THE EFFECT OF NON-PERFORMING LOANS ON THE FINANCIAL PERFORMANCE OF SELECTED RURAL BANKS IN THE WESTERN AND ASHANTI REGIONS OF GHANA

By

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A thesis submitted to Department of Accounting and Finance

Kwame Nkrumah University of Science and Technology School of Business

in partial fulfilment of the requirements

for the degree of

MASTER OF BUSINESS ADMINISTRATION (FINANCE -OPTION)
School of Business, KNUST

College of Humanities and Social sciences

August, 2015

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.

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ABSTRACT

This study investigated the effect of non-performing loans on financial performance and trend of incidence of non-performing loans. Secondary data with reference period of 2004-2013 were collected from six selected rural Banks in both the Ashanti and Western Regions of Ghana between. The Ordinary Least Square Regression (OLS) was employed to estimate the effect of non-performing loans on financial performance. The polynomial function was employed to determine the trend of the incidence of non-performing loans. The results of the OLS revealed that non-performing loans, cost-income ratio, loan recovered and total revenue were all statistically significant at 1% significance levels respectively. The liquidity risk was not statistically significant. The non-performing loans and cost-income ratio had a negative influence on financial performance whereas total revenue and loan recovered had a positive effect on financial performance. The polynomial trend analysis revealed that non-performing loans in all the selected banks showed an increasing trend. The study therefore recommends that, the six rural banks should improve their credit management so as to avoid the fall in their profitability

DEDICATION

This dissertation is dedicated to my sweet mum, Madam Susana Esi Atia and my lovely Daddy, Mr. Clement Nsobilla Adariya and also to my Uncle, Mr.Naab Kakora a retire lecturer KNUST   for supporting me in diverse ways in my career development.

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1.1   INTRODUCTION

This chapter is composed of background of the study, research problem, research objectives, and research questions, significance of the research, scope of the research, overview of the methodology and the organization of the research.

1.2   BACKGROUND OF THE STUDY

In Ghana rural banks is believed to have did creditably in their quest to provide service to majority of the population in areas where banking is not part of their culture. Distribution of credit disbursement is one the main activities of every Rural Bank as well as Financial Non-Governmental Organization (FNGOs), Savings and Loans Companies, credit Unions and Microfinance institutions in Ghana and the globe as a whole (J.Obuobi and G.Polio, 2010).

It is commonly demonstrated through the huge fraction the loans occupy in the total operational assets of the financial companies. Recovered loans are thus essential to financial companies in sight of their effect on capacity in lending, Liquidity, profitability as well as earnings of every rural bank. It is believed that rural banks presently deliver financial services to an estimated 15 percent more than the commercial banking sector out of Ghanaian population total as asserted by (J.Obuobi and G.Polio, 2010).

 Arko (2012) reported that large proportion of the loans disbursed by these institutions unfortunately become non-performing and finally result in bad debts which have negative consequences on their overall financial performance. The Non-performing

loans can be defined as those monetary assets from which financial institutions no longer receive interest and/or installment payments as initially or previously scheduled. They are referred to as non-performing due to the fact that the loans stop to create income for the financial institution.

The issue of non-performing loan is becoming a serious problem that impends the sustainability of the various rural banks. The main reasons of the challenge are diverse which is not constant across diverse literature, this assertion is supported by Mombo (2013) who also opined that the deterioration of non-performing loans has been at the pivotal point of affairs of causing bank's distress as well as economic crises in both developing and advance economies. Example can be said of the 2008 global economic crisis. In view of this, it is advisable for financial institutions to develop the means of checking the conduct of borrowers.

It has been observed that since 1990's, borrowers and lenders have significantly increased their management in credit risk, primarily in the developing countries (Elsinger *et al.,* 2006). Consequently, the specialists argued that, financial institutions were obliged to review their lending policies. Assessment of potential borrower's credit risk is the basic efficient responsibilities related to lending this include; monitoring borrower's behavior and compiling management report; gathering receivables as they decrease due and dealing with those who default loans; bearing the risk of default or bad debt; making the credit granting decision in tandem with credit terms and limits and financing the investment in receivables.

1.3   PROBLEM STATEMENT

It is asserted that all over the globe, financial institutions face enormous risks of non-performing loans (NPLs). Financial institutions particularly rural banks are very important not only in providing financial assistance to the low income earners in the society, but also in granting of credit facilities to them. However, just like other financial institutions, rural banks experience numerous cases of non-performing loans. The NPLs negates the profitability of the rural banks. Nonperforming loans are not only argued to harmfully affect the financial performance of rural banks, but they also have other far reaching repercussions. This is due to the fact that, other potential borrowers may be denied to access credit facilities since part of the funds that could be extended as loans by the rural banks are still knotted to NPLs. The non-performing loans also affect the economy of a country which explains the rationale behind the setting of guidelines by the central bank for enabling financial institutions to alleviate NPLs. The importance of NPLs to the financial performance necessitated this study which aimed to found the effects that NPLs have on financial performance of rural banks in Ghana.

1.4   RESEARCH OBJECTIVES

The prime objective of the study is to assess the effect of non-performing loans on financial performance of rural banks in Ghana.

Specific Objectives

1. To estimate the effect of Non-performing loans on financial performance of the selected rural bank?

2. To determine the trend of incidence of Non-performing loans in the selected rural banks?

1.5   RESEARCH QUESTIONS

From the forgoing, the following research questions become pertinent:

1. What is the effect of Non-performing loans on the financial performance of the selected rural banks?

2. What is the trend of occurrence of Non-performing Loans in the selected rural banks?

1.6   SIGNIFICANCE OF THE STUDY

The loan portfolios of the rural banks are principal assets that generate a significant amount of interest income. In determining the financial performance of the rural banks loans play an important role and it can therefore believe that better financial performance comes about as a result of healthy loans disbursed by the rural banks. In view of the significance of healthy loan portfolio, it is imperative that a study be undertook to ascertain the effect of non-performing loans on the financial performances of the rural banks. Outcome of this study would enable Upper Amenfi (UA), Sekyere, Atwima Kwanwoma, Atwima Nwabiagya, Juaben, and Bosomtwe rural banks adopt feasible mechanisms to control the problem of a growing non-performing loan portfolio in the institutions and thereby improve its financial performance and profitability. Secondly, the project would be of benefit to the Ghanaian banking and non-banking financial sectors as a whole since the financial and lending institutions in the country operate within the same environment and deal with customers of similar characteristics.

Thirdly, the project could serve as a source of reference for other related research works in the future. Thus, the study would contribute immensely to the development of rural banks which play a significant role in the economy. This is due to the fact

aside the problems, rural banks has arose worldwide as the effective ways reducing rural poverty with the prospective for far-reaching effect in changing the lives of the rural people.

1.7   SCOPE OF THE STUDY

The study focuses on the non-performing loans in the rural banks in Ghana with particular focus on Upper Amenfi, Sekyere, Atwima Kwanwoma, Atwima Nwabiagya, Juaben, and Bosomtwe rural banks. Thus, the project seeks to establish the effect of non-performing loans on financial performance of the selected rural banks as well as the trend over some year period. The reason for limiting the scope to these rural banks is that they are among the few rural banks which have been contributing significantly to expand the frontiers of rural banks operations in Ghana since 1983. It possesses all the unique characteristics of rural banks, they engage in almost all the activities undertaken by the other rural banks in the country. Additionally, microcredit activities of these rural banks covers several sub-sectors of the economy which make them a model rural banks and therefore suitable rural banks which could be studied and the findings reasonably generalized as what pertains in other rural banks in Ghana. Generally, this research work looks at trend of the NPLs and the effect of the NPLs on the financial performance of the selected rural banks. The reference period selected for this study has also been restricted to 2004-2013. This is to help the study capture the result that reflects the present trend in the operations of the selected rural banks.

1.8   OVERVIEW OF METHODOLOGY

This study employed a descriptive research design, which captured the relevant issues that concerns six selected Rural Banks.

Since these six rural banks are among the rural banks performing creditably in the Ghana club 100 of industries, ascertaining the main objective of the work with the sample selected from them was to give fair generalised and representative responses to the demands of the study.

Purposive sampling was used to select these rural banks. This was employed due to the satisfactorily performance of the rural banks in the Regions and the county as a whole.

Secondary data was sourced from the rural banks annual financial statements.

1.9   ORGANIZATION OF THE STUDY

This study is ordered into chapters of five. The first chapter constitutes the study's background, problem statement, research questions, the study's objective, the study's significance, limitation and scope of the study and the organization of the study. The chapter two presents a review literature on the Evolution of rural banks, definitions and causes of NPLs, performing and NPLs, how loans are classified and provisioning, consequence of NPLs for rural banks, reducing the incidence of NPL and the challenges facing rural Banks. The institutions on which this project is based are Upper Amenfi (UARB), Sekyere, Atwima Kwanwoma, Atwima Nwabiagya, Juaben, and Bosomtwe rural banks. Data for the work would therefore be obtained from sources such as the organization's financial statements and annual reports, credit policy manual and other pertinent documents.

Chapter three describes the research methodology and profile of study area. Here, the research instrument and data collection procedures are outlined. The data analysis, interpretation, and discussions are contained in chapter four. Chapter five provides the summary, conclusions and recommendations of the study.

CHAPTER TWO

LITERATURE REVIEW

2.1 INTRODUCTION

This chapter presents a discussion on the relevant literature reviewed as far as the overview of rural banks in the Ghanaian economy, concept of loan defaulting , the effects of non-performing loans and financial performance of rural banks is concerned. Among the issues discussed include theoretical foundations; the conceptual framework; and the empirical literature reviewed

2.2 OVERVIEW OF RURAL BANKING IN GHANA

Rural banks are believed to be the major suppliers of financial services to people of rural dwellings and represent around half of the total banking openings in Ghana (IFAD, 2008). At the end of 2008, 421 branches of the banks were established, these were head offices exclusive. When the head offices were included it amounted to 548 service delivery locations which spread through-out the country. It is believed that all the executive regions have minimum of one bank, though majority are situated in Central, Eastern, Western and Ashanti.

The Ghanaian Government undertook policy processes to enlarge rural people access to credit. These processes led to the formation of the Agricultural Development Bank (ADB) around 1965. This bank had a special order of given funds to allied and agriculture industries in rural areas and the condition that commercial banks lend at least 20 percent of their loan portfolio for agricultural uses. Afterwards, commercial banks and the Agricultural Development Bank opened branches in rural areas, with an emphasis on rural areas where cocoa is much grown. However, credit provision in the

rural area stayed low; the rural branches of the commercial banks were mainly used to make payments to cocoa growers and collect deposits for loaning in urban centers. Other banking services, like credit, were not given the rural dwellers as initially intended. It is believed that the Commercial banks required the opening of deposit accounts which were difficult and tougher surety to provide loans to rural areas. Majority of the peasant farmers and fishermen had no accounts with the commercial banks, and their asset they have to be used as collateral security were not adequate for commercial lending (Andah and Steel 2003). Hinson *et al*. (2006) and Rajeev *et al.* (2006) reported that ADB's credit delivery and coverage were inadequate. Only 27% of the branches of the Commercial bank were located in the rural areas. The bank was able to lend about 15 % of its total loan disbursed to smallholder farmers. In view of this situation, the Government of Ghana (GoG) resorted to the creation of community banks in the rural settings with the intention of supplying services financial to the inhabitants. Due to aforementioned the BoG sent some group of people to Philippines to learn how banking in the rural areas is done.

It is believed that rural banks are made up of 127 unit banks in Ghana that independently joined together. The Bank of Ghana regulates these banks and thereby forms part of the regulated financial sector in Ghana. The rural banks are believed to be the largest formal financial services providers in the rural areas. They represent about half of the total banking outlets in Ghana (IFAD 2008). The banks had 421 branches during year ended 2008. In total there were 548 branches with the head offices inclusive, their facility delivery points were scattered across the whole nation. All the regions that are believed to administrative such as central, Ashanti as well as Eastern and Western regions have a minimum of one bank. Compared to the

Commercial banks, rural banks are small financial institutions with average share capital of GHc136, 526 (US$105,263), average assets of GHc3.8 million (US$2.4 million), and average deposits of GHc2.3 million (US$1.77 million). However, there is a significant variation in the three indicators.

Seventy five (75) percent of the 127 rural banks own resources between GHS 1 million and GHS 8 million , 20% of them own assets which is less than GHS 1 million, and 5% also own assets over GHS10 million. Likewise, 44% of them own share capital which is less than GHS100, 000 and only 6% own share capital which more than GHS 250,000.As a system, rural banks have earned amazing level in delivering of services and performance financially (IFAD, 2008).

These banks had deposits, GHS343.9million from over 2.8 million customers, loans and advances of GHS 224.7 million with about 680,000 customers by the ending of 2008. More than a few of the rural banks have performed creditably, both within the financial sector as well as the private sector. Some of the rural banks have featured more than once in Club 100. Club 100 is a group of 100 Ghanaian institutions acknowledged every year for excelling in their businesses. Nonetheless, several challenges remain, the performance of 17 out of the 127 rural banks have been rated by Bank of Ghana (BoG) as mediocre, based on capital adequacy. These banks are categorized 5 banks as distressed, among those rural banks categorized as mediocre, 6 of them have negative net worth. The Apex bank which was established to link these banks, with their main objective of providing services to rural banks, is believed not to be fully financially self-sufficient and lack the needed resources to perform it function. The Bank of Ghana (BoG), which has been set aside to supervise the rural

banks, is limited in effectively performing its supervision role due to resource constraints, political and civil society pressures and inadequate allocation of supervisory functions to the Apex Bank.

Rural banks are amalgamated and registered under the Companies Code of 1963 (Act 179) of Ghana as limited companies and shareholders from the local community where the banks operate are required to own it. In the beginning, 43 percent of the shares in the rural banks were owned by Bank of Ghana (BoG) as preference. In 1990's this practice was curtailed. The shareholding levels of for an individual was 10 percent whereas that of the corporate body was 30 percent in the early years of rural banks. More recently, the shareholding levels have been reviewed to 30 percent for an individual and 50 percent for a corporate body. It is also believed that a recognizable group can also own up to 40 percent shares in a bank (Bank of Ghana, 2004).

The rural banks have elected board of directors that forms the governance structure. Board of directors serves as shareholders representatives within the bank. The board supervises the management of the bank. Shareholders of the bank elect the board of directors from the communities where it is situated. Board members are elected during the bank's annual general meetings (AGMs). The election of directors is done based on their professional qualifications and status in the community. The Bank of Ghana validates the individuals that have been nominated by the shareholders before their responsibilities are given to them. The board of directors in their own jurisdiction elects a chairman and a vice chairman from among them. The chief executive officer of the bank in most times serves as the secretary of the board.

The fixed term in office for a board member is three years but can be re-elected for an unlimited number of terms by the shareholders. One-third of the board members need to go on retirement at every AGM but are qualified for re-election, in agreement with the Ghanaian company code.

2.3   THE ASSOCIATION OF RURAL AND COMMUNITY BANKS

In an attempt to address these and other problems that were hampering the smooth operation of rural banks, a suggestion was made by the bank of Ghana to the rural banks to form an association. In 1981, the 31 rural banks emanated together to establish the rural bank association. The name was later changed to the association of rural banks, Ghana. It was registered under the companies code, 1963, (Act, 179), as a non-profit, non-governmental organization limited by guarantee (Asiedu-Mante, 2011).

The aims and objectives of the Association of rural banks as enshrined in its Regulations were as follows:

1. To exchange and provision information on rural banking services in Ghana, to serve as a forum for the discussion of common problems of rural banks and their possible solution.

2. To promote and strengthen cordial relationship among rural banks in Ghana, and achieve the objectives of the rural banking system,

3. To undertake the education of rural communities on the purpose and work of rural banks.

4. To serve as an advocate for the well-being of rural banks in Ghana.

2.4 PERFORMANCE OF RURAL BANKS

Performance of financial institutions is defined by Harker and Zenios (2000) define as an economic performance which can be measured in both short and long-term by several financial indicators such as the Tobin's q-ratios, firm's stock beta and alpha, price-to-earnings ratios.

The financial performance of RCBs is influenced by internal factors or bank-specific factors and external or macroeconomic factors. Studies such as Zaman and Collier (2005) and Lariviere and Martin (1998) have investigated the factors influencing better financial performance of RCBs.

Lariviere and Martin examined three active rural and community banks which have achieved leadership in providing financial services at to millions of rural households and microenterprises at unprecedented levels in Asia. Zaman also undertook an in-depth study in Bangladesh to examine how four renowned rural and Community banks made a great strikes in financial intermediation.

According to Achou and Tenguh (2008), non-performing loans (NPL) has a negative significant influence on banks' profitability. Total asset as a proxy for bank size has been reported by previous empirical studies to have an impact on profitability. Nonetheless, the existing evidence indicates that, the relationship between banks' profitability and total assets (size) is an inconclusive one. For instance, Berger and Udell (1990) reported that when bank increase in size it will help it achieve cost savings. The findings of Berger and Udell (1990) corroborates with that of Shaffer (1985), specifically, Shaffer reported that increase in bank's size lead enhances financial performance through the achievement of economics of scales.

Nonetheless, other empirical studies have reported a negative relationship between banks' total asset (size) and financial performance. For example, Naceur (2003) revealed that, as a result of inefficiencies associated with diseconomies of scale, large banks tend to have lower levels of profit. Buyinza (2010) has confirmed the findings of Naceur (2003) by reporting that bank size has negative statistically significant influence on profitability.

Wong et al. (2007) asserted that cost efficiency, bank consolidation, and the ability of a bank to take on more risk as the main determinants of banks' profitability, whereas market structure, as measured by market concentration, and size were found to have negative statistically significant effect profitability. On the other hand, Okazaki (2007) has a slightly different opinion as his findings show that policy-oriented consolidation has a positive statistically significant impact on deposits, though it may have a decreasing effect on bank's profitability. Clair (2004) established that credit quality, expense control and proper management of lending activities enhance bank's financial performance. The study also reported that interest rates may place significant downward pressure on capital and liquidity, and that non-performing loans reduces profits.

Delis and Papanikolous (2009) employed a partial-parametric model to find out the effect of industry and bank-specific factors and macroeconomic indicators on financial institutions' performance and efficiency. The study discovered that bank size is statistically significant and has a direct relationship with banks' efficiency and performance. Kosak and Zajc (2006) also did an in-depth research into the cost efficiency of banks as a parameter of improved financial performance and growth in the banking sector. Their findings corroborated that of Delis and Papanikolous (2009).

In particular they found a direct relationship between banks' cost efficiency and financial development.

Hansan and Bashir (2003) asserted that given improved financial market system and stable macroeconomic environment, high capital and improved loan–to-asset ratios have positive significant influence on banks financial performance.

In Asia, Malhotra (2002) investigated the effect of location some selected regional rural banks in India financial performance. The empirical study concluded that geographical location of rural banks is not a limiting factor of their financial performance.

Robison and Barry (1977) asserted that loan delinquencies and default as well as low levels of deposits are the main engines that propel liquidity challenges of rural banks. They claimed that banks with high-risk loan portfolios are more efficient than those with low-risk loan portfolios. Robison and Barry further concluded that the level of asset quality and availability of liquidity may help to reduce the risks of rural banks.

5. To place the services of the Association under the care of the bank of Ghana and other organizations both inside and outside Ghana in pursuance of matters relating to rural banking and rural development.

6. To ensure that rural banks are generally seen as instrument of national development in rural areas.

The Association therefore acts as a representative of all rural banks at all levels and in all matters relating to rural banking and the well-being of all rural banks (Asiedu-Mante, 2011).

2.5   THEORETICAL FRAMEWORK

Several theories have been promulgated to explain financial performance. Nevertheless, the theories that explain non-performing loans are scanty. This study will discuss six theories that seek to explain the two concepts. The first two theories explain the need for financial performance and the last four presents need for microfinance lending and reasons why rural banks deviate from lending to the poor.

2.5.1   THE STEWARDSHIP THEORY

The rationale behind the stewardship theory is to lay more emphasis on the agency theory which assumes that there is rigidity between the risk tendency of heads and their subordinates whereby subordinates focus their actions upon alleviating their principal risk at the expense of principals.

The agency theory postulates that owners must identify the existence of this tension and prevent subordinate activity that has a link with moral hazards by monitoring managers and developing strategies that align the interests of subordinates with heads and prevent opportunistic actions by the subordinates.

Stewardship theory on the other hand assumes that leaders act as trustworthy stewards of the organization and work towards the collective good of the constituents in the firm irrespective of the manager's self-centeredness (Donaldson and Davis 1991). The likelihood of moral hazard is assumed because the manager who is considered as the steward chooses to work for the owners and this causes the risk variance between the owner and manager that energies the hidden actions of managers in the owner-agent theory are not acted upon by the steward manager.

The steward manager believes that the owners will equitably share the remaining claims from the firm hence maximization of those claims for the owner maximizes the share of the steward manager. The stewardship theory designates that there is orientation between the managers and owners interest this is due to the fact that the steward managers believe the pursuit of what is best for the organization and their owners are taken even if such actions are not in the steward's immediate self-interest.

This underlying assumption of unity between managers and owners runs counter to the assumption of the self-serving, individualistic, opportunists that organizational economists have offered as the model of firm management in a market system. Stewardship theory also contends that individuals can do away self-interest. In this case, the managers are not motivated by personal or individual goals but rather by the firm (Wesley, 2010).

2.5.2 THE STAKEHOLDER THEORY

The stakeholder theory was proposed based on the argument that apart from stakeholders there are numerous agents with an interest in the movements and deliberations of companies. Stakeholders are said to groups and the beneficiaries of such groups are affected by and their rights are either respected or violated by corporate actions. In addition to shareholders, stakeholders include creditors, customers, employees, suppliers and the communities at large. The Stakeholder theory asserts that businesses have a social obligation that requires them to take into consideration the interests of all parties affected by their actions. Management should not solely consider its shareholders when making decisions pertaining to the organization, but also any individual who is harmed by the business decisions. The stakeholder theory exhibit some views which goes contrary with the classical theory,

the stakeholder theory holds the view that "the aim of any organization is or should be the prosperous of the organization and its key stakeholders (Freeman et al., 2004).

Some of the setbacks with the stakeholder theory lie in the difficulty of considering stakeholders who are believed to be voiceless such as the ecosystem and potential victims or future generations which are believed to be absent. The difficulty of considering the ecosystem as a stakeholder is tangible due to the fact that the majority of the definitions of stakeholders typically treat them as individuals or groups, thereby excluding the ecosystem as a matter of definition because it is not a community or human group as are, for example, consumers, employees and the like (Buchholz and Rosenthal 2004). Philips and Reichart (2000) contend that only humans can be considered as organizational stakeholders and criticize attempts to give status to ecosystem stakeholder.

2.5.3 MISSION DRIFTING THEORY OF MICROFINANCE

The theory of mission drifting suggests that the foremost mission of microfinance institutions is to provide financial services which are affordable to majority of the poor populations around the globe. Provision of affordable financial services therefore entails provision of loans at low interest rates and laying more emphasis on poor clients. But some microfinance institutions find themselves shifting their focus from the poor clients who are more risky to lend to and start lending to corporate or rich clients in their bid to enhance financial performance and avoid high levels of non-performing amount overdue. When this happens, microfinance institutions are said to be drifting from their initial mission of providing affordable financial performance is slowly making microfinance institutions to deviate from their mission of lending money to the low income bracket in the society (winters, 2010).

2.5.4 THE FINANCIAL ACCELERATOR THEORY

This theory seeks to explain how lending and borrowing activities of organizations are largely affected by small economic tremors. This theory depends on the interaction between the external finance premium that arises due to unequal flow of information between borrowers and lenders and economic agents' net worth. Economic agents' net worth can be defined as: the sum of liquid assets plus collateral value of illiquid assets minus outstanding obligations; and the external finance premium can be defined as: the difference between the cost of funds raised externally and opportunity costs internal to the firm (Bernanke *et al.,* 1999). The theory reported that for debt financing, borrowers are motivated to take projects that are more risky. These projects are those that have a high propensity to generate large return, than projects offering low returns. These projects are preferred from borrowers since the firms losses in the case when the project's return is low and are limited to zero by legal regulation. These projects are unfavorable from the lender's point of view since they bear all, or most of, the costs in the case of low project returns. The theory also designates that due to economic tremors, the borrowers may not have the aptitude to borrow and the probability of them avoiding the repayment of their loans or external finance.

2.5.5 CREDIT RATIONING THEORY

This theory suggests that lenders based on prevailing interest rates and available collateral or substitutes for collaterals to control the amount of credit they give out to borrowers. Decision making by lenders to either lend or not to lend is conditional on the kind of surety the borrowers present to them. To avoid riskier investment and the chances of the borrowers not fulfilling their credit obligations, lenders give out loans at low interest rates. The provision of loans based on other alternatives to collateral provides borrowers with an avenue of defaulting from repaying their loans since their

relationship with the lender is not as strong when collateral is involved. The credit rationing theory suggests that interest rate is very significant in determining the amount a financial institution will be willing to lend and determine the ability of the borrower to repay the loan.

2.6 CONCEPTUAL FRAMEWORK

The diagrammatic representation of conceptual framework shows how the variables were related. Loan appraisal credit policy, loan recovery and loan appraisal are independent variables, loan default of loan repayment is dependent variable which depends on the occurrences of the said independent variables.

The dependent variable of this study was loan default which was influenced by various independent variables. The independent variables considered in the study were economic cycles / factor, loan appraisal, credit policies and loan recovery procedures

Independent variables   Dependent variable

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┌─────────────────────────┐              ┌─────────────────────────┐
│  ✓ Loan appraisal        │              │   Loan Defaulting       │
│  ✓ Credit policy         │ ───────────▶ │  (Non-performing        │
│  ✓ Loan recovery         │              │      Loans)             │
│     procedures           │              │                         │
└─────────────────────────┘              └─────────────────────────┘
              Moderating   ▲   Factors
        ┌─────────────────────────────────────┐
        │  ✓  Concrete payment plan            │
        │  ✓ Constructive structural change    │
        │ ✓ Sensitization & education by rural │
        │   banks to their customers on the    │
        │       paying loans on time           │
        └─────────────────────────────────────┘
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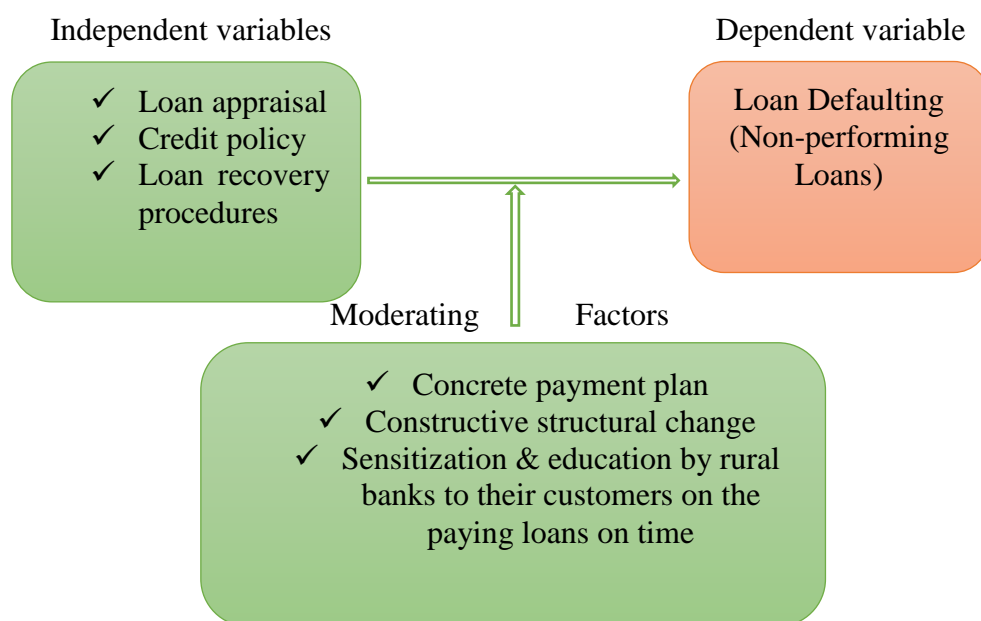
FIGURE 2.1: Conceptual Framework

2.6.1   LOAN POLICIES

Loan policies are believed to influence default of loans to a great extent. Well formulated loan policies are believed to have inversely proportional relationship with loan default. Whereas poor loan policies are believed also to have directly proportional relationship with loan default.

2.6.2   INITIAL LOAN APPRAISALS

Preliminary loan appraisals determine whether a loan will be defaulted or not. The default mostly arises involves when customers use false information or means to acquire loans from the lending institutions. These might also include accepting or giving securities whose values have been impaired and overstated. Some borrowers who might have falsified their past business performance records in order to obtain loans would not be able to repay easily later. It can be ascertained from the above mentioned that initial loan appraisal includes the core five ingredients of loan appraisal. This comprise of tests on accuracy, collaterals, honesty, capacity and cash flow to determine loanee's credit worthiness and the probability of loans default.

2.6.3   LOAN RECOVERY PROCEDURES

The loan recovery procedures employed by various microfinance's can contribute to loans default to a greatest extent. Poor loan recovery procedures for example will create a huge portfolio of debt uncollected thus led to loans default and vice versa

2.6.4   CREDIT POLICIES

At the same time the nature of credit policies including loaning conditions and terms as well as loaning procedures had the long term effect on loan default. The basic

requirements a member will be required to meet to qualify for a loan in the institution determined whether or not that member would honour the loan repayment in future. Liberal, stringent and lenient credit policies had long-term consequences on the loan default. For instance, it is highly likely that lenient and liberal policies would almost automatically create a huge portfolio of loan default.

2.7 DEFINITION OF LOAN DEFAULT

Loan default can be defined as the failure of a borrower to pay his/her loan as at when due (Balogun and Alimi, 1988). Developing countries (i.e. Ghana, Nigeria and the like) should be much concern about high loan default rates in SMEs lending, this is due to the fact that it impact negatively on the financing of SMEs. (Adams and Von-Pischke, 1980) reported that there are numerous negative repercussions associated with loan default among which are: the incapability of the organization to salvage credit to borrowers; reluctance of financial mediators to attend to the requests of lesser loan seekers; and the formation of suspicion. According to Baku and Smith (1998), both borrowers and lenders feel the costs of delinquencies associated with loans. The costs incurred by lenders in delinquency situations, include legal fees, cost of alternative forgone of principal, lost interest and associated costs. In the situation of a borrower, the decision to evade is the opportunity cost between the consequences in lost character from the default against the trade-off of forgoing investments due to working out the current loan.

2.8 CONCEPT OF NON-PERFORMING LOANS

Non-performing loans are defined as those financial assets from which banks no longer receive interest and/or installment payments as initially or beforehand booked.

They referred to as non-performing because the loan ceases to generate income for the bank. According to Choudhury *et al.,* (2002) nonperforming loan is not a multiclass concept. This is mainly because nonperforming loans can be classified into different varieties usually based on the duration it has been overdue. Non-performing loans are viewed as a typical by-product of a financial crisis: they are not a main product of the lending function but rather an accidental occurrence of the lending process, one that has enormous potential to deepen the severity and duration of financial crisis and to complicate macro-economic management (Woo,2000). This is because nonperforming loans can bring down investors' confidence in the banking system, piling up unproductive economic resources even though depreciations are taken care of, and impeding the resource allocation process. In a bank-centered financial system, nonperforming loans can further thwart economic recovery by shrinking operation margin and eroding the capital base of the banks to advance new loans.

This is sometimes referred to as credit crunch (Bernanke *et al.,* 1991). In addition, nonperforming loans if created by the borrowers willingly and left unresolved, might act as a contagious financial malaise by driving good borrowers out of the financial market. Muniappan (2002) asserts that a bank with high level of nonperforming loans is forced to incur carrying costs on non-income yielding assets that not only strike at profitability but also at the capital adequacy of a bank, and in consequence, the bank faces difficulties in augmenting capital resources. Bonin and Huang (2001) indicate that the profitability of banking crises increases if financial risk is not eliminated quickly. Such crises not only lower living standards but can also eliminate many of the achievements of economic reform overnight.

2.9   CONCEPT OF FINANCIAL PERFORMANCE

Financial performance as a part of financial management is very crucial so it cannot be overemphasized. We can do not away with comprehensive financial performance, if not the operation of businesses and organizations may easily shut down. The ability of an organization to achieve success in financial performance is dependent on its ability to manage its financial matters efficiently. It is believed that there is evidence of a positive relationship between financially linked activities such as maintenance of sound financial records, planning, procurement of external and professional finance advice, and successful financial performance (Ismaila, 2011).

To ascertain whether or not organization is able to achieve its targeted financial objectives, it is imperative for it to measure its financial performance. There are variety of measures that organizations can use or adopt in measuring their financial performance. One such category of measures is the liquidity measures that determine the capacity of the business to achieve its financial obligations without disrupting any of its activities. These measures usually rely on the relationship between assets and liabilities of the organization. The other type of measures are solvency measures which determine the amount of borrowed capital used by the business relative the amount of owner's equity capital invested in the business.

This implies that solvency measures provide an indication of the business' ability to repay all indebtedness if all of the assets were sold. Financial performance can also be measured using profitability measures such as Return on Equity (ROE) and Return on Assets (ROA). Profitability measures are important in measuring the extent to which a business can be able to generate profits from the factors of production.

2.10 NPLs AND FINANCIAL PERFORMANCE

Report has been made that the effect of NPLs has not been felt by on the lending institutions but economy as a whole. According Klein (2013), the financial crisis that occurred 2008 had a significant impact on the individual financial institutions financial performances. Most countries in the whole wide world were also affected by this economic down turn. Management of non-performing loans becomes extremely hard by the rural banks when it is allowed to increase to certain levels. When this happens more resources are needed to be invested to cater for the unpaid loans and supplementary costs will be suffered in funding retrieval struggles. Costs and provisions consume a large share of the profit that is made by the rural banks which result to performance retardation.

The size of non-performing loans in rural banks also defines how viable they are. Nonperforming loan serves as is one of the major financial performance determiners of rural banks. The aforementioned justifies how significant non-performing loans are when it comes to determining financial performance levels of the rural banks. According to Mwangi (2012) there is an opposite relationship between banks financial performance and non-performing loans. The study further reported that the higher the non-performing loans the lower financial performance as measured by return on asset and vice versa. The financial performance of a bank is dependent on the management practices pertaining to non-performing loan. This signifies that the best practices in non-performing loan management has the prospect of improving upon the financial performance of that institution.

METHODOLOGY

3.1   INTRODUCTION

The research design employed for this study involves the collection of data from the selected rural banks on Non-performing loans.

Panneerselvam (2004) provided a definition to research methodology which stated it is as a system of models, techniques and procedure employed to find the results of a research problem.

This section discusses on how the research was designed, total population and enumerated sample. It also discusses the instrument that would be used in the data collection, the procedure for the data collection and the method for data analysis.

3.2   RESEARCH DESIGN AND SAMPLING PROCEDURE

The research design is a framework within which business research is conducted (Malhotra and Birks, 2007). It serves as the basic plan for collecting and analyzing data. The descriptive approach is used in undertaken this study. This is because; descriptive research depicts an accurate profile of persons, events or situations.

The study was quantitative in nature. The selection of the six rural banks, as the unit of analysis is motivated by the fact that the banks are among the satisfactory RCBs striving to be among the best RCBs in Ghana but confronted with persistence recording of non-performing loans. The case study approach is adopted in order to gain rich understanding of the context of the research and the processes being enacted.

A descriptive panel data study was conducted to collect quantitative data in all the six selected RCBs. Simple random sampling approach was employed to select the six RCBs from the rural banks in the Western and Ashanti Regions.

3.3   DATA COLLECTION TOOLS AND SOURCE OF DATA

Secondary data collected was collected from six rural banks in the Western and the Ashanti Regions of Ghana. These rural banks were, Upper Amenfi, Sekyere, Atwima Kwanwoma, Atwima Nwabiagya, Juaben, and Bosomtwe

The reference period was from 2004-2013. The data was obtained from Banks annual financial reports (2004-2013).

3.4   METHOD OF DATA ANALYSIS

This section presents the various methods for achieving each objective.

3.4.1   IN ESTIMATING THE EFFECT OF NON-PERFORMING LOANS ON THE FINANCIAL PERFORMANCE

In achieving this objective, simple linear regression model was employed by the researcher to ascertain the effects of Non-performing loans on the financial performance of Upper Amenfi rural bank Ltd as was successfully used by Mwangi (2012).

Times series data was employed for this analysis, the Return on asset (ROA) was used as a proxy for the financial performance which served as the dependent variable and the independents variables were; Non-performing loans (NPL) which was the variable of interest, Loan recovered (LR) which was measured using loans recovered as a

percentage of the loan booked, liquidity risk (LR) of the company, cost-income ratio

and the total revenue (TR) of the company.

The functional form is specified generally as;

$$Y_{it} = \delta_0 + \delta_1 \log NPL_{it} + \delta_2 \log LR_{it} + \delta_3 \log TR_{it} + \delta_4 \log LRISK_{it} + \delta_5 \log CIR_{it} + \mu_{it} \quad (1)$$

Empirical Model for the study is specified as;

$$ROA_{it} = \delta_0 + \delta_1 \log NPLs_{it} + \delta_2 \log LOANREC_{it} + \delta_3 \log TOTALREV_{it}$$
$$+ \delta_4 \log LIQUIDITY - RISK_{it} + \delta_5 COST\_INCOMER_{it} + \mu_{it} \quad (2)$$

TABLE 3.1 Description of Variables

Variable	Interpretation	Measurement	Exp. sign
$\log NPL$	Log of Non-performing loan	Non-performing loans amount	-
$\log LR$	Log of loan recovery rate	Loan recovered as a ratio of the total loan	+
$\log TR$	Log of total revenue	Sum of interest income and non-interest income	+
$\log LRISK$	Log of liquidity risk	Total loan divided by deposits	+
$\log CIR$	Log of cost-income ratio	Operating expenses divided by operating income	-
ROA	Return on asset	Net income divided by total asset	n/a

3.4.2 DETERMINING THE TREND OF THE INCIDENCE OF NON-PERFORMING LOANS

The trend in NPL was estimated using the polynomial function.

$$y = b + C_1 x + C_2 x^2 + C_3 x^3 + C_4 x^4 \quad (3)$$

Where y= Non-performing loans, b is the intercept and $C_1 - C_4$ is the slope

coefficients that measures the constant proportion or relative change in y for a given

absolute change in the value of the regressors. $\quad SSE = \sum(y_i - \bar{y}_i)^2 \quad (4)$

$$SST = (\sum y_i) - (\sum \bar{y}_i)^2 \quad (5)$$

$$R^2 = 1 - \frac{SSE}{SST} \quad (6)$$

Where R^2 is the coefficient of determination, which explains how the change in the regress and (NPL) was jointly described by changes in the regressors.

Where; y_i is the actual $\bar{y}_i$ is the estimated y.

SSE: Is the sum square errors.

SST: Is the sum of squares total.

3.4.3   STATISTICAL TOOL EMPLOYED FOR ANALYSIS

Stata software version 13 and Microsoft excel was employed for analysis. The Stata was employed to estimate the effect of non-performing loans (NPLs) on Bank's financial Performance.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND DISCUSSION

4.1   INTRODUCTION

This section presents the findings achieved from secondary data. The findings are as a result of application of several statistical tools and techniques among which include: graphs showing trends of non-performing loans across years and table depicting the Ordinary Least Squares regression results used to analyze the general information as well as study variables.

4.2   PRESENTATION OF RESULTS

This section presents the results from the various analysis of the study.

4.2.1   ESTIMATION FOR THE EFFECT OF NON-PERFORMING LOAN (NPL) ON BANKS PERFORMANCE

Tables 4.1 and 4.2 show the description of the variables used for the analysis.

Table 4.1 indicates that the mean log of return on asset (ROA) for the banks was 16.9 with a maximum of 8.81, minimum of 2.59 and a standard deviation of 0.195.

Mean log of total revenue of the rural banks across the years was 5.52, with a maximum of 4.49, minimum of 2.64 and a standard deviation of 1.98.The mean log of cost-income ratio was 4.25, with a maximum of 7.46, minimum of 1.55 and a standard deviation of 1.52.

The mean log of non-performing loans of the rural banks was 1.53, with a maximum of 9.74, a minimum of 2.64 and a standard deviation of 2.3. The mean log of loan

recovered was 9.79, with a minimum of 1.54, a maximum of 7.41 and a standard

deviation of 1.52. Mean of log liquidity risk was 9.441, a maximum of 8.15, minimum

of 4.65 and a standard deviation. The highest standard deviation was 1.98 and the

least was 0.144 whereas the highest mean was 16.9 and the least was 1.53.

TABLE 4.1: Description of Variables for the Regression

Variable		Mean	Std.Dev.	Min.	Max	Observations	
Return on Asset	Overall	16.9	0.195	2.59	8.81	N	60
	Between		0.962	1.43	3.07	n	6
	Within		1.73	-1.29	7.43	T	10
Log Total Revenue	Overall	5.522	1.983	2.64	4.49	N	60
	Between		0.243	2.58	8.95	n	6
	Within		0.957	-3.06	4.52	T	10
Log Liquidity Risk	Overall	9.441	1.470	4.65	8.15	N	60
	Between		0.794	2.36	5.40	n	6
	Within		1.29	-1.32	6.67	T	10
Log Non-performing loan	Overall	1.530	2.3	2.64	9.741	N	60
	Between		1.91	1.203	5.222	n	6
	Within		0.16	-2.847	9.176	T	10
Log Loan Recovered	Overall	9.786	1.52	1.54	7.4	N	60
	Between		0.593	3.233	4.77	n	6
	Within		1.411	-7.67	6.678	T	10
Log Cost-Income ratio	Overall	4.253	1.52	1.547	7.46	N	60
	Between		0.144	1.58	7.95	n	6
	Within		1.211	1.470	4.644	N	60

Source: Author's Computation (2015)

The TABLE 4.2 indicates R-squared is equal to 0.8125, this implies that about

81.25% of the changes that occurred in the dependent variable (ROA) was jointly

influenced by the regressors (Non-performing loans, operating expenses, total revenue

and loan-recovered). The adjusted R-squared of 0.7986 also implies that there is about

79.86% assurances that the changes that occurs in the dependent variables is jointly

caused by the independent variables. The F-statistic used to decide whether the model

as a whole has statistically significant predictive capability, that is, whether

the regression sum of squares (SS) is big enough, considering the number of variables needed to achieve it. The null hypothesis states that the model is not statistically significant whiles the alternatives states otherwise.

4.2.1 REGRESSION DIAGNOSTICS CHECKING

Various tests were done to ascertain whether or not some assumptions of the Ordinary Least Squares regression were not violated. This study tested the following assumptions, multicolinearity, heteroscedasticity, serial correlation and specification error. The variance inflation factor and the correlation matrix were employed to test the presence of multicolinearity. The rules governing the variance inflation factor is that if the mean is not greater than 10 then it can be concluded that there is no multicolinearity. For the correlation matrix, multicolinearity is said to be persisting if the relationship coefficient is greater than +/- 0.800.

The heteroscedasticity assumption was tested through the use of Breuch-Pagan test to heteroscedasticity. The null hypothesis state that the residual term has constant variance whereas the null state otherwise. The decision rule is that if the Probability value of the chi-square calculated is not significant at any level (1%, 5% or 10%) do not reject the null hypothesis, otherwise reject.

The serial correlation assumption was also tested through the use of Breuch-Godfrey LM test for the presence of serial correlation. The null hypothesis reports that there is no serial correlation whereas the alternative hypothesis indicates otherwise. The decision rule is that if the probability value of the F-statistic is not significant does not reject the null hypothesis, otherwise reject.

The Ramsey RESET specification error test was employed to test for omitted variables in the model. The decision rule is those if the probability value of the F-statistic is not significant do not reject the null hypothesis, otherwise reject.

TABLE 4.3: Correlation Matrix Test for Multicolinearity

Variable	Log total revenue	Log Cost-income ratio	Log non-performing Loan	Log loan recovered	Log liquidity ratio
Log Total Revenue	1.000				
Log Cost-income ratio	-0.113	1.000			
Log Non-performing Loan	0.120	-0.017	1.000		
Log Loan Recovered	-0.713	-0.112	-0.451	1.000	
Log liquidity ratio	-0.057	-0.325	-0.272	-0.074	1.000

Source: Author's computation (2015)

The TABLE 4.3 depicts the test of multicolinearity among the variables. All the variables were included in the analysis. This is due to the fact that none of them was found highly correlating. The empirical result indicates that none of the coefficients was above +/-0.800.

TABLE 4.4: Variance Inflation Approach to Multicolinearity

Variable	VIF	1/VIF
Log loan recovered	3.15	0.317
Log total revenue	2.53	0.395
Log Non-performing Loan	1.45	0.690
Log cost-income ratio	1.14	0.881
Log liquidity risk	2.10	0.476
Mean VIF	2.07	

Source: Author's Computation (2015)

The TABLE 4.4 indicates the VIF test to multicolinearity. Since the mean VIF is less than 10, it implies that there is no multicolinearity among the independent variables.

TABLE 4.5: Result of the Breusch-Pagan Test For Heteroscedasticity

Variable	Chi(1)	Prob>Chi(2)
	0.82	0.366

Source: Author's Computation (2015)

The TABLE 4.5 indicates the Breusch-pagan test for heteroscedasticity. The empirical result indicates that there is no heteroscedasticity within the model since the probability value of the Chi-square statistic is not statistically significant.

TABLE 4.6: Result of the Ramsey Reset Specification Error for Omitted Variable

Variable	F(3,51)	Prob>F
	1.85	0.149

Source: Author's Computation

The TABLE 4.6 indicates Ramsey RESET test for omitted variable. The null hypothesis of no omitted variables is not reject. This is due to the fact that the probability value of the F-calculated is not significant at any level.

TABLE 4.7: Result Of the Breusch-Godfrey Test for Serial Correlation

Variable	Chi(2)	Prob>Chi(2)
	1.326	0.123

Source: Author's Computation (2015)

The TABLE 4.7 indicates the result from the test for serial correlation. The null hypothesis which states that there is no evidence of the presence of serial correlation cannot be rejected. This is due to the fact that the probability value of the chi-square calculated is not significant at any level.

TABLE 4.2: OLS Results for the Effect of Non-Performing Loans on Bank's Financial Performance (Dependent: Return On Asset (ROA)

Variables	Parameters	T-statistic	P-value
Log of Non-performing loan	-0.049	-2.99	0.005***
Log of cost-income ratio	-0.947	-11.42	0.000***
Log of total revenue	1.152	3.15	0.003***
Log of loan recovered	0.088	2.85	0.007***
Log of Liquidity risk	0.079	1.58	0.123
Constant Term	-44.985	-8.22	0.000

*, *** indicates 10% and 1% significant levels
Number of Obs: 60   F $(4, 54)$ = 58.49 Prob> F = 0.000 R^2 = 0.8125
Adjusted R-squared = 0.7986

The decision rule is that if F-statistic is statistically significant or exceeds F-critical from the statistical table reject the null hypothesis, otherwise do not reject. Since the empirical model produced prob>F to be statistically significant at less than 1%, the study rejected the null hypothesis. And concluded that the model specified best fits the analysis.

The empirical result shows that, non-performing loans had a negative statistically significant (1%) influence on the return on asset. Empirically, this implies that 1% increase in the non-performing loans of the banks will lead to 0.049% decrease in the return of asset of the banks all things being equal. The empirical result is consistent with the study's expectation which stated that there is a negative correlation amongst NPLs and financial performance (return on asset) of the bank. The empirical result was also consistent with Tracey and Leon (2011) who revealed a negative relationship between non-performing loans and financial performance.

Cost income ratio had a negative statistically significant (1%) effect on return on asset. Empirically, this implies that 1% increase in operating expenses leads to 0.947% decrease in financial performance (ROA). The empirical results were consistent with the studies expectation which stated there is a negative relationship between cost-income ratio and financial performance. This empirical result corroborate with Mathuva (2009) who reported a negative relationship between cost-income ratio and profitability in Kenya.

This can be interpreted based in the fact that although rural banks needs to incur some expenses to make gains or profit too much of it without a return is detrimental. This empirical result is consistent with Mombo (2013) who revealed a negative relationship between cost-income ratio of banks and financial performance.

Total revenue had a positive statistically significant (1%) effect on return on asset. Empirically, this implies that 1% increase in the total revenues of the rural banks will lead to 1.152% increase in the return on asset (financial performance). The empirical result was consistent with study's expectation which stated that there is a positive relationship between total revenue and financial performance. The empirical result is consistent with Mombo (2013) who revealed a positive correlation between financial performance and total revenue of banks.

Loan recovered had a statistically significant (at 1% significance level). This implies that in statistical term it had effect on financial performance. The empirical result implies that 1 percent-point increase in the loan recovery of the rural banks leads to 0.088 percent-point increase in financial performance. However, it was consistent with the study's expectation which stated that there is a positive relationship between

loan covered by the rural banks and financial performance. This can be explained based on the fact that, as more loans are recovered by the rural banks the money can be channeled into other areas or loan to other potential customers which will increase their profitability. This empirical result is consistent with Mombo (2013) who revealed a positive correlation between financial performance and total loan recovered by banks.

Liquidity ratio was not statistically significant at any level. This implies that statistically wise liquidity had no significant influence on the financial performance of the selected rural banks. Nonetheless, it sign corroborates with the studies expectation, which hypothesized a positive relationship between liquidity ratio and financial performance. The result is consistent with Al-Khouri (2011) who reported a positive relationship between liquidity risk and ROA. It is also consistent with Ongore and Kusa (2013) who reported a positive relationship between liquidity risk and ROA.

4.3   TREND OF NON-PERFORMING LOANS FROM (2004-2013)

This section presents the trends of non-performing loan in the rural banks surveyed.

TABLE 4.8: Trends of Non-Performing Loans Upper Amenfi Rural Bank (2004-2013)

Item/ Year	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Loan	6,777,550	30,521,568	39,324,617	47,027,421	49,369,880	96,964,740	216,841,608	36,116,882	39,157,482	43,159,682
NPL	232,121	839,500	1,821,012	5,652,241	6,856,562	5,862,211	6,562,232	5,652,462	6,232,201	7,522,210
Ratio	3.42%	2.75%	4.63%	12.02%	13.89%	6.05%	3.03%	15.65%	15.92%	17.43%

Source: Author's computation (2015)

The TABLE 4.8 indicates the loan granted by the Upper rural bank from the period of 2004-2013 as well as non-performing loan and ratio of the loan granted to non-

performing. The empirical results indicate the in the year ended 2000, non-performing was 3.42% of the total loan granted. In the year ended 2005 the ratio decreased to 2.75%, it rises to 4.63% in 2006. In 2007, it increased to about 12.03% of the total loan. The non-performing loan increased to 13.89% in the year 2008, it reduced in the years ended 2009 and 2010 to about 6.05% and 3.03% respectively. The Upper Amenfi rural bank recorded the highest non-performing loan from year ended 2012 to 2013. The trend of the non-performing loan across the years is presented in the figure 4.1

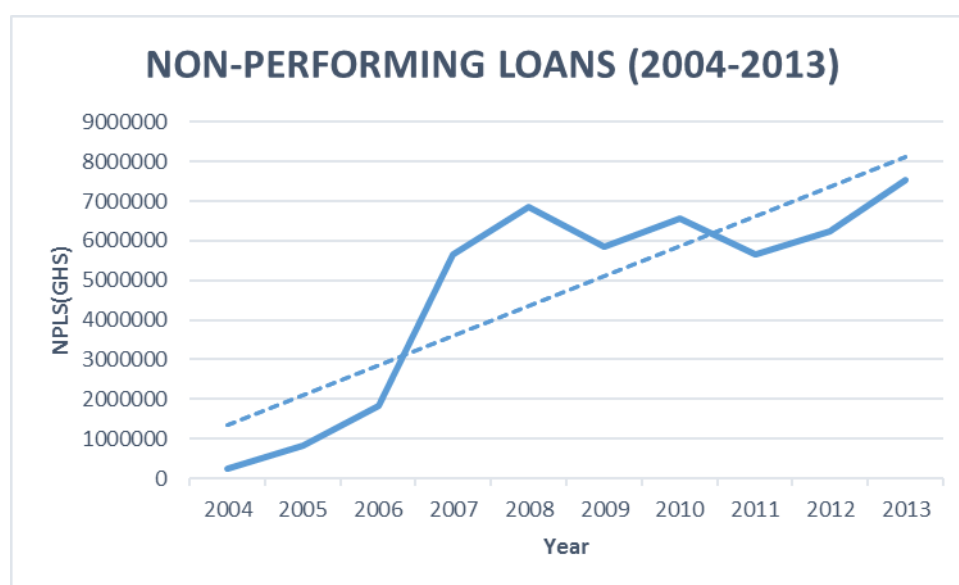**FIGURE 4.1: Trend of Non-Performing Loans (Upper Amenfi Rural Bank)**

TABLE 4.9: Trends of Non-Performing Loans (Atwima Kwanwoma Rural Bank) (2004-2013)

Item/ Year	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Loan	2,895,936	27794538	28799420	29799480	13217424	10683047	91810901	20179992	14161251	38101260
NPL	138678	1952309	1790892	984427	498740.6	389984.2	2686990	1048087	699989.1	3096209
Ratio	4.79%	7.02%	6.22%	3.30%	3.77%	3.65%	2.93%	5.19%	4.94%	8.13%

Source: Author's Computation (2015)

The TABLE 4.9 indicates the loan granted by the Atwima Kwanwoma rural bank from the year ended 2004-2013 as well as non-performing loan and ratio of the loan granted to non-performing. The empirical results indicate the in the year ended 2000, non-performing was 4.79% of the total loan granted. In the year ended 2005 the ratio increased to 7.02%, it decreased by 0.8% in the year 2006. In the year 2007, it shown a decrease to about 3.30%, it increased again in the year ended 2008 to about 3.77% and 3.03%. The Atwima Kwanwoma rural bank recorded the highest (8.13%) non-performing loan from year ended 2013. The trend of the non-performing loan across the years is presented in the figure 4.2

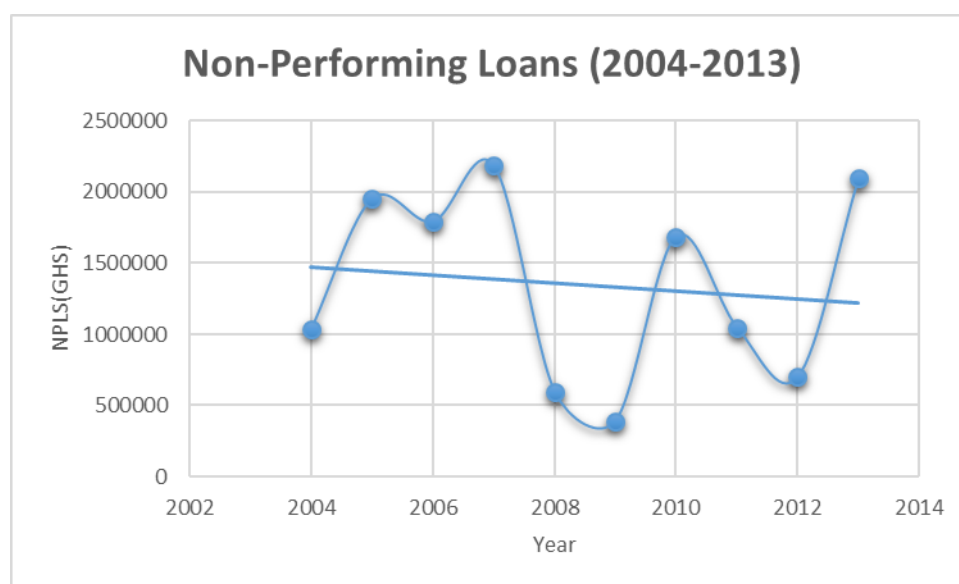**FIGURE 4.2: Trend of Non-Performing Loans (Atwima Kwanwoma Rural Bank)**

TABLE 4.10: Trends of Non-Performing Loans Atwima Nwabiagya Rural Bank (2004-2013)

Item/ Year	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Loan	16384000	21163860	34163900	16421396	9011689	9602596	11542596	26231440	23681658	58164740
NPL	360305	720674	1081043	1241412	232034.9	343105.10	506621.40	1782888	1637054	4703626
Ratio	2.20%	3.41%	3.16%.	7.56%	2.57%	3.57%	4.39%	6.80%	6.91%	8.09%

The TABLE 4.10 indicates the loan granted by the Upper rural bank from the period of 2004-2013 as well as non-performing loan and ratio of the loan granted to non-performing. The empirical results indicate the in the year ended 2000, non-performing was 2.20%. In the year ended 2005 the ratio increase to about 3.41%, it decreased to about 3.16% in 2006. In 2007, it increased to about 7.56% of the total loan; it reduced in the year ended 2008 (2.57%). It showed an increase in the year ended 2009. The Upper Amenfi rural bank recorded the highest non-performing loan from year ended 2013. The trend of the non-performing loan across the years is presented in the FIGURE 4.3.

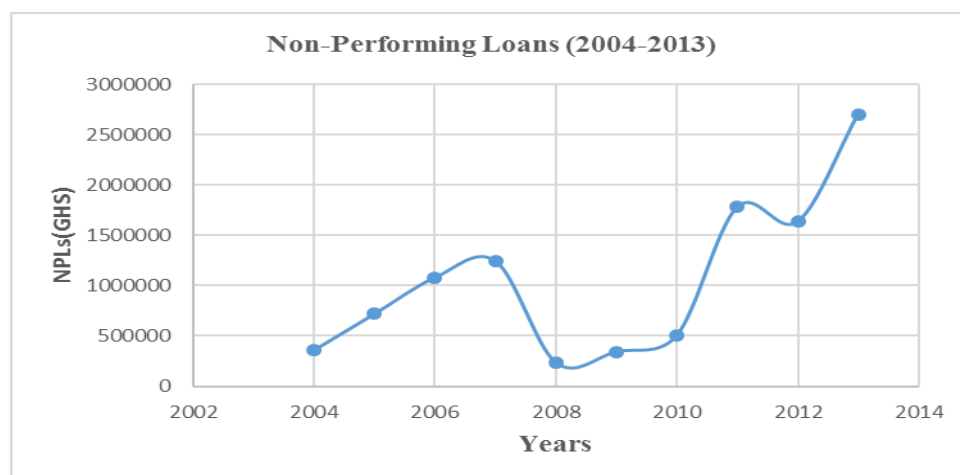**FIGURE 4.3: Trends Of Non-Performing Loans Nwabiagya Rural Bank (2004-2013)**

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TABLE 4.11: Trend Of Non-Performing Loans (Sekyere Rural Bank)

Item/ Year	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Loan	15497000	31122000	75846747	62372000	6273804.12	62348901	7377789.15	22312487	119750080	156122458
NPL	665582	1331164	4996747	4066203	206480.82	3874160.32	218984.94	1132465	7990211.54	9096655
Ratio	4.29%	4.28%	6.59%	6.51%	3.29%	6.21%	2.97%	5.08%	6.67%	5.82%

Source: Author's computation (2015)

The TABLE 4.11 indicates the loan granted by the Sekyere rural bank from the period of 2004-2013 as well as non-performing loan and ratio of the loan granted to non-performing. The empirical results indicate the in 2000, non-performing was 4.29% of the total loan granted. In 2005, the ratio decreased to 4.28%, it rises to 6.59% in the year ended 2006. In the year ended 2007 it increased to about 6.51% of the total loan, it reduced in the years ended 2008 to about 3.29%. The rural bank recorded the highest non-performing loan in the year ended 2012. The trend of the non-performing loan across the years is presented in the figure 4.4

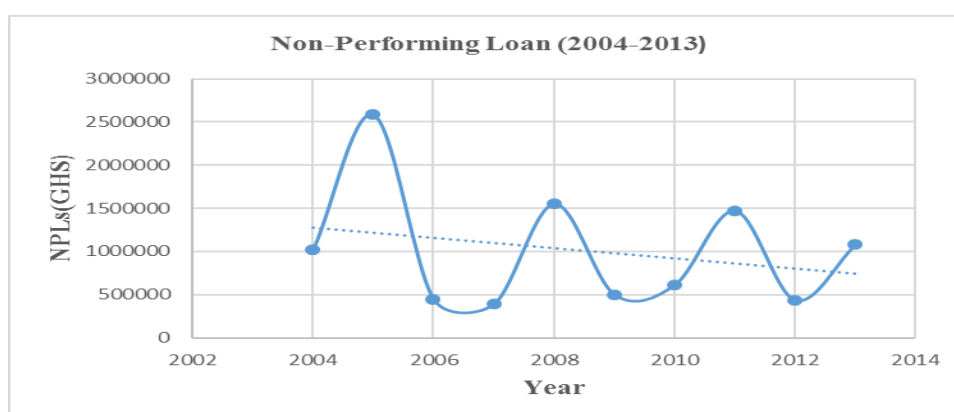**FIGURE 4.4: Trend of Non-Performing Loans (Sekyere Rural Bank)**
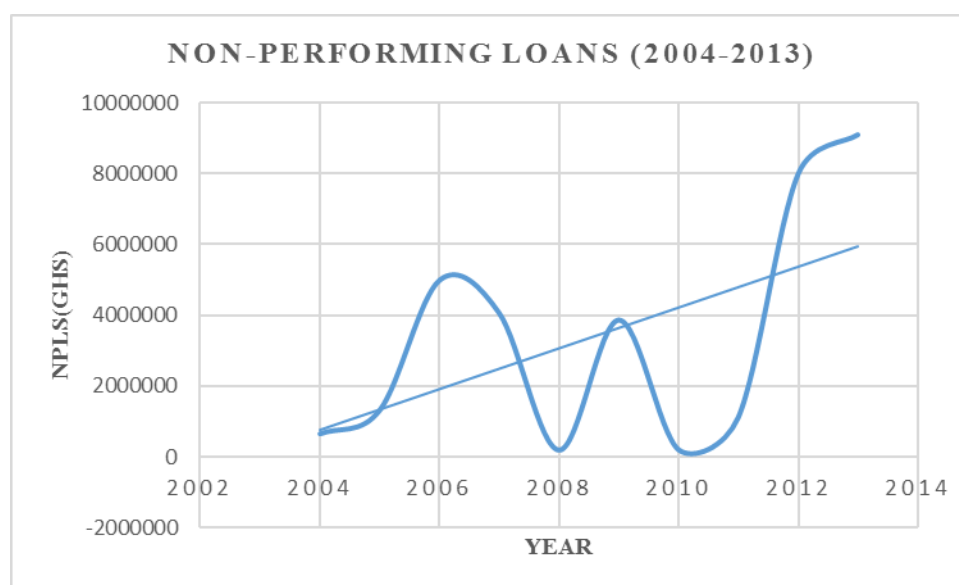
The TABLE 4.12 indicates the loan granted by the Bosomtwe rural bank from the period of 2004-2013 as well as non-performing loan and ratio of the loan granted to non-performing. The empirical results indicate the in the year ended 2000, non-performing was 2.03% of the total loan granted. In the year ended 2005 the ratio increased to 4.23%, it rises to 8.69% in the year ended 2006. In the year ended 2007 it decreased to about 4.09% of the total loan, it increased again in the years ended 2008 and 2009 to about 6.57% and 7.57% respectively.

TABLE 4.12: Trend of Non-Performing Loans (Bosomtwe Rural Bank)

Item/ Year	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Loan	49974110	61102691	5144037	9492779	5354606.1	5304923.5	5964488	40061707	12087210	12505407
NPL	1015360.8	2584360.2	447399.2	388425.8	351842.03	401792.75	412540.27	1473168.2	436399.63	1079210
Ratio	2.03%	4.23%	8.69%	4.09%	6.57%	7.57%	6.91%	3.68	3.6%	8.63%

It decreased again to 6.91% in the year ended 2010, in the years ended 2011 to 2012 it decreased to about 3.68% and 3.60% respectively. The non-performing loan rise again to 8.63% in the year ended 20. The trend of the non-performing loan across the years is presented in the figure 4.1.

**FIGURE 4.5: Trend of Non-Performing Loans (Bosomtwe Rural Bank)**

The TABLE 4.13 indicates the loan granted by the Juaben rural bank from the period of 2004-2013 as well as non-performing loan and ratio of the loan granted to non-performing. The empirical results indicate the in the year ended 2000, non-performing of the bank was 6.65 %. In the year ended 2005 the ratio increased to 9.53%, it decreased to 4.29% in the year ended 2006. In the year ended 2007 it decreased to about 3.22%, it reduced in the years ended 2008 to about 3.12%.

TABLE 4.13: Trend of Non-Performing Loans (Juaben Rural Bank)

Item/Year	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Loan	2867614	7113699	13058218	5951859	6762615	7388095	53820634	16371549	84392446	73392116
NPL	190615	677974	560277	191536	210799	422758	1238929	434657	1747919	2097919
Ratio	6.65%	9.53%	4.29%	3.22%	3.12%	5.72%	2.30%	2.65%	2.07%	2.85%

It increased again the year ended 2009 to about 5.72%. It again showed a decrease in the year 2010 to about 2.30%. The non-performing loan of the bank was recorded to be 2.85% in the year ended 2013. The trend of the non-performing loan across the years is presented in the figure 4.4

FIGURE 4.6: Trend of Non-Performing Loans (Juaben Rural Bank)
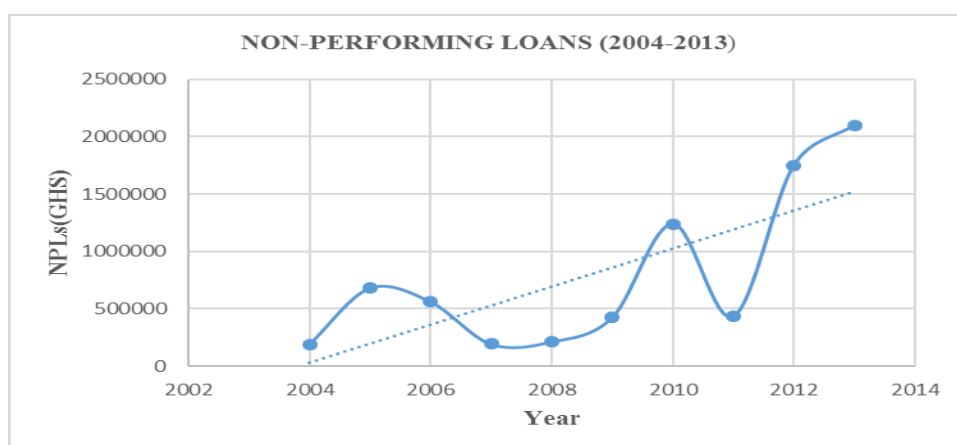
CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATION

5.1   INTRODUCTION

The chapter presents the summary of the findings of the study, draws conclusion and makes policy recommendations based on the findings of the study. Summary of findings begins followed by conclusion two.

5.2   SUMMARY OF THE FINDINGS

This research was carried out to evaluate the consequence of NPL on financial performance of the selected rural banks located in the Ashanti and Western Regions of Ghana. Secondary data were employed for analysis in this study. The data collected was from 2004-2013. The variables include loan recovered, non-performing loan, total revenue, operating expenses. The data was sourced from the banks' annual reports.

In estimating the effect of non-performing loans on financial performance of the selected rural banks, the empirical results showed that; log non-performing loan, log cost-income ratio, log total revenue and log loan recovered were found to be statistically significant at 1% (0.01) significance levels respectively. The log of liquidity risk was not statistically significant although it was consistent with the study's expectation. Moreover, log non-performing loan and cost-income ratio had a negative relationship with the financial performance. The direction of the sign of both the log non-performing loan and log cost-income ratio corroborated with the study's expectation. The empirical results indicated that increase in any of these variables will

cause a reduction in the performance of the enumerated rural banks financially whereas log loan recovered; log total revenue had a positive relationship with the financial performance. It was also consistent with the study's expectation. This implies that increase loan recovery and total revenue leads to increase in the financial performances of the banks.

In determining the trend of non-performing loans of the selected rural banks across the years of review, the empirical results revealed that the non-performing loans over the years have being following an increasing trend in the selected rural banks.

5.3   CONCLUSION

It can be concluded based on the empirical results that NPLs have a negative statistically significant influence on the financial performance in the selected rural banks. This signifies that the greater the NPL, the lower the profit of the selected rural banks. The results of the OLS revealed that non-performing loans, cost-income ratio, loan recovered and total revenue were all statistically significant at 1% significance levels respectively. The liquidity risk was not statistically significant. The non-performing loans and cost-income ratio had a negative influence on financial performance whereas total revenue and loan recovered had a positive effect on financial performance. The polynomial trend analysis revealed that non-performing loans in all the selected banks showed an increasing trend.

5.4 POLICY RECOMMENDATION

Based on the above findings are following recommendations are made;

Firstly, it is imperative for these rural banks to put in place suitable credit management policies to help in building of quality loan book that will not result to high volumes of non-performing loans.

Secondly, the six rural banks should improve their credit risk management so as to avoid the fall in their profitability.

Thirdly, the six rural banks should accrue a rational amalgamation of their capital structure and allocate them correctly to minimize financial loss. This will help them maximize their profits.

Fourthly, Bank of Ghana and the government of Ghana must control not only interest and inflation rates that influences the activities of the rural banks, but also items that are off the banks' balance sheet and additional causes by setting up standards for the maximum risk as well as minimum amount of total return for each factor of risk and return.

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