how efficient management is able to convert deposits of customers into loans that generate high earnings (Vijayakumar, 2012). Liquidity is positively related with ROA, though it is not statistically significant. This study confirms the work of Ongore and Kusa (2013) who also found a positive relationship to ROA, with a weak relationship as well. However, Tesfai (2015) found a positive significant relationship between

return on assets and liquidity. Such a situation is possible because liquidity of the RCBs used in this study may be related to safeguarding the obligation of depositors much more than they are committed to the interest of investors. It has been noted by Kamau (2009) that holding high liquidity becomes an opportunity cost for alternative investments which is capable of yielding better returns.

CHAPTER FIVE

SUMMARY OF FINDINGS, RECOMMENDATION AND CONCLUSION

5.0 Introduction

This chapter is a summary of the findings of this research in accordance with the research objective and specific research questions as guidelines. The findings were used as the basis for recommendations and the limitations of the study is also presented.

5.1 Summary of Findings

The aim of this study is to evaluate the financial performance of Rural and Community Banks (RCBs) in the Kumasi Metropolis. Specifically, the study sought to examine the extent to which the CAMEL model (capital adequacy, asset quality, management efficiency, earnings quality and liquidity) influenced the financial performance of RCBs selected for the study.

5.1.1 Financial Performance of RCBs

The dependent variable used to measure financial performance in this study was Return on Asset (ROA). Data used in the study was obtained from the annual financial statements of 10 RCBs for a period of five-years (2010 to 2014). The results indicate that the ROA of RCBs in the Ashanti Region averaged 15.4% with a minimum of 10% and a maximum of 48%. According to the results, ROA for these rural banks was highest in 2014 with 20.1%. Particularly, the highest ROA was recorded by Odotobri Rural Bank, followed by Okonfo Anokye Rural Bank and Otuaseken Rural Bank.

5.1.2 CAMEL Model Performance of RCBs

Five (5) ratios of the CAMEL model were employed as the independent variables in assessing the financial performance of selected RCBs in Kumasi Metropolis. These were capital adequacy measured with total capital to total asset; asset quality measured with non-performing loans to total loans; management efficiency measured with total operating revenue to total profit; earnings quality measured with operating expense to operating income; and liquidity measured with total loans to total customer deposit.

The findings of this study indicate that the performance of RCBs was better in 2013 in terms of their capital adequacy and asset quality; however, in terms of management efficiency, and earnings quality, the best performance of the RCBs occurred in 2012. Particularly, Okomfo Anokye Rural Bank had the best performance in capital adequacy and asset quality. Bosomtwe Rural Bank also had the best performance in terms of management efficiency and earnings quality, and Juaben Community Rural Bank had the best liquidity position over the five-year period.

5.1.3 Effect of CAMEL on Financial Performance of RCBs

The findings of this study indicate that the CAMEL model explains 38.53% of the variations in the financial performance of the selected RCBs in Kumasi Metropolis. This means that the remaining 61.47% of the variations depend on other variables which were not accounted for in this study. The explanatory power of the model is therefore 38.53%.

The regression analysis showed that asset quality and earnings quality were statistically significant in influencing the financial performance of the selected RCBs in Kumasi Metropolis, even though asset quality was positively related to ROA, while earnings quality was negatively related. The remaining variables in the CAMEL (capital adequacy,

management efficiency, and liquidity) were not statistically significance. However, management efficiency was inversely related with ROA.

5.2 Recommendations

Based on the findings, the study recommends the following.

5.2.1 Management Efficiency

The efficiency structure theory relates that when management efficiency is enhanced, it leads to improved financial performance. However, this study identified that management efficiency was inversely related to RCBs performance and it was not significant. It is therefore recommended that RCBs in the Ashanti region should improve their managerial efficiency so they can make crucial decisions which will lead to improved financial performance of the banks.

5.2.2 Internal Controls

It is also recommended that management of RCBs in Kumasi Metropolis should pay due attention to the effective management of their assets in order to improve the asset quality as it is a key measure of financial strength of RCBs. This means that the core banking activities of RCBs which include lending should be improved in order to boost the quality of earnings of the banks as it determines the earning power of RCBs.

Liquidity had no significant influence on the financial performance of RCBs used in this study contrary to the popular view of the link between liquidity and returns. This study therefore recommends that management of RCBs should create internal policies which will improve the liquidity position of the banks through the identification, measurement, monitoring and control of liquid risks in RCBs.

5.2.3 Corporate Governance

The performance of RCBs is also affected by poor operational environments. This study recommends that government and regulatory institutions provide clear financial and nonfinancial regulations such as capital adequacy and qualification of board members and directors, in order to strengthen the corporate governance environment within which RCBs operate.

5.2.4 Capacity Building

It is noted that capacity inadequacy in rural areas affects the performance of RCBs. This study recommends among other things that the government and regulatory agencies should provide adequate capacity building for RCBs as this will lead to positive payoffs. The move towards strengthening the efficiency of RCBs should consider the necessity for capacity building.

5.3 Conclusion

This study sought to examine the effect of CAMEL model ratios on the financial performance of RCBs in Kumasi Metropolis. The it can be concluded from the findings of this study that the financial performance of the selected RCBs has been improving over the five-year period. It can be seen that RCBs in the Kumasi Metropolis have good asset quality and earnings quality. There is the need for RCBs to improve upon their liquidity and management efficiency as a way of enhancing their overall financial efficiency.

5.4 Limitations and Future Research Direction

The following are the limitations within which this study was conducted.

First, this study utilized data from ten (10) selected RCBs in Kumasi Metropolis, and this scope is a major constrain on the ability of the researcher to generalize the findings for all RCBs in the Ashanti Region, and those in Ghana as a whole. Future studies should be conducted using more RCBs and compared with other financial institutions which operate in rural areas.

Another major limitation of this study involves the use of a five-year financial data on the selected RCBs. The data used covers the period of 2008 to 2014. Hence, any uneven trend before or beyond the set period will be the limitations of the study. It is recommended for further studies to be carried out on RCBs using data that spans for more than five years in order to improve the quality of the findings.

The analysis of this study was only based on monetary data, hence, non-monetary factors were not considered in this study. Other researchers could factor non-monetary factors into their studies on RCBs.

Finally, the independent variables used in this study considered only single ratios for each of the CAMEL variables. In all five ratios were used to measure the impact of CAMEL on financial performance which was measured by ROA. Other financial performance ratios such as return of equity (ROE) can be considered in different studies. Also, firm specific characteristics such as the age, size, number of board members, and other macro-economic factors like GDP and inflation can be included in further studies.

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