UNIVERSITY OF CAPE COAST

LOAN DEFAULT ON FINANCIAL PERFORMANCE OF KAKUM RURAL BANK

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BY

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DECLARATION

Candidate's Declaration

I hereby declare that this dissertation is the result of my own original research and that no part of it has been presented for another degree in this university or elsewhere.

Candidate's Signature …… … Date ……..…

NAME: Ebenezer Kwesi Ahinaquah

Supervisor's Declaration

I hereby declare that the preparation and presentation of the dissertation was supervised in accordance with the guidelines on supervision of dissertation laid down by the University of Cape Coast.

Supervisor's Signature…….... Date……

Name: Mr. Isaac Christopher Otoo

ABSTRACT

When repaid with interest, credit is a main operation of banks that produces a significant percentage of their revenue. However, when the majority of the loans disbursed are non-performing, this poses a substantial danger to the bank's viability. The study's major goal is to look at the influence of nonperforming loans on Kakum Rural Bank's financial performance. The study's specific objectives were looking at the trajectory of non-performing loans from 2015 to 2019, determining the reasons of non-performing loans at Kakum Rural Bank, and studying the increase and impact of bad loans on general operations. The research used a descriptive and explanatory technique in its research design. A total of 76 people were chosen from the Bank's credit officers, branch managers, operations staffs, management staff, and clients, and information was gathered using questionnaire and interview guide. The researcher used panel regression or the longitudinal model. According to the research, the bank's non-performing loans increased from 2016 to 2019. Again, the analysis found that inadequate monitoring and a lack of credit officer logistics were the root reasons of non-performing loans. The research also shows that debt and ROA have a strong and favorable relationship. Non-performing loans have a positive and significant impact on a bank's financial performance, according to the study. According to the research, banks should develop a credit monitoring team that would regularly monitor borrowers' behavior, and bank management should get the technical and expertise necessary to analyze the trend and bad loans cases in order to take the necessary measures.

KEYWORDS

Loan Default

Financial Performance

Non-Performance Loan

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DEDICATION

This study is dedicated to Mr. Joseph Ahinaquah and Mrs Grace Aba Ahinaquah

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LIST OF ACRONYMS

NPL	Non-Performing Loans
VAR	Vector Auto-Regression
GDP	Gross Domestic Product
ROA	Return on Asset
ROE	Return on Equity
SPSS	Statistical Package for Social Science
KRB	Kakum Rural Bank
LATDR	Loans and Advances to Deposit Ratio

CHAPTER ONE

INTRODUCTION

Since its inception in 1976, the Ghanaian rural banking sector has expanded tremendously with regards to assets and contribution to the nation's economic development. Regarding ownership structure, management structure, and operational elements, it has distinctive qualities. Rural Banks are community-run financial institutions, in contrast to the big commercial banks. They benefit geographically from this, which makes effective management easier.

The Bank of Ghana (BoG initiated the rural banking concept a number of years ago when it started talking to stakeholders about how to raise money for useful endeavors and bring banking to rural communities in Ghana. ARB Apex Bank Limited was certified by the former Banking Law, 1989 (PNDCL 225), which was rescinded under the new Banking Act. It's registration as public limited liability company by the Companies Code, 1963 (Act 179) was in order to fulfill the goals of the Bank of Ghana (Act 673).

Background of the Study

Financial institutions now serve as crucial worldwide pillars for the socioeconomic progress of every country. Their function in the contemporary global economy acts as a vehicle for economic development and expansion (Anbar and Alper, 2011). The ability of a bank to efficiently and effectively implement its strategies determines its performance and profitability (Mills and Amowine, 2013). Banks with efficient, effective and strong functioning systems are imperatively better placed to withstand negative economic shocks that may impede their

performance. Unlike most commercial banks, Rural Commercial Banks (RCB) has low earning capacity which influences their performance. Arguably, aside the large number of defaulters and cost of operations, the low earning capacity is due to restrictive policies on rural banks, targeted at widening and building financial intermediation among the rural communities.

The Ghanaian rural banking sector has expanded greatly in assets and involvement in the country's economic expansion. Regarding ownership structure, management structure, and organizational characteristics, it has distinctive traits (Shekhar and Shekhar, 2011). Unlike the big commercial banks, Rural Banks are unit banks operated by the community and managed by the community. This gives them spatial advantages that promote proper administration. The concept of rural banking was developed by the Bank of Ghana a few years ago, it launched a dialog with key stakeholders to strategize how to raise funds for industrious activities and introduce rural banking to the Ghana doorstep.

Loan generate for the majority of rural banks' income. Therefore, by increasing credit growth and thereby the whole loan portfolio, rural banks can produce more money in order to maximize profitability. Bad loans are credit products for which clients or borrowers frequently experience difficulties making payments or settlements. According to Kassim (2010), some of the main reasons behind default loans are managers poor skills in management, inefficient and ineffective loan policy, inadequate loan analysis, mistakes in documentation, focus on profit over quality of the credit to be approved, false practices, political and

economic issues such as instability, unwholesome competition, unreliable policies and regulations, and inconsistency in politics.

Non-performing loans have an immediate financial impact because of disposal costs like reductions in loanable capital, direct write-offs of bad loans, and credit loss provisions. Regardless of their findings, Bofondi and Ropele (2011) claim those nonperforming loans are linked to yearly growth rates, interest rates and redundancy rates. Aside from that, huge sums of bad loans in the banking industry have put numerous Commercial and Rural Banks in jeopardy, if not outright failure. These loans have a history of causing financial instability in the greater economy and, in some cases, resulting in the collapse of government enterprises altogether.

One key cause that contributed to a fall in bank profit margin in 2009, according to the ARB Apex Bank's end-of-year (2018) assessment of RCBs performance through the Efficiency and Monitoring Unit, was the case of increased loan loss faced by the banks, among other contributing factors. According to their recommendations, RCBs should participate in effective debt collection actions in order to enhance the quality of loans given and reduce the occurrence of bad and dubious debts. Bad loans tend to credit risk for rural banks because they reflect the potential of loss resulting from borrowers' inability to satisfy their payment commitments. These loans have a history of causing financial instability in the greater economy and, in some cases, resulting in the collapse of government enterprises altogether. The problem necessitates an effective plan to address it before bad loans spiral out of control, and this research project aims to do just that by

examining the effects of defaulted loans on how rural banks in Ghana perform financially.

Statement of the Problem

The loan portfolios of the majority of financial institutions are their most important operating assets and income generators. However, some of the loans provided become non-performing, decreasing the lending institutions' profitability and overall financial performance. According to Siaw (2013), non-performing loans are a cost to banks since they degrade the quality of their asset portfolio and their profitability. This is due to the fact that, in order to meet banking standards, banks make provisions for non-performing loans and charge for bad loans, both of which have an influence on their loan portfolio and profitability.

In his article entitled 'Rural Banks in Ghana Collapsing' Ampah (2010) claimed that rural banks in Ghana face a number of major challenges in terms of handling their loans in the prevention of weak credit. Nair and Fissha (2010) indicated in a similar study of the Ghanaian rural and community banks that, loan portfolio is often considered the best leaching indicator of the financial institution's performance. The study revealed that the percentage of a loan portfolio that was in default among some selected banks per one month was 16%. This is too high and unacceptable given the global average of 3% for the worldwide micro-banking industry.

The rural banks' profitability is negatively impacted by defaulted loans. Default loans are said to have far-reaching effects in addition to negatively affecting the financial performance of rural banks. The study which sought to determine how

default loans affect banks financial performance particularly those in rural communities, was necessary due to the significance of default loans to financial performance. In light of the gaps in the studies, this research seeks to examine the impact of loan default on Kakum Rural Bank particularly on how it is performing financially.

Objective of the Study

The general objective of the study is to assess the impact of loan default on financial performance of Kakum Rural Bank Limited. Specifically, the objectives are to:

1. Determine the trend of loan default in Kakum Rural Bank
2. Identify factors accounting for loan default in Kakum Rural Bank
3. Examine the association between loan default and financial performance of Kakum Rural Bank.

Research Questions

The research work seeks to find answers to the following questions:

1. What has been the trend of loan default in Kakum Rural Bank in the last five years?
2. What are the factors accounting for loan default in Kakum Rural Bank?
3. Is there relationship between loan default and financial performance of Kakum Rural Bank?

Hypotheses

H_o: There is no significant relationship between loan default and financial performance in KRB

H_A: There is a significant relationship between loan default and financial performance KRB

Significance of the Study

Lending institutions' loan portfolios are huge assets that generate a significant amount of interest revenue. It has a significant impact on the Rural Bank's financial performance, and so the loan's health is closely related to the bank's financial success. Given the importance of the loan portfolio's health, a research to identify the issues that are causing the Rural Bank to underperform is essential. As a result of this project, Rural Banks will be able to implement practical measures to address the issue of a growing non-performing loan portfolio, allowing them to enhance their financial performance and profitability. Second, because Ghana's financial (credit institutions) operate in the same environment and deal with clients who have comparable characteristics, this research will assist both the banking and non-banking financial sectors. The findings might be beneficial as a data source for future research projects on the same topic. As a result, the study will have a significant influence on the rural banking sector's growth, which is essential to the economy. Rural Banks have evolved as one of the most effective poverty-reduction initiatives in the world, capable of changing the lives of the poor, despite the challenges.

Delimitation

This study is confined to assessing loan default and financial performance of Kakum Rural Bank Limited. It will explore from financial sectors' perspectives, based on how loan default will influence Kakum Rural Bank performance financially. The study population was delimited to Kakum Rural Bank only. Therefore, conceptually this study investigates financial performance, by emphasizing on the loan default actions.

Limitations

Time was one of the most significant obstacles in our investigation. The case study technique was chosen because of the time frame necessary to complete the assignment. Even if the selected Rural Bank shares many of the same qualities as other banks and faces comparable issues, it is possible that some parts of the topic may be overlooked if they are unique and not included in the research. Kakum Rural Bank provided just a limited amount of information. For fear of violating the Oath of Secrecy, the Bank and some of its employees withheld information from researchers (Duty of confidentiality). These limitations were overcome by trusting on publicly available annual reports and financial statements, as well as ensuring respondents that the information was primarily for scholarly reasons and that their names would never be revealed.

Organization of the Study

The study is categorised into five chapters. The first chapter covers the study's background, the problem statement, the research questions, the study's

objectives, the study's importance, the study's scope and limits, and the study's organization. The second chapter examines the literature on Rural Banking's Evolution, NPL definitions and causes, performing and nonperforming loans, Rural Bank Loan Classification, NPL Reduction, and Rural Bank Challenges. The data for the study was gathered from Rural Bank's financial statements and annual reports, as well as the loan policy document and other vital documents. In addition, interviews and surveys with relevant persons inside the institution would be conducted. The data collected is subjected to quantitative analysis. The third chapter delves into the research methodology as well as the profile of the location being investigated. This section covers the targeted population, sample and sampling method, research equipment, and procedure for data collection. You'll learn about data analysis, interpretation, and discussion in Chapter 4. In Chapter 5, the study's Summary, Conclusions, and Recommendations are offered.

Chapter Summary

This first chapter detailed the study's introduction. Also, the problem statement, the study's objectives as well as research question have been explained. The significant of this study have also been explained to identify the various sectors that will be benefiting from this study. Also, the study has indicated the delimitation of the study which was Kakum Rural Bank in the Central Region. Limited of the study which relate to time and financial constraint has also been explained in this chapter. The final section of this chapter included the organization of this study. The next chapter of this study will focus on the literature review.

CHAPTER TWO

LITERATURE REVIEW

Introduction

This chapter detail the appropriate related literature in terms of a summary of the role played by rural banks in the economic affairs of Ghana, the concept of loan default, non-performing loans effects on banks, and rural banks financial performance. Theoretical underpinnings, conceptual framework, and empirical literature evaluation are among the topics explored.

Theoretical Underpinning

These are theories that attempt to explain the subject's fundamental principles. The following are some of the hypotheses that were used in the research.

Credit Rationing Theory

Stiglitz and Weiss (1981), as quoted in Malhotra (2015), proposed credit rationing as a paradigm for assessing a firm's financial performance. Credit rationing is a term used by lenders to describe when they refuse to offer extra funds to a borrower, even though the interest rate is higher. In this formulation, credit restriction is viewed as a supply-side event, with the lender's supply function becoming entirely price inelastic at some point.

This reasoning supports the study since a debtor can decide to default if he would not encounter trouble obtaining credit later on. This is due to the challenges that a lender encounters in identifying the amount their debtors have gathered prior to the payment of the loan, rather than when the application request is made. If lenders are unable to determine whether borrowers will be able to repay the loan,

the risk of default is considerable. Knowing this, lenders might charge higher interest rates, perhaps leading to market collapse (Stiglitz et. al, 2012).

Adverse Selection Theory

Akerlof's (1989) theory of adverse selection describes the link between lenders' ability to pick appropriate borrowers with whom to conduct business. Sharing information, according to Pagano and Jappelli (2014), lowers adverse selection since credit information on credit applicants is better when information is shared (2018). According to Auronen (2017), distinguishing good borrowers from bad borrowers may be challenging owing to the concept of asymmetric knowledge, which leads to adverse selections and moral hazard difficulties. The concept is that when the borrower knows more about the transaction to be, then he has an advantage in negotiations over the lender. Among the two parties, the one with less awareness of the transactions to be completed is more likely to make poor judgments. When there is adverse selection and moral hazards in a transaction, there is a large increase in NPLs (Bofondi & Gobbi, 2016).

The hypothesis is valid and relevant to this study since loan repayment is contingent on a number of factors, including MFIs monitoring the borrower's financial and business performance, the status of the country's economy, and borrowers diverting loan funds to non-agreed-upon uses.

Concept of Loan Default

According to Adams and Von-Pischke (2015), loan default has a number of negative consequences, including the organization's inability to salvage credit for

borrowers, financial mediators' unwillingness to react to demands of inferior loan applicants, and building of distrust. Both borrowers and lenders bear the consequences of loan delinquencies, according to Baku and Smith (2019). Legal fees, the cost of alternative foregone principle, missed interest, and other expenditures are among the expenses experienced by lenders in delinquent circumstances. In a borrower's scenario, the option to dodge is a balancing between the penalties of a default in terms of lost character vs the trade-off of foregoing investment owing to paying off the present debt.

Delinquency is a red flag that something is wrong with the system, as well as a warning sign that there is a growing risk of loss. It might also be used to estimate how much of a loan portfolio will be lost or transformed into bad debt. Only three types of default indicators were considered: the ratio of actual amounts paid to expected amounts, the ratio of delinquent borrowers to outstanding debtors, and the risk portfolio, which rates late amounts to total debt outstanding (CGAP, 2016).

According to Murray, a loan default happens when a borrower fails to meet his or her commitments under the loan contract, or when one of the parties, the debtor, fails to meet his or her obligations as set down in the loan paperwork agreement. When a person or a group, for example, fails to achieve their planned loan repayment timeline, the borrower is said to have broken the loan contract's by-laws (Ameyaw-Amankwah, 2018). Loan default is described as failing to satisfy a loan repayment plan on time, as previously indicated. Default occurs when a borrower or debtor decides, whether consciously or unconsciously, not to repay a

loan on time. Loan default is defined as a borrower's or debtor's failure to adhere to a written loan repayment arrangement (Murray, 2015).

Furthermore, when a three to four installment payment is missed during a twenty-four (24) month period, a risk threshold as defined by Pearson and Greeff is reached (2016). This implies and indicates that such a signal throws more light on the fact the borrower by all standards will default in the loan repayment if all other repayments are ceased. This is a global accepted standard and is considered vital due to the fact that a general description was needed for loan default. This also does not refer to debtors who by all standards have ceased servicing the loan and hence necessary measures taken against the borrower or financially as described, as the loan has been written off as bad debt. That is the whenever a borrower is not able to meet the amount required on stipulated time is loan default (Balogun and Alimi, 2018).

Classification of Loans

Loans are categorized in ways. This loan classification approach aids banks in reviewing lending facilities in order to provide grades to loans based on risk and other important factors. Continuous credit facility evaluation and categorization assists banks in keeping track of the quality of their lending facilities and, if necessary, taking remedial action to protect the credit quality of their loan portfolios from deteriorating. The loans were categorized into five categories by Kone (2016): current, OLEM, substandard, dubious, and loss. The lending facilities have also been categorised by the Ghanaian Central Bank as follows:

Current: This form of loan occurs when the debtor is current on his or her loan obligations, including backlog of debt developing (Conroy, 2016).

Substandard: The client's existing sound worth and payment capability are not used to acquire substandard loan advances. NPLs and receivables that are 90 days or more past due but not yet 180 days past due are also considered poor loans. When the principle or interest component of a loan advance is due and unpaid for 30 days or longer, it is considered unpaid (AguandOkoli, 2013).

Doubtful: Despite the high likelihood of loss, the presence of some strong suggestive criteria may work to the repayment's favour and strengthen it, postponing its anticipated loss category until a more precise status is discovered. NPLs and receivables with an overdue term of 180 days or more but less than 360 days are categorised as dubious loan advances.

Loss: Losses are stated to be uncollectible and of such little worth that they should not be treated as recoverable advances. This does not imply that the loan advance has no recovery value, but rather that it is possible to postpone writing off this form of debt despite the fact that partial recovery may be impeded in the future. Liquidated or bankrupt businesses with poor current assets and cash flow are eligible for this sort of credit advance. Regardless of how long it takes to repay the loans, financial institutions should not maintain these loan advances on their books. Losses should be taken during the time when they become uncollectible. NPLs and receivables with a 365-day unpaid duration or greater are classified as losses (Mohammed and Hassan, 2015).

Loan Provisioning

The capacity to honor the loan obligation is a significant element examined by most financial institutions in Ghana when providing loan facilities to borrowers (Murray, 2015). To reduce the chances of a loan default, most banks make every effort to guarantee that loans are securely secured. This circumstance ensures that in loan defaults cases, the various financial institutions will be able to use the property secured for the facility to mitigate the financial loss (Banking Act, 2015). The table below depicts the five criteria that will aid in determining the amount of supplies necessary in this direction.

The table above demonstrates that the greater the kind of NPL, the more likely such provisions and costs for that specific bad loan would arise. The Bank of Ghana's cumulative banking industry credit facility, for example, indicates an upward in non-performing groups of 85.97 percent, 78.47 percent, and 63.73 percent for the substandard, dubious, and loss categories, respectively, as of December 2018. The percentage of nonperforming loans (NPLs) has risen from 6.37 percent in 2017 to 7.68 percent in 2018. Effective credit management processes are essential of banks. As a result, banks should make a concerted effort to monitor the loan facility's quality, as well as the frequency of defaults, categorisation, provisioning sufficiency, and recovery progress in their operations.

Table 1: Table on Category, Provision rate and its Expiration Period

	CATEGORY	PROVISION RATE (%)	PERIOD (EXPIRY)
1.	Current	1%	Less than 30 days
2.	OLEM	10%	30 less than 90 days
3.	Substandard	25%	90 less than 180 days
4.	Doubtful	50%	180 less than 360 days
5.	Loss	100%	360 and above

Source: Republic of Ghana (2016)

Factors Accounting for Loan Defaults

Until the global crisis of 2014 to 2018, the quality of most loans in many nations remained relatively consistent over time. According to several studies, the Gross Domestic Product (GDP), the currency rate, and the lending rate were all key determinants in loans becoming non-performing. All banks rely on loans and advances as their principal source of revenue. Due to this, the banks seeks to maximize its profit or returns by giving more loans as it is more profitable compared to any other assets. In some situations, these loans get defaulted, hence non-performing making it difficult for the banks to make profit (Paterson and Wadman 2015). Since loans are important assets to banks, it is necessary to establish the factors that cause non-performing loans. It has been considered in some studies in other countries that failure of banks can be caused by non-performing loans (Brownbridge, 2012).

Diversion of funds for different purpose

Some findings suggest that non-performing loans arise when funds borrowed are used for purposes different from what was agreed on (Richard, 2016). Added to this, Ahmad (2017) indicated that willful default together with diversion of loans and improper credit appraisal are factors of loan default. Loan default, also known as non-performing loans, happens when a borrower fails to meet the conditions of the loan (Murray, 2015). Customers failing to provide important information during the loan application process, as well as a lack of necessary skills among loan authorities, were highlighted as key factors in loans becoming non-performing.

Asymmetry of information

Lenders are considered mostly to have less information on borrowers because of the lack of transparency and integrity on the part of some borrowers. The concept of information asymmetry where the borrower has more information than the lender results in moral hazards and adverse selection problem making it challenging to distinguish bad borrowers from good ones (Auronen, 2017). Non-performing assets (NPLs) in banks may increase when there is the problem of adverse selection and moral hazards (Bester, 1994; Bofondi and Gobbi, 2003). A bank failure, according to Palubinskas and Stough (2015), is caused by a lack of reliable financial information on borrowers to aid in creditworthiness assessment.

Poor management procedures

A number of factors identified according to Kohanasal and Mansoori (2017) as causes of Non-Performing Loans included loan diversion, willful default by

borrowers and poor management procedures. Brownbridge (2015) found out that moral hazards also contributed to bad debts or non-performing loans in banks as some banks fail to adopt prudent lending strategies and still lend to certain borrowers who are willing to pay higher rates although they are undeserving. Some findings also suggest that, the major factor that cause loans to become non-performing include diversification of funds and weak credit analysis. According to Allan and Olomi (2013) it was stated that banks are not fully resourced in terms of capacity for credit and risk management, hence suggesting that trainings obtained may not be adequate or probably there are few staff to do effective supervision and monitoring.

However this conflicts with the findings of Waweru and Kalani, (2015) in Kenya. They established unfavorable economic environment as an important factor that caused NPLs. In the research study conducted by Berger and De Young (216), it was found out that, the main causes of loan defaults in the industrial sector was improper selection of entrepreneurs, unrealistic terms and the schedule for loan repayments, absence of measures in following up of borrowers, natural calamities and lack of adequate collateral security.

Inflation

Non-performing loans are caused by inevitable factors including unexpected price changes for products such as fuel and changes in foreign exchange rates and interest rates (Gorter and Bloem, 2018). According to Berge and Boye (2017), real interest rates and unemployment were also found to be causes of non-

performing loans. Added to this, Vandel (2015) confirmed interest rates charged by Banks to contribute to loan defaults by borrowers.

Time of disbursement

Another factor that causes non-performing loans is the time at which loans are disbursed to borrowers. Most at times financial institutions take so long a time to disburse loans to successful applicants and such make the funds available to borrowers at the time that the funds may not be much needed. This has had so many effects on borrowers especially farmers, whose businesses are seasonal or in line with the weather conditions, hence delaying their planting season and subsequently not making enough profit that could be used to service loans as scheduled (Sheila, 2016).

Repayment period

The time given to the borrowers by lenders to make repayment of loans is usually too short therefore resulting in default in payment of amount borrowed (Sabato, 2018). That is borrowers put the money into business, at the time that lenders may also be demanding repayment of loans, hence affecting working capital as they are left with no other option than to retrieve the money to repay the loans.

Concept of Financial Performance

The capacity of a company to achieve financial success is determined by how well it manages its money. Experts say there's evidence of a link between money-related behaviors including keeping good financial records, budgeting, and obtaining external professional financial advice and excellent financial

performance (Ismaila, 2016). It is critical for an organization to measure its financial performance in order to determine whether or not it will be able to meet its financial goals. Organizations can use or adopt a variety of methods to evaluate their financial performance. Liquidity measurements are one type of measure that determines a company's strength to achieve its financial commitments without affecting its normal operations. These calculations are frequently based on the organization's assets and liabilities. The other sort of measure is solvency, which determines the quantity of borrowed capital utilized by a corporation in comparison to the amount of owner's equity capital invested.

Solvency metrics examine whether a company could pay all of its debts if all of its assets were sold. Profitability indicators such as Return on Equity (ROE) and Return on Assets can also be used to assess financial success (ROA). For assessing how much a firm may profit from its manufacturing components, profitability measures are critical.

Financial Performance Indicators

According to Berger and Humphrey (2015), the purpose of monitoring bank performance is to separate banks that are performing well from those that are not. Ratio analysis is an analytical tool that is used to provide insight into the banks performance. It shows the actual situation and level of a business' performance. It helps to determine whether a company is financially healthy and solvent, analyzes the profits for its shareholders and other stakeholders while determining the risk associated with its financial structure. For analyzing bank performance, traditional

accounting procedures largely centered on the use of financial ratios have been used (Ncube, 2019).

Profitability: It is the most common measure among others in assessing the performance of banks. It is the key determinant for all users of financial information. Assessing the profitability of the banks give direction to how successful managers create profits for the bank. Included in the profitability ratios are Return on Assets, Return on Equity, and Cost to Income ratios.

Return on Assets: This demonstrates management's capacity to obtain deposits at a reasonable price and invest them in lucrative investments (Badreldin, 2019). It's determined by dividing net profit by total assets. The ratio describes the amount of net income earned per unit of assets, and the greater the ratio, the better.

Return on Equity: This is a measure of a bank's profitability and growth potential. It is the return on each unit of bank equity invested in terms of a percentage. Net profit divided by total equity equals return on equity (ROE).

Liquidity: The capacity of banks to satisfy their financial commitments as they become due is measured by liquidity ratios, often known as solvency ratios. It determines a company's short-term viability. All financial institutions must have a certain amount of liquidity to aid with their day-to-day operations. The following ratios fall within this category:

Liquid Assets to Total Assets: This is the percentage of the bank's short-term financial commitments that may be covered with liquid assets if clients suddenly withdraw funds. Liquid Assets/Total Assets is how it's calculated.

Loans and Advances to Deposit: This ratio assess a bank's capacity to cover client drawings and, as a result, to assess the bank's short-term survival. All financial institutions must have a certain amount of liquidity to support their day-to-day operations. Loans and Advances/Total Deposits is how it's computed. The greater the ratio, the more likely it is that the bank is reliant on borrowed cash.

Asset Quality: Banks are likely to lose money in their day-to-day operations. However, it is critical for these institutions to limit their losses (Casu et al., 2016). The ratio of a certain loan category to the total loans of a financial institution is used to determine asset quality. Loan loss Provision to Gross Loans and Non-Performing Loans to Gross Loans, both presented as percentages, can be used to assess the asset quality or credit quality of loans. These figures show what percentage of the overall loan portfolio has been put aside but not charged off.

NPLs and Financial Performance

According to a report, the impact of nonperforming loans (NPLs) is felt not just by lending institutions but also by the economy as a whole (Murray, 2015; Wamugo, 2017; Stephen & George, 2017). According to Klein (2013), 2008 financial crisis had a substantial influence on the performance of individual financial institutions financially. This economic downturn has an impact on almost every country on the planet. When non-performing loans are permitted to get to certain levels, managing them becomes exceedingly difficult for rural banks (Ismaila, 2016). When this happens, extra resources are required to cover the outstanding debts, as well as additional expenditures incurred as a result of the

money recovery battles. Costs and provisions eat up a huge portion of the profit earned by rural banks, causing them to underperform.

In rural banks, the size of non-performing loans determines their viability. One of the most critical financial performance measures for rural banks is nonperforming loans. The preceding highlights the significance of non-performing loans in evaluating rural banks' financial performance. Bank financial performance and non-performing loans, according to Mwangi (2012), are adversely connected. According to the research, the bigger the percentage of defaulted loans, the lower the financial performance evaluated by return on asset, and vice versa. The non-performing loan management practices have an influence on a bank's financial performance. This indicates that optimal practices in non-performing loan management have the potential to improve an institution's financial performance.

Empirical Review

Poor management, according to certain studies and publications, is the cause of non-performing loans (Berger & De Young, 2016). Bloem and Gorter (2017) claim that less predictable events like the cost of petroleum items, significant export costs, foreign currency rates, or quick interest rate fluctuations might induce NPLs. They claimed that poor management, monitoring, overly optimistic creditworthiness assessments during default of loans.

Bader and Javid (2016) conducted research on the long-term and short-term relationships, including the influence of microeconomic determinants on NPLs. The authors employed five macroeconomic variables in their research: Inflation, interest rate, GDP, exchange rate, and money supply are all factors to consider.

They established a long-term link between macroeconomic pressures and nonperforming loans in their research. According to the study, nonperforming loans have a long-term association with supply of money and interest rate. On the other hand, the short-term link between non-performing loans, inflation, and the currency rate were shown to be moderate.

The influence of credit risk management in Nigerian commercial banks was explored by Idowu and Awoyemi (2015). These credit risk indicators have a considerable influence on bank profitability, according to the study. This result was achieved by using panel regression on seven different commercial banks from 2005 to 2011 during a seven-year period each. The survey discovered an increasing percentage of non-performing loans among banks, indicating extremely weak risk management methods in the nation. Curak et al (2014), on the other hand, looked at the factors of non-performing loans using data from the banking systems of southern Europe. This research was carried out using dynamic panel analysis and the General Method of Moment (GMM) using yearly data from 69 banks in ten different countries from 2003 to 2010. According to the findings, declining economic growth, increasing inflation, and increased interest rates are the primary reasons of loan non-performance in the banking industry. Furthermore, bank-specific characteristics such as size of the bank, return on asset and solvency influence credit risk.

Wangai et al. (2014) conducted a research in Kenya on different microfinance banks, evaluating the impact of nonperforming loans on their profitability. Because the survey's target group was so small (66 people), they used

primary sources of data. As a result of rising NPLs, the quantitative study discovered that credit risk had a negative influence on profitability. In a similar study, Espinoza and Prasad (2013) looked at how macroeconomic variables influenced NPLs at different banks in the Gulf Cooperative Council (GCC) nations and tried to figure out what was causing total NPLs in the banking industry.

In addition, Warue (2013) looked at the role of non-performing loans and bank-specific macroeconomic dynamics in driving profitability in Kenyan commercial banks. The study indicated a growing influence of bank specific factors on NPLs compared to macroeconomic pressures such as per capita, GDP, inflation, and interest rate between 1995 and 2009 on yearly frequencies. To reduce the amount of non-performing loans, banks should focus on effective bank management. Afriyie and Akotey (2013) investigated the credit risk management and profitability of rural banks in Ghana's Brong-Ahafo region. The utilization of yearly secondary data from 10 rural banks in this region from 2006 to 2010 enabled this study. According to the analysis, CAR had no meaningful impact on profitability. Despite their inadequate management of credit risk in terms of significant NPL, the investigation indicated that earnings were growing. This is due to the fact that these banks pass on the risk of loan default to other consumers through excessive interest rates.

Mills and Amowine (2013) looked at the profitability of fifty Ghanaian rural banks using panel regression over the period 2002 to 2011, the study found that GDP growth and monetary expansion are the primary external determinants that drive the viability of rural banks. To guarantee the whole transition of these

institutions' profitability, the government is asked to promote economic stability and development.

Conceptual Framework

The diagrammatic representation of conceptual framework shows how the variables are related. In conceptualizing the impact of delinquent loans on financial performance of banks, it is considered that, interest income and net profit are significantly influenced by loan default.

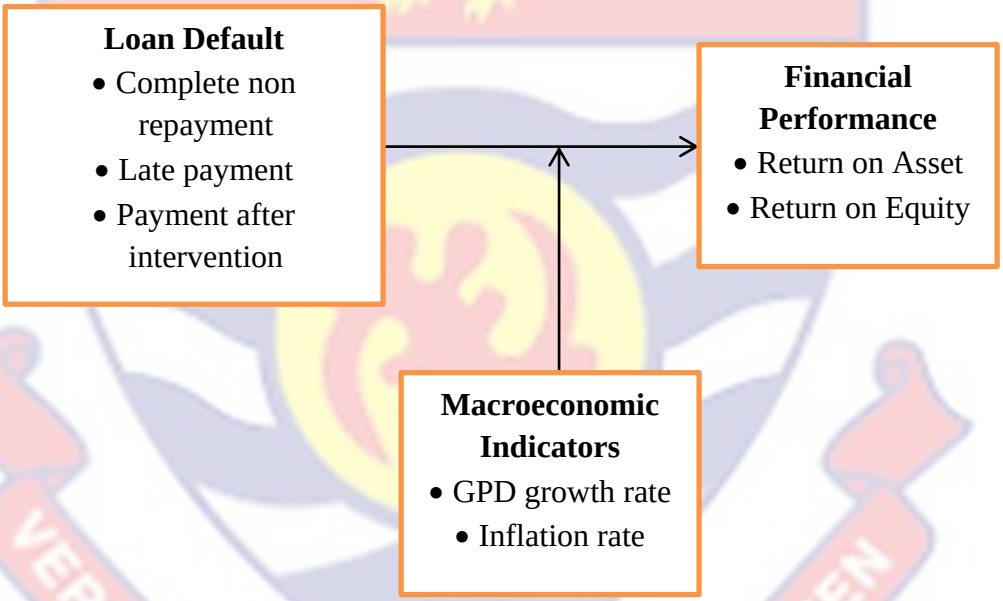

Figure 1: The relationship between the dependent and independent variables

Source: Adopted from Bichanga (2015)

The researcher has adopted this conceptual framework as the independent variables (Complete non-repayment, late payment and payment after intervention with the macroeconomic indicators) are expected to influence the dependent variable (Return on Asset and Return on Equity). Figure 1 shows the diagrammatic

expected relationship between the dependent variable (Financial Performance) and the independent variables (Loan Default, and Macroeconomic Indicators).

Loan Default

When a debtor fails to satisfy his or her legal obligations under the debt contract, such as failing to make a scheduled payment or breaking a loan covenant, it is referred to as a loan failure in finance (condition). A loan default occurs when a borrower fails to repay an obligation. A debtor may fail on a loan if he or she is unable to settle his or her debt. This affects all financial commitments, including bonds, loans or mortgages, etc (Johnson, 2015).

Financial Performance

There are various ways in which a firm's financial performance may be measured. Kiel and Nicholson (2017) stated that, accounting-based measures and market-based measures are the two types of financial measurements utilized in empirical research on corporate governance. They also claim that the most often utilized accounting-based measure is return on assets (ROA). Return on equity (ROE) is a frequently used accounting-based statistic, according to Baysinger and Butler (1985).

Return on assets (ROA): Finkelstein and D'Aveni 1994; Kiel and Nicholson 2003; Weir and Laing 2001 are examples of performance measures for accounting-based metrics that are extensively employed in the governance literature. As a measure of short-term performance, Finkelstein and D'Aveni (1994) defined ROA as net profit divided by total assets. It's a statistic examining assets' efficiency (Bonn, Yoshikawa and Phan 2004). The return on assets, according to Epps and Cereola

(2008), demonstrates to investors the profits made from money invested in capital assets.

Return on Equity: It's an indicator for evaluating an business performance employed in corporate governance research. One of the fundamental motives for firms to exist, according to Epps and Cereola (2008), is to make profits for their shareholders. As a result, ROE is a statistic that represents the earnings created by the money spent to shareholders and other stakeholders. This statistic is determined by dividing net profit by common equity.

Chapter Summary

The chapter discusses the various theories which included credit rationing theory and adverse selection theory. Various concepts on loan default and financial performance were also elaborated with various empirical reviews based on the objective of the study. Factors accounting for loan defaults and financial performance indicators were also discussed within this chapter. A conceptual framework depicting the causes of non-performing loans and various strategies the reduce loan default have been discussed in this chapter.

CHAPTER THREE

RESEARCH METHODS

Introduction

This chapter present detailed idea about how the research was conducted. It explains the research design, research approach, sources of data, sampling technique adopted, sample, data collection methods and data analysis method used. Additionally, the methodology is the profile of the case study which includes its history, mission, vision, and business strategy.

Research Design

Research design in general refers to how the study questions were answered. Research design, according to Cooper et al. (2012), is the process of focusing on the researcher's perspective for the aims of a specific study. Exploratory, explanatory, and descriptive study designs are proposed by Saunders et al. (2011). Explanatory study approaches were used by the researcher to demonstrate the link between financial performance and loan default. In addition, because this study is an explanation, human interaction is essential, therefore questionnaires were given and the researcher conducted face-to-face interviews to get information not revealed by the questionnaire. The approaches adopted for this research were both qualitative and quantitative research (mixed method). These strategies engage the usage of structured questionnaire survey and interview guide which would serve as the primary source of data and the use of financial statements and relevant books: journals, magazines, etc. was among the secondary source. Survey design was shown to be the best suitable study design in several relevant investigations

(Mungai, 2014; Abioro, 2013; Ademola et al., 2013). Ex-post facto research methodology was also used by the researcher for the study. According to Fraenkel and Wallen (2000) and Sarantakos (2005), this form of research makes it easier for the researcher to try to understand the connections between existing disparities in the behavior or status of corporations or organizations, as well as their origins, effects, or reasons. Since the independent variables' manifestations have already happened, the researcher cannot influence them in any way, leading to the adoption of an ex-post facto study methodology. Raji (2012) asserts that it is actually impossible to manipulate these parameters. By enabling the researcher to explore the practical effects of independent factors on dependent variables and by enabling the researcher to view the independent variables after the event has occurred, the ex-post facto technique enhances the researcher's skills (Raji, 2012).

Profile of Kakum Rural Bank

In February 1980, Kakum Rural Bank (KRB) Ltd was founded. Edinaman Rural Bank Ltd was the name until 1990, when it was renamed Kakum Rural Bank Ltd. The name Kakum was chosen to represent a common feature of the bank's catchment territory, the River Kakum, which runs through its operations territories. Elmina is the bank's headquarters, and it has developed from humble beginnings to become the Central Region's number one rural bank.

An 11-person Board of Directors and one Ex-Officio member supervise the bank's operations. The board of directors meets once a month to discuss the bank's operations. Strategic, Audit, Finance, Social Responsibility, and Disciplinary are

five board subcommittees that meet on a regular basis to ensure that the bank's operations are working well.

Population of the Study

Population defined by Polit and Hungler (2016) is the whole or sum of all elements that fulfill a set of criteria. An investigation is generally confined to one or more samples obtained from a community since there are usually too many individuals to investigate adequately. The population source for the study was the staff of Kakum Rural Bank Limited and customers of the bank. The total staff population of Kakum Rural Bank was 64 comprising of Operation Staff, Credit Officers, Branch Managers, and Management Staff. The population also included a total number of 180 customers of the bank who have accessed loan facility. The reason for using this category of people was because most of them have rich experience with regard to appraisal and approval of loans in the bank. The bank loan customers were included in the study to help identify some causes of loan default in respect of the bank's loan portfolio.

Table 2: Total Staff and Active Loan Customers

Department	Number Of Staff
Credit Officer	15
Branch Managers	8
Operation Staff	28
Management Staff	13
Loan Customers	180
TOTAL	244

Source: Kakum Rural Bank (2020)

Sample and Sampling Technique

The idea of sampling from a bigger population is to figure out how that population acts, or is expected to behave. The study used purposive sampling technique method to select respondents from Kakum Rural Bank Limited. These were made up of credit officers at the head office, branch managers and other management staff across all the branches. The reason for the choosing these respondents were their experts in the administration of loan. The research work avoided personal biases as selection of officials were drawn from different units of the bank. That is thirteen (13) management staff at the head office, fifteen (15) credit officer and eight (8) branch managers were selected as respondents. Also the study used the same technique to sample the 40 customers of the bank who have accessed loan for the past years. A sample size of 76 of management and credit officers of the bank is sufficient to be considered representative because according

to Stutely (2003) a successful statistical study requires at least 30 samples. The distribution is presented in Table 3 below:

Table 3: Sample Staff and Active Loan Customers

Department	Number Of Staff
Credit Officer	10
Branch Managers	6
Operation Staff	12
Management Staff	8
Loan Customers	40
TOTAL	76

Source: Kakum Rural Bank (2020)

Data Collection Instruments

Primary and secondary data was acquired for this inquiry. The primary data source was acquired by the usage of an interview guide and the distribution of a questionnaire. A questionnaire is a sort of research instrument composed of a series of questions or other prompts meant to elicit information from a respondent. Closed-ended and open-ended items are blended together in a typical research questionnaire. An interview guide, on the other hand, is just a list of the high-level subjects you intend to cover in the interview, as well as the high-level questions you intend to answer under each topic. The questionnaires were utilized to get respondents' unbiased opinions, and the interview guide was used to gain clarifications on any subjects that were unclear. The questionnaire which were both open ended and multiple choice questions was used to answer objective two of the study. The questionnaire consist of 2 sections, for which section A is the

demographic representation of the respondents and section B seeks to answer objective two of the study which is identifying the factors accounting for loan default in Kakum Rural Bank. The interview guide was provided in a separate section which consisted of list of questions for the staff and management to provide additional information on the objective two which seek to locate the reasons for loan default in the bank.

The secondary data utilized was Kakum Rural Bank Limited's published financial statements presented in the annual reports. The data was collected during a five-year period, from 2015 to 2019. The information gathered was important in answering the study's first aim, which was to evaluate the pattern of loan default and examine the pace of increase and impact of loan default on performance over a five-year period.

Data Collection Procedure

The researcher conducted preliminary interactions with Kakum Rural Bank management to explain the reason for the project before beginning data collecting. The respondents were advised that the exercise was for academic reasons only, that confidentiality would be maintained, and that no one would be harmed as a result of any negative conclusions related to their professional responsibilities. This was done to encourage people to deliver their answers without hesitation. To guarantee the highest possible response rate, the researcher set aside time to collect all completed surveys from the respondents. The recovery of the questions was scheduled for a two-week period, after which some of the responders were allowed interviews. The respondents' questionnaires were serially coded for easy

identification. The researcher personally delivered and collected the questionnaires for each bank. The secondary date was derived from the institution's published annual reports and financial statements, which were received from the bank.

Reliability and Validity

The consistency of a research study or measuring test is referred to as dependability in research. Validity in research also refers to the precision with which the instruments were able to elicit responses from organizations in order to fulfill the study's primary objectives, as specified by the investigator. In addition, it is the degree to which the analysis responds specifically to the questions that should be answered (Gravetter & Forzano, 2015). Through the expert judgment of the appointed supervisor and other experts in the field of financial analysis, the content and length of the construction is calculated in relation to the various elements used. The study ensured the face, the material and established the instrument's validity. Also the face-to-face validity for this study was provided by the researchers' peers, colleagues and students, as well as by some of the managers in the branches. The research is also trustworthy because the researcher ensures that the answers provided by the variables description and measurement are consistent with existing literature and are not ambiguous, as well as that the researcher's results are comparable to those provided by other researchers with similar research objectives.

Model Specification

The researcher employed panel regression or the longitudinal model to analyze and estimate the impact of loan default on financial performance. This was due to the fact that the data included observations of a variety of occurrences collected during several time periods for the bank. The model will aid in determining if loan default and financial performance are causally related. The formulae for the panel model the researcher used were:

$$Y_t = \alpha_t + \beta_t + U_t$$

The variables for the research were calculated using the equation above and the multiple regression model below. The model is a multiple linear regression that shows how loan default affects financial performance. The equation's dependent variable was Return on Asset (ROA), a financial performance metric. This was because studies of Abiola and Olausi (2014) and Kedebe and Selvaraj (2015) also adopted ROA as their dependent variable in measuring non-performing loans on financial performance. Below is how the general regression equation is:

Variable Description

Return on Assets (ROA)

The yield or return on total assets invested in an organization's activities is known as return on assets. It is calculated by dividing a company's earnings by its total assets in a fiscal year and expressing the result as a percentage. Typically, investors seek out banks that have a better return on assets.

Return on Equity (ROE)

After all commitments, such as fixed interests, have been met, this is the yield on a shareholder's investment. It is a measure of a company's ability to create extra earnings from its reinvested earnings. It is commonly used to assess a company's efficiency, or how much profit a company can make given the resources provided by its owners. Typically, investors seek out firms with better returns on equity.

Loans and Advances to Deposit Ratio (LATDR)

Liquidity management is a critical choice that S&L managers must make in order to satisfy their obligations and maintain the institution's solvency. LATDR is the proportion of a bank's loan that is financed by deposits. The bank's liquidity status is determined by the ratio of loans and advances to deposits. It shows how well the bank used depositor funds to support credit operations, which are considered to be vulnerable to default risk. The LATD ratio is used to determine a bank's capacity to withstand client deposit withdrawals and its readiness to service lending needs by lowering cash assets.

Interest on Loans (InL)

The cost of borrowing money is expressed in terms of interest. Lenders earn from the interest paid on top of the original loan amount when they make a loan. To fund its activities, the bank makes loans with a fixed or revolving interest rate.

Non-Performing Loans Ratio (NPLR)

This is a credit risk metric that assesses a financial institution's asset quality. As the name implies, one of the major functions of savings and loans institutions is loan issuing. As a result, S&L firms regard their loan portfolio as a valuable asset. The performance of the loans given determines the asset quality of S&L enterprises. Different studies use different methods to assess asset quality. Loan Loss Provision to Total Asset (LLPTA) or Loan Loss Reserve to Total Asset (LLRA) is two methods of calculating it (LLRTA).

Table 4: Variable and their Method of Computation

Variable	Acronym	Formula	Sign
Return on Asset	ROA	Net Profit / Total Asset	-/+
Return on Equity	ROE	Profit after interest and tax / Total Equity of firm x100	-/+
Debt to Asset Ratio	LAR	Total debts / Total Assets	+
Loans and Advances to Deposit Ratio	LATDR	Loans and Advances / Total Assets	+
Interest on Loans	InL		+
Non-Performing Loans	NPLR	NPLs / Total loans	-/+

Source: Adopted from Micah (2014)

Data Processing and Analysis

To finish the keying procedure, the data from the research was first input into the data view. From a descriptive and inferential statistics standpoint, both primary and secondary data were processed with the Statistical Package for Social Sciences (SPSS). Condensing the raw data into consumable bits, providing

summaries, and making statistical conclusions were all part of the data analysis process. As a consequence, the following procedures were taken to examine the data from the research. To ensure consistency among respondents, the data was edited to identify and correct any mistakes or omissions that occurred. All of the responses to questions and secondary data acquired were entered into the SPSS program for data processing and analysis to help in easy and rapid interpretation of data. Regression analysis, frequencies and appropriate tables and diagrams were also used to give meaning from the data obtained. The choice and justification of using regression models is that it is useful in testing the causal/effect relationship between loan default and financial performance.

Ethical Consideration

Permission to send an introduction letter from the UCC School of Business to the institution under investigation was requested. The researcher also ensured the respondents' complete anonymity and permission by giving them with background information so that they could make an educated decision about whether or not to participate. Respondents were given the option of withholding information that they deemed personal. Furthermore, the researcher verified that the participants were neither physically nor mentally damaged during or after the study. Furthermore, the researcher made certain that individuals with contributions to the study were properly acknowledged.

Chapter Summary

The chapter looks at the research methodology used in this study. Survey design was the research design employed for this study and quantitative methods were used for analysis. The purposive and convenience sample methods were employed to select sample for this study. Data was gathered from both primary and secondary source and was analyzed using SPSS.

CHAPTER FOUR

RESULT AND DISCUSSION

Introduction

The study's purpose was to assess the "Impact of loan default on financial performance of Kakum Rural Bank Limited". This chapter presents the analysis, interpretation, and discussion of data gathered from primary and secondary sources in the field. Data from bank financials was gathered and entered into SPSS for study across a five-year timeframe (2015 to 2019). The first study goal was investigated using trend analysis. In addition, the Pearson correlation model was employed to investigate goal three, while content analysis employed to investigate goal two. The results in regard to the study objectives and questions were detailed in this part. The conclusions from the results are also discussed in reference to the study's literature in this section.

The research obtained a response rate of 80 percent as 62 out of the 77 questionnaires and interview sampled for the study. The response rate can be defined as high and can therefore be considered to give an accurate image of the population they were drawn from. According to Miller and Dillman (2011) a response rate of 70% is good enough to represent a study. The high response rate was due to the way the questionnaire and interview guide was structured which, according to the respondents, was easy and convenient to answer.

Table 5: Reliability Statistics

Crobach's Alpha[a]	No of Items
.738	8

Source: Field Survey (2021)

The alpha coefficient for the four eight items is .0738 suggests that the items have high internal consistency. According to Cronbach (1951) and DeVellis (2003) reliability is concern with the ability of an instrument to measure consistently and a value range from 0.70 to 0.95 is high and acceptable. The reliability coefficient of .738 is higher than .70 which is considered as acceptable in most social science research.

Demographic Information of Respondents

It shows the description of the sampled population of customers by gender, age, educational level attained and nature of business activity. The results are displayed in Tables 6.

The total respondents who answered the questionnaire were 35. Out of this number, 22 representing 62.9% were males with the remaining 13 also representing 37.1% were females. This shows an unfair distribution of gender on the respondents to the questionnaire. This analysis shows the male dominance of the respondent in loan accessing in the bank. Table 6 shows the age distribution of respondents. 18 of the respondents representing 51.4% were between the ages of 31–40, 10 respondents representing 28.6% were between the ages of 21–30 and the remaining 7 respondents representing 20.0% were between the ages of 21-30 years. The

groups form a better blend of young and old personnel who have been accessing credit facility from the bank.

Table 6: Demographic Characteristic of Customers of the Bank

	Frequency	Percent
Sex of Respondents		
Male	22	62.9
Female	13	37.1
Total	35	100
Age of Respondents		
21-30years	7	20.0
31-40years	18	51.4
41-50years	10	28.6
Total	35	100.0
Educational Level		
No Formal Education	8	22.9
Basic Education	9	25.7
SHS/ Vocation Education	13	37.1
Tertiary Education	5	14.3
Total	35	100.0
Business Activity		
Provision Items	16	45.7
Electric Items	11	31.4
Building Materials	2	5.7
Food Vendors	6	17.1
Total	35	100.0

Source: Field Survey (2021)

The ability to study, interpret and apply the requisite laws, rules and regulations regarding any subject depends on the individual's education background. Table 6 represents the Educational level of the selected respondents. 8 respondents representing 22.9% had no formal education, 9 respondents

representing 25.7% had obtained basic education, 13 of the respondents representing 37.1 had obtained SHS/vocational education while the remaining 5 respondents representing 14.3% have obtained tertiary education. This implies that almost all the respondents do have knowledge to understand the credit rules and regulations and interpret them.

Further questions on the business activity of the respondent were asked the respondents. This study found out that the respondents were all traders. 16 respondents representing 45.7% were into provision shop, 11 respondents representing 31.4% were into electric appliances, and 6 respondents representing 17.1% were food vendors while 2 respondents representing 5.7% were into building materials. This indicated that the customers of the bank are into various business activities which promote the products of the bank.

Analysis of Trend of Non-Performing Loan figures (2015-2019)

This study aims to determine the trend of defaulted loans at Kakum Rural Bank for the time period in question (2015-2019). Table 3 depicts the NPL numbers from 2015 to 2019 in both tabular and visual format.

Table 7: Trend of Non-Performing Loans

Item/ Year	2015	2016	2017	2018	2019
Loan	9,927,587	10,863,081	3,974,023	4,036,478	1,459,011
Impairment	2,471,474	9,340,026	2,961,466	2,963,846	557,245
Impairment Ratio	0.249	0.860	0.745	0.734	0.382

Source: Kakum Rural Bank (2015-2019)

According to one of the respondents, those that fell in the ratio that indicates a little improvement in the loan portfolio's quality, is attributable to loan write-offs in 2017 rather than late loan recovery. Renegotiated loans are categorised as current or standard credit facilities since they are treated as new loans. In 2018, the ratio dropped from 74.5 percent in 2017 to 73.4 percent. Given the high risk profile of writing-off debts, this drop is unsurprising. As a result, the majority of the write-off loans were classified as unfavorable the next year. It's worth noting that the total number of non-performing loans in 2016 is higher than the total number of non-performing loans in all previous years combined. The key reason for this large number is that if write-off loans are not monitored individually and independently, a sign of borrower's payback difficulty would vanish, and he or she will be more prone to defaulting repayment arrangement.

In 2019, the loan portfolio's quality improved significantly, with just 38.2 percent of total loans classed as non-performing. Table 2 shows that the corporation lowered its loan portfolio by over 300 percent between 2015 and

2019, with no matching increase in logistics such as trucks, motorcycles, or the hiring of extra field employees (credit officers) for effective supervision. As a result, the loan portfolio shrank by more than 300 percent, and the provision for credit losses shrank at the same time.

Table 8: Moving Trend Analysis Loan Portfolio and Impairment

Item/ Year	2015	2016	2017	2018	2019	%Chg 15-16	%Chg 16-17	%Chg 17-18	%Chg 18-19
Loan	9,927,587	10,863,081	3,974,023	4,036,478	1,459,011	9%	-63%	1%	-63%
Impairment	2,471,474	9,340,026	2,961,466	2,963,846	557,245	277%	-68%	0.1%	-81%
Impairment Ratio	0.249	0.860	0.745	0.734	0.382				

Source: Kakum Rural Bank (2015-2019)

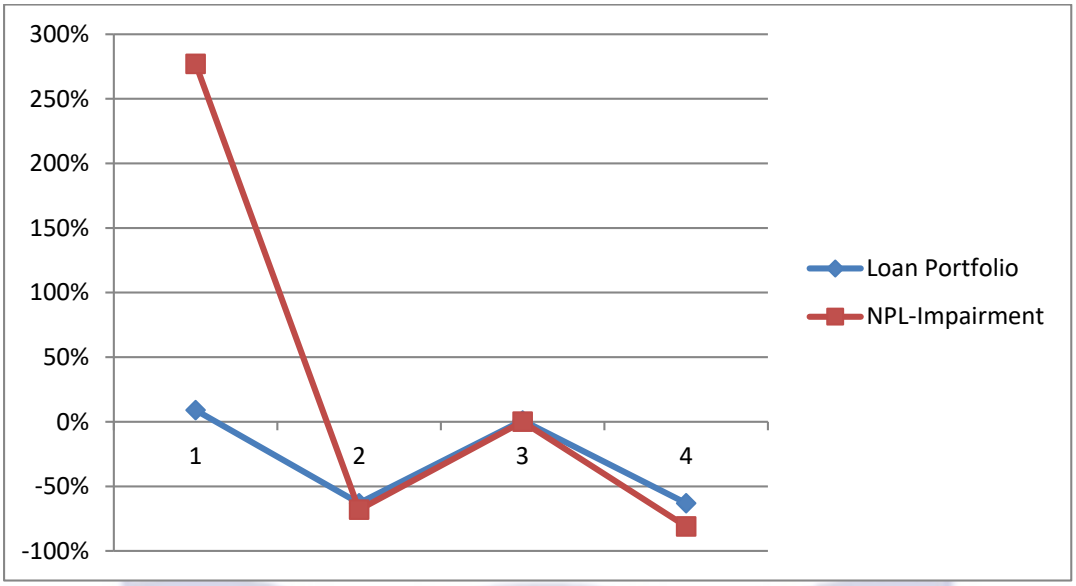

Figure 2: Moving Trend Analysis of Loan Portfolio and Impairment
Source: Kakum Rural Bank (2015-2019)

Table 8 shows that the number of nonperforming loans grew by 277 percent from 2015 to 2016. If this tendency had been permitted to continue, it may have had a significant influence on Kakum Rural Bank's operations. The loan portfolio's 9 percent growth from 2015 to 2016 was noteworthy, and this must have contributed to the large impairment provision made in 2016. Apart from the fact that loanable funds for 2017 were reduced by the large provision made for credit losses in 2016, the table shows that management made a conscious effort in 2017 to slow down on loan granting and instead concentrate efforts and resources on recovering current due and past due debts and advances. In 2017, this work paid off in a big way.

According to Table 8, the number of people with disabilities declined by 68 percent between 2016 and 2017. This represents a significant improvement in the loan portfolio's quality. The provision for impairment only increased by 0.1 percent between 2017 and 2018, which was partially due to an improvement in the bank's operations due to total loan portfolio expanded by just 1% from 2017 to 2018. The portfolio's deteriorating trend improved dramatically from 2018 to 2019, with the impairment number dropping by 81 percent. Overall, the general trend has been irregular, despite the fact that massive sums of money have been allocated as non-performing loans, with the most current figure representing an 81 percent decrease from the previous year's figure. This trend study of non-performing loans is consistent with Afriyie & Akotey (2013), who explored the management of credit risk and rural banks profitability in Brong-Ahafo region in Ghana and discovered that the trend of non-performing loans in rural banks is constantly on the increase.

Causes of Non-Performing Loans at Kakum Rural Bank

Customers at the Kakum Rural Bank ascribed a variety of reasons to the causes of non-performing loans. Poor credit evaluation processes, insufficient monitoring, money diversion, business failure, poor weather circumstances, insufficient marketing outlets, incorrect credit delivery timing, high interest rate, and wilful default were among the key issues highlighted by the respondents. The causes for unsatisfactory loans in Bank were rated on a scale of 1-10, with 10 being the most common cause, 9 being the second factor, and so on, while 1 is the least common cause. Table 9 shows the findings.

Table 9: Causes of Non-Performing Loans

Factors of NPL	Frequency of First Position	Percentage (%)	Rank
Delayed approval	18	8.2%	7th
Poor credit appraisal	24	11.0%	4th
Diversion of funds	23	10.5%	5th
Business Failure	27	12.3%	3rd
Wrong timing of credit	20	9.1%	6th
Ineffective monitoring	33	15.1%	1st
Poor weather conditions	17	7.8%	8th
Inadequate marketing avenues	29	13.2%	2nd
High Interest Rate	16	7.3%	9th
Willful Default	12	5.5%	10th
MEAN	21.9		
STD DEVIATION	6.51		

Source: Field Survey (2021)

On a scale of 1 to 10, respondents were asked to rate the reasons of non-performing loans, with 10 being the most important issue and 1 being the least important. Ineffective monitoring was indicated by 33 of the 40 people who submitted the surveys as the most common cause of NPLs. The most prevalent reasons for inadequate monitoring were understaffing and a lack of logistics (vehicles/motorbikes). Insufficient marketing opportunities were mentioned as the second most prevalent reason of NPLs in banks by 29 respondents. Their argument

was that goods perish or products suffer post-harvest losses owing to a lack of market, resulting in an inability to repay debts.

Business failure is the third most prominent cause producing non-performing loans in Bank, according to 27 of individuals who responded to the surveys. Those who answered to the researcher's questions said that borrowers with strong credit histories do default on occasion, and that the bulk of these instances are caused by corporate failure. According to 24 respondents, poor loan evaluation processes on the part of credit officer are partly to blame for certain loans being late. Poor credit evaluation methods are cited by these respondents as the fourth most important source of NPLs. Some loan officers, they claim, are unable to adequately assess a credit offer in order to determine if it is financially feasible.

Diversion of monies was the next issue mentioned by the respondents. Diversion of money is ranked number 5 on a scale of 1 to 10 by 23 of the respondents as one of the causes of the occurrence of NPLs. Diversion of money occurs when funds or loans meant for a certain project are diverted for unexpected purposes, resulting in a reduction in predicted cash flows and, eventually, loan default. Certain respondents claimed that some business chances are lost due to delays in approving loans sought by customers before the loan money is given to the clients. Whenever this occurs, the funds are delivered in cash, the borrowers are more likely to misappropriate the money or, at the very least, use them for ill-advised or unplanned business ventures that fail. They are unable to repay the loan in the end. Twenty people identified this reason, and it was placed sixth on the scale.

The loan clients of the bank also stated that delayed approval of loans causes NPL. According to the respondents, many of the defaulters will not have the need for the loan when it is not given at the appropriate time. They further explained that the bureaucratic nature of the Banks operation has resulted in the delay of the approval. Clients once again named bad weather as the eighth most important cause in non-performing loans. 17 people agreed with this viewpoint. Poor weather conditions, according to the respondents frequently include severe scarcity, extreme rainfall, late beginning of precipitation, and reduced rainfall periods. Crop failure might be caused by one or more of these conditions. When a farmer's harvest fails, he or she is likely to default on his or her debt. One credit officer in the Central Region supplied this answer.

The high interest rate was named as a cause by 16 respondents, and it was placed number 8 among the other factors contributing to the bank's clients' NPLs. This was not seen to be a very convincing answer because it only applies to loan defaulters who have paid off their principal and are simply behind on their interest payments. When a borrower is behind on both principle and interest, it's hard to blame the loan failure on the high interest rate. Some types of loan defaulters, according to the respondents, do so for no apparent reason. Many defaulters are believed to have the ability to repay the debt, but they don’t do so, according to the respondents. It is not regarded as a main cause of default by the bank, because the number of borrowers who fall into this group is small. These findings back with the findings of Bloem and Gorter (2017), who found that weak management,

inadequate supervision, overoptimistic creditworthiness evaluations during economic booms result in the non-payment of loan.

Interview on Factors Causing Non-performing Loans by Staff

The demography of the respondents was first sorted by the researcher. A total of 27 respondents were interviewed from all the branches. Out of the 27 respondents 10 were credit officers, 8 were operation staff, 7 were branch managers and 2 were management staff. Out of the 27 respondents 12 have worked for over 10 years, 8 have worked for within 5-10 years whiles 7 have worked for 1-5 years. On the types of loan facility available respondents indicated that the bank operate susu loan, overdraft, salary loans, smart loans and group loans. The researcher identified that the loans were priced based on the interest rate by provided by the banks policy.

The researcher posed many questions to the managers, credit officers and the operation staff to sort the views on the cause of non-performing loans in the Bank. The causes of non-performing loans in the bank have been attributed to a variety of factors. Poor credit evaluation processes, insufficient monitoring, money diversion, business failure, poor weather circumstances, insufficient marketing outlets, incorrect credit delivery timing, high interest rate, and wilful default were among the key issues highlighted by the respondents. It was shown that non-performing loans disproportionately affect members of the informal sector. The managers and credit officer explained that "*those in the informal sector are the people who do not have guaranteed monthly income like those in the formal sector. Their income therefore depends on the performance of the market hence their*

ability to adhere to their loan repayment schedule depends on the success of the market. Market failure therefore makes it difficult for members to pay their loans on time."

Analysis from managers and credit officer interview again revealed that most of the customers after taking the loan do not actually know how to invest the money. And also they rely heavily on hearsay of businesses that are profitable and those that are not profitable. They do not actually have any proper business plan before going for a loan scheme. This makes it difficult for them to succeed on their businesses thereby affecting the repayment of their loans. Some of the credit officers again explained that most of the members also divert their loans for purposes that make it difficult for them to repay their loans. Purposes such as school fees, funeral and household expenses are some of the things the members usually use the loans for and since majority are in the informal sector, its becomes difficult for them to get the money back to repay the loan hence the loan becoming delinquent.

On the issue of monitoring, the credit officers explained "*they do not most of the time monitor their loans and attributed it to limited staff and logistics. They only contact them on phone and to the extreme take legal action after going through their books and realizing that some members have defaulted*". This conclusion is consistent with that of Amoako (2015), who found that the majority of respondents (84%) mentioned weak loan monitoring as one of the key causes accounting for poor loans in the rural banking business.

Growth and Impact of Non-Performing Loans on the General Operations

The impact of loan non-performing loans on the operations of the Kakum Rural Bank is discussed in this section. Trend analysis of non-performing loans and non-performing loan growth rate are among the aspects examined. Relationships between non-performing loans and other operations, as well as profitability and other operations, are included. The results of these are presented in the following Tables and Figures.

Figure 3 shows the growth of non-performing loans in Kakum Rural Bank. The figure reveals that from the year 2015 to 2019. Non-performing loans in the institution is growing at very high rate. Apart from the year 2018-2019, non-performing loans has been growing tremendously in the institution which is not good for the operation of the Bank.

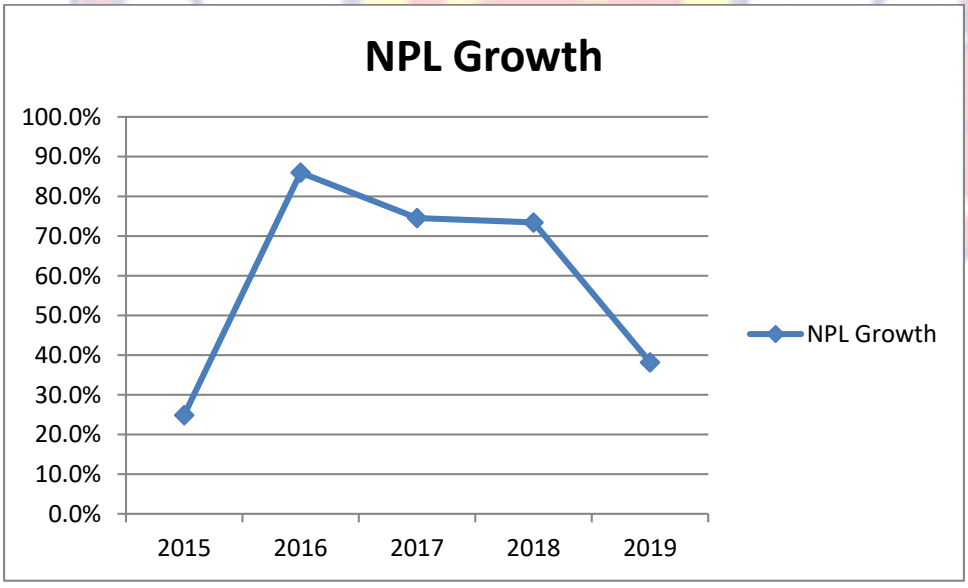

Figure 3: Growth Analysis of Non-Performing Loans

Source: Kakum Rural Bank (2015-2019)

Regression Analysis

The coefficient of determination (R2), as shown in Table 10, informs us how Kakum Rural Bank performs. The value of R2 in Table 4 is 0.491. This means that changes in bank non-performing loans affected up to 49.1% of fluctuations in the institution's performance. Other factors account for 50.9 percent of performance variances. The coefficient of correlation (R = 0.701) indicates that the y and x variables have a good association.

Table 10: Model Summary

Mode	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.701[a]	.491	.438	.152993

a. Predictors: (Constant), Return on Equity, Debt to Asset Ratio, Loans and Advances to Deposit Ratio, Non-Performing Loans Ratio

Source: Addae-Sifah, 2022

The ANOVA test results are shown in Table 11. ANOVA is a collection of calculations that provide information about the degrees of variability within a regression model and are used as the basis for significance tests. A statistic for comparing the null hypothesis that all ß= 0 to the hypothesis that all ß= 0 is found in the "F" column. (According to Weisberg, 2005). The ANOVA findings have a P value of 0.000 0.05, indicating that the model is statistically significant. The results also show that the regression equation is capable of predicting both the dependent and independent variables.

Table 11: ANOVA[a]

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	1.086	5	.217	9.278	.000[b]
Residual	1.124	48	.023		
Total	2.209	53			

a. Dependent Variable: Return on Asset
b. Predictors: (Constant), Return on Equity, Debt to Asset Ratio, Loans and Advances to Deposit Ratio, Non-Performing Loans Ratio

Source: Addae-Sifah, 2022

Analysis of Coefficients

Table 12 is a correlation coefficient, which depicts the interrelationship between the study variables with ROA and ROE which is are the proxy for financial performance. The Non-performing Loan Ratio (NPLR) negatively related with performance of banks indicating that the higher the NPL ratio (when assets quality deteriorates), the less performance of the banks. Debt to Asset ratio (DAR) on the other hand had a positive relationship with bank performance measured by ROA and ROE.

Table 12: Coefficients on ROA and ROE

Model	ROA Coefficients		ROE Coefficients		Sqrt(V_b-V_B)
	B	Sig.	B	Sig.	Std Error
(Constant)	-.260	.000	-.090	.447	.023
Debt to Asset Ratio	1.131	.000	.869	.059	.592
Interest on loans	.000	.157	.000	.508	.003
Loans and Advances Ratio	.009	.600	.002	.957	.006
Non-Performing Loans Ratio	.002	.001	.0005	.004	.010

Source: Addae-Sifah, 2022

The multiple regression model structure is as follows:

$Y_1t = -.260 + 1.131X_1t + 0.000X_2t + .009X_3t + 0.002X_4t + åt$

$Y_2t = -.090 + 0.869X_1t + 0.000X_2t + .002X_3t + 0.005X_4t + åt$

where;

Y_1= ROA, Y_2= Return on Equity, X_1= Debt to Asset Ratio, X_2= Interest on loans, X_3= Loans and Advances Ratio, X_4= Non-Performing Loans Ratio, Ýt= Error term

The most significant variable is the one with the greatest t-value, and the least significant variable is the one with the lowest t-value. The analysis found a positive and significant association between debt to asset and ROA (â = 1.131, p value 0.05), but a positive and insignificant relationship between ROE (â =.869, p value >0.05) as well. This indicates that when the debt-to-asset ratio rises, the Return on Assets rises by 1.131 units, while the Return on Equity rises by.869 units. The additional findings demonstrated that the interest cover ratio on ROA and ROE had no significant association (â = 0.000, p value >0.05). This means that a change in loan interest has no effect on ROA and ROE.

The findings on the rise of non-performing loans in the bank show that in the study period of 2018-2019, the bank's non-performing loans grew with just a trickle. The study discovered that debt to asset ratio and return on investment (ROI) had a positive and substantial link. The other findings suggested that the interest cover ratio on ROA and ROE had no meaningful relationship. The findings support the findings of Langat, et al., (2014), who discovered that business performance, as measured by ROE and ROA, was significantly and negatively connected to short-term debt at 5%. Banks utilized more short-term obligations than long-term debts, according to Maina & Ishmail (2016). Short-term debts are positively related to bank performance, according to Teruel and Solane (2018), which may be the most important factor in securing outside finance in countries with weak collateral laws.

The study's findings also demonstrated a favorable but negligible association between loans and advances and ROA and ROE. This implies a rise in loans and advances creates a 0.009 unit and 0.002 unit increase in the bank's ROA and ROE, respectively. The study also discovered a favorable, although not statistically significant, association between non-performing loans and ROA and ROE. This means that as the number of non-performing loans rises, the bank's ROA and ROE fall by 0.002 and 0.005 units, respectively. This result suggests that if the bank's loan portfolio becomes non-performing, it will have an impact on the bank's operations. The research also discovered that loans and advances had a favorable but minor impact on ROA and ROE. The analysis found a favorable but not statistically significant association between non-performing loans and ROA and ROE. The conclusions are consistent with empirical findings of Baid (2009), who

discovered that long-term debt and return on assets had no meaningful connection. In their analysis, Masiega et al (2013) found a substantial positive association between long-term debt and overall firm assets.

Chapter Summary

This chapter explained the result and discussion used for the study. The chapter commenced with the trend analysis of non-performing loans, followed by causes of non-performing loans, the growth and impact of non-performing loans in the bank. The growths, regression, correlation coefficients were explained to provide answers to make meaning to the data gathered and conclusions made based of findings for this study.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Introduction

This chapter summarizes the findings that the researcher discovered during the course of the study in connection to the study's problem and objectives. The summary would be tracked by the study's conclusion, based on the findings in connection to the study's topic and major goal. It will conclude with the study's suggestions and a conclusion.

Summary

The study aimed at investigating the impact of nonperforming loans on financial performance of Kakum Rural Bank. The introduction of the study discusses of non-performing loans and how these loans have affected the operations and performance of some rural banks. The study identified three research objectives consisting examining the trend of the defaulted loans over the study period of 2015-2019, finding out the reasons for non-performing loans in Kakum Rural Bank and investigating the growth and influence of defaulted loans on general operations.

The study further discusses various theories which include credit rationing theory and adverse selection theory. The theories denoted how loan defaults impact on performance of banks. It also explains various concepts relating to loan default and financial performance. Factors accounting for loan defaults and financial performance indicators were also discussed within this chapter.

Again the study identified the research design of the study to be descriptive and explanatory approach. The study gathered information from both primary and

secondary sources. Total samples of 76 were selected from credit officer, branch managers, operation staffs, management staff and client of the Bank. The respondents' information was gathered using a questionnaire and interview guide, while the bank's financial statement was utilized to answer objectives one and three. The research summarizes the data and draws conclusions on the consequences. Practical recommendations, and suggested areas for further studies are made in light of the findings.

The study obtained a response rate of 80 percent as 62 out of the 77 questionnaires and interview sampled for the study. The study had an alpha coefficient for the eight items to be .0738 implies high internal consistency of the items. Analysis on the trend of non-performing loans revealed that the NPLs increased by 277% from 2015 to 2016. The study also revealed that the impairment figure decreased by 68%, 1% and 81% in the years 2016 to 2017, 2017 to 2018, 2018 to 2019 respectively. Despite the fact that significant sums of money have been allocated as non-performing loans, the trend analysis has been inconsistent, with the most current data showing an 81 percent decrease from the previous year's figure. Afriyie and Akotey (2013) studied risk management associated with loans and the viability of rural banks in Brong-Ahafo, Ghana and discovered that non-performing loans in rural banks are on the rise.

According to the analysis, the most prevalent reason of non-performing loans is ineffective monitoring. Inadequacy of staff and logistics were the most commonly cited reasons for ineffective monitoring. The banks' staffs ascribed a variety of reasons to the causes of non-performing loans once again. Poor credit

evaluation processes, insufficient monitoring, money diversion, business failure, poor weather circumstances, insufficient marketing outlets, incorrect credit delivery timing, high interest rate, and wilful default were among the key issues highlighted by the respondents. This conclusion is consistent with that of Amoako (2015), who found that the majority of respondents (84%) mentioned weak loan monitoring as one of the key causes accounting for poor loans in the rural banking business.

The findings on the rise of non-performing loans in the bank show that in the study period of 2018-2019, the bank's non-performing loans grew with just a trickle. The study discovered that debt to asset ratio and return on investment (ROI) had a positive and substantial link. The other findings suggested that the interest cover ratio on ROA and ROE had no meaningful relationship. According to Maina & Ishmail, banks used short-term commitments more than long-term loans (2014). The research also discovered that loans and advances had a favorable but minor impact on ROA and ROE. The analysis found a favorable but not statistically significant association between non-performing loans and ROA and ROE. The conclusions are consistent with empirical findings of Baid (2009), who discovered that long-term debt and return on assets had no meaningful connection.

Conclusions

The purpose of this study was to see how non-performing affected Kakum Rural Bank’s financial performance loans. The study concludes that the bank's trend analysis for the period 2015-2019 is irregular, despite the fact that significant

sums of money have been provided as non-performing loans, with the most recent figure being an 81 percent decrease from the previous year's figure.

This study also suggests that one of the causes of loan default in Kakum Rural Bank was poor loan monitoring, which had negative consequences on loan recovery during the study period. Low loan recovery, which translates to a high proportion of non-performing loans, is also linked to incorrect collateral appraisal and monitoring. Under-financing, difficulty of credit officers to identify consumers as a result of incorrect and insufficient evaluation methods might all be factors in customers diverting loan payback payments. Non-performing loans have had a negative influence on the bank's financial performance during the last five years. Non-performing loans eat up a large portion of the bank's profit margin.

To conclude, on the third objective, the non-performing growth rate analysis reveals that from the year 2015 to 2019, the non-performing loans in the institution is growing at very high rate and it is even forecasted to increase. On the influence of non-performing loans on Kakum Rural Bank's operations, the study suggests that non-performing loans have a favorable and significant impact on the bank's financial performance.

Recommendations

In terms of loan trend, reasons of non-performing loans, growth, and impact of non-performing loans, the research indicated the impact of non-performing loans on the operations of Kakum Rural Bank. Non-performing loans have devoured a large portion of the banks' financial fortunes in the past, according to the report.

Given the critical role that banks play in supporting low-income earners and micro firms in obtaining credit in the country, it is critical that they take aggressive efforts to assist the sector in the face of massive loan delinquencies on their books. Based on the findings, the following recommendations can be drawn.

1. The primary goal of the study was to discover the bank's trend analysis of non-performing loans. The study showed a wide undulating pattern in non-performing loans from 2015 to 2019. As a result, bank management should acquire the technical skills and managerial competence required to recognize the trend and incidence of non-performing loans and take necessary action. Furthermore, the bank should make proactive judgments and take proactive activities to establish an enabling environment in which the company and the borrowers' loan agreement may be followed.
2. According to the research, the leading reason of non-performing loans at the Kakum Rural Bank was poor loan monitoring. As a result, the research recommends that banks develop a credit monitoring team to keep a close eye on borrowers' conduct. Banks must also employ technology to maintain track of their customers' and borrowers' accounts, such as computer systems.
3. Management should also make a concentrated effort to equip loan officers with appropriate cars and other logistics to aid their monitoring operations at all times. Effective loan facility monitoring and frequent client account evaluations will aid the institution in spotting early warning indications and

taking corrective action to avoid the credit facility from deteriorating further.

4. To restrict the amount of non-performing loans, the bank must ensure that an effective and efficient credit evaluation system is in place. For example, to ensure that non-performing loans are maintained to a minimum, the bank must analyze clients' creditworthiness using all available methods.

Suggestions for Further Research

The study has investigated the impact of non-performing loans on the financial performance of Kakum Rural bank therefore future research might broaden the scope of the study to include dynamisms as well. Alternatively, a comparison study between two or more banks can be undertaken, with the researcher progressing from exploratory case studies to a higher level of general theoretical models, invariance, such as causation or evolution.

REFERENCES

Abiola, I., & Olausi, A. S. (2014). The impact of credit risk management on the commercial banks performance in Nigeria. *International Journal of Management and Sustainability*, *3*(5), 295-306.

Achou, F. T., & Tegnuh, N.C. (2014). Bank performance and credit risk Management, Master degree Project School of Technology And Society, University of Skovde Press.

Afriyie, H. O., & Akotey, J. O. (2013). Credit risk management and profitability of rural banks in the Brong-Ahafo Region. *European Journal of Business and Management 5*, 24-33

Agu, C.C. (1998). Loan management in agriculture, in Ijere, *Readings in Agricultural Finance*. Longman Nigeria Plc. Lagos

AguandOkoli, W. H. (2013). *Econometrics Analysis* (5 ed.). Upper Saddle River, New Jersey: Prentice Hall.

Ahmed, F., & Bashir, T. (2013). Explanatory power of macroeconomic variables as determinants of non-performing loans: Evidence from Pakistan. *World Applied Sciences Journal*, 22 (2), 243-255.

Akerlof's N. (1989). Loan Management in Banks, in Ghana, *Readings in Agricultural Finance*. Longman Nigeria Plc. Lagos

Ameyaw-Amankwah I. (2018). Causes and effects of loan defaults on the profitability of Okomfo Anokye Rural Bank, *IMF working Paper*. 54 (4)

Amoako, J. (2015). Causes and effects of loan defaults on the profitability of Okomfo Anokye Rural Bank. Thesis, unpublished. KNUST.

Ampah, S.K (2010). Rural Banks in Ghana Collapsing, Top Story www.theghanaianjournal.com 7th September, 2010

Anbar, D., O. & Alper, W., F. (2011). Rural and microfinance regulation in Ghana: implications for development and performance of the industry. Africa Region Working Paper Series No. 49. Washington, DC: World Bank.

Appiah, N., B. (2011). Factors influencing loan delinquency in small and medium enterprises' in Ghana Commercial Bank Ltd, Master's Dissertation, Kwame Nkrumah University of Science and Technology, Kumasi,

Asiedu-Mante, E. (2011). Rural banking in Ghana, combert Impressions, Ltd, Accra

Athanasoglou, P. P., Brissimis, S. N., & Delis, M. D. (2008). Bank-specific, industry-specific and macroeconomic determinants of bank profitability. *Journal of International Financial Markets, Institutions and Money*, *18*(2), 121-136.

Atta Mills, E., & Amowine, N. (2013). The rural bank profitability: evidence from Ghana. *International Journal of Application or Innovation in Engineering and Management*, *2* (4) 3-11

Auronen, N. (2017). The rural bank productivity nexus: evidence from Ghana. *International Journal of Innovation in Engineering and Management*, *2*(4) 45-48

Awunyo-Vitor, D. (2012). Determinants of loan repayment default among farmers in Ghana, *Journal of Development and Agricultural Economics*, 4 (13): 339-345.

Baid, I. E. (2009). The impact of capital-structure choice on firm performance: Empirical Evidence from Egypt. *The Journal of Risk Finance*, 10 (5), 477-487.

Balogun, E.D & AlimiAdekunle. (2018). Loan delinquency among small scale farmers in developing countries. A case study of the Small-farmer Credit Programme in Lagos State. *Economic and Financial Review, 26*(3), 36-44.

Bank of Ghana (2001). Report on Rural Bank Failures Bank of Ghana, Accra

Bank of Ghana (2006). Bank of Ghana web site, available at: www.bog.gov.gh

Bank of Ghana (2015). Report on Rural Bank Failures Bank of Ghana, Accra

Bank of Ghana (2018). Bank of Ghana web site, available at: www.bog.gov.gh

Barr, R. S., & Siems, T. F. (1997). Bank failure prediction using DEA to measure management quality. In *Interfaces in computer science and operations research* (pp. 341-365). Springer, Boston, MA.

Berge, T. O., & Boye, K. G. (2007).An analysis of bank's problem loans. *Norges Bank Economic Bulletin*, 78, 65-76.

Bofondi, M., & Ropele, T. (2011).Macroeconomic determinants of bad loans: *Evidence from Italian banks, Occasional Papers*.

Bonn, G., Yoshikawa, W., & Phan, E. (2004), Rural banking in Ghana, Combert Impressions, Ltd, Accra

Borrowers & Lenders Act of Ghana (2008). Act 773, Accra, Retrieved from http//www.bog.gov.gh on November 13, 2013

Brownbridge, A. (2012). *The nature and determinants of rural loan repayment performance in Nigeria: The Case of FADU's Micro-credit*

Programme (No. 3). Nigerian Institute of Social and Economic Research (NISER).

Caprio, G. Jr. & Klingebiel D. (1996). *Bank insolvency-bad luck, bad policy or bad Banking*. Annual World Bank Conference on Development Economics.

Chelagat, K. N. (2012). Determinants of loan defaults by small and medium enterprises among commercial Banks in Kenya, *Master's Dissertation, University of Nairobi, Kenya*, 5-56.

Clark, T. S., & Linzer, D. A. (2012). Should I use Random or Fixed Effects? polmeth.wustl.edu/media/Paper/ClarkLinzerREFEMar2012.pdf

Conroy, T. S. (2016). Should I use Random or Fixed Effects? *Review of Economic Studies*, 59: 473-494.

Cooper, M. T., Durrheim, K., & Painter, D. (2012). Research in practice: Applied methods for the Social Sciences. Cape Town: *University of Cape Town Press.*

Curak, M., Pepur, S., & Poposki, K. (2013). Determinants of non-performing loan; *Evidence from Southeastern European Banking System Banks and Banking Systems* (8) 45-53

Demirguc-Kunt A. & Detragiache E. (2009). Banking on the principles: compliance with consumer loan portfolios'. *Journal of Banking and Finance*, 36, 1012–1027.

Epps, R., D. & Cereola, W. (2008). Factors influencing loan delinquency in small and medium enterprises' in Ghana Commercial Bank Ltd, Master"s

Dissertation, Kwame Nkrumah University of Science and Technology, Kumasi

Fidrmuc, J. & Hainz, C. (2009). Default rates in the loan market for SMEs: Evidence from Slovakia, 2nd Working Meeting of the CESIUK, Comenius University in Bratislava, *Faculty of Philosophy*, January 14, 2009.

Finkelstein, P., P. & D'Aveni, M. D. (1994). Bank-specific, industry-specific and macroeconomic determinants of bank profitability. *Journal of international financial Markets, Institutions and Money*, *18*(2), 121-136.

Fraenkel, G. & Wallen Y. (2000). Small loans, big claims. *Foreign Policy*, (132), 79.

GHAMFIN Annual Report (2017). GDP growth (annual %). http://data.worldbank.org/indicator/NY.GDP. MKTP.KD.ZG [Assessed: 3/2/2018].

Godfred, N. (2016). The impact of non-performing loans on the financial Performance of some selected Rural Banks in Ashanti Region of Ghana

Godlewski, C. (2015), Capital regulation and credit risk taking: *Empirical Evidence From Banks In Emerging Market Economies*. 4 (9) 3

Gorter, N. & Bloem M. (2012). The macroeconomic statistical treatment of Non-Performing Loans.

Gravetter G. & Forzano, D. (2015). Episodes of systemic and borderine financial crisis", The World Bank (Unpublished).

Greene, W. H. (2008). *Econometrics analysis* (5 ed.). Upper Saddle River, New Jersey: Prentice Hall.

Gujarati, D. N. (2010) *Essential of econometrics*. New York: McGraw Hill/Irwin

Hosna, A., Manzura, B., & Juanjuan, S. (2009). Credit risk management and profitability in commercial banks in Sweden. *rapport nr.: Master Degree Project 9 (36)*.

Hossain, F. (2002). Small loans, big claims. *Foreign Policy*, (132), 79.

Kassim, M. (2010). Bank Efficiency and NPLs: Evidence from Malaysia and Singapore, *Prague Economic*, 2, 118-132.

Kiel, D. & Nicholson R. (2017). Loan delinquency among small scale farmers in developing countries. A case study of the Small-farmer Credit Programme in Lagos State. *Economic and Financial Review, 26*(3), 36-44.

Kithinji, A. M. (2010). Credit risk management and profitability of commercial banks in Kenya. 5 (7) 3-8

Kone, N. (2016). The impact of non-performing loans on the financial performance of some selected Rural Banks in Ashanti Region of Ghana.

Laeven, L., Kroszner, R. S., & Klingebiel, D. (2002). Financial crises, financial dependence, and industry growth. *World Bank Policy Research Working Paper*, (2855).

Langat C.P., Chepkoech L., Shavulimo M.P., Wachira, M., &Thuo D. (2014). The effect of debt financing on the profitability of Kenya Tea Development Authority processing factories. Retrived May 1, 2015,

Maina G., & Ishmail T., (2016) Cookie-cutter versus character: The micro structure of small business lending by large and small banks. *Journal of Financial and Quantitative Analysis*, 39(2), 227–251.

Malhotra, S. (2015). Financial crises, financial dependence, and industry growth. *World Bank Policy Research Working Paper*,

Mileris, R. (2012). Macroeconomic determinants of loan portfolio credit risk in banks. *Journal of Engineering Economics*, 23(5), 496-504.

Millar, M.M., & Dillman, D.A.(2011) Improving Response to Web and Mixed-Mode Surveys. *Public Opin Q*, 75 (2): 249-269

Mills, J., & Amowine, G. (2013). Rural and micro finance regulation in Ghana: Implications for Development and Performance of Industry. *International Conference on Ghana at the Half of the Century*,18-20.

Mohammed, G. & Hassan D. (2015). *Bank Insolvency-Bad Luck, Bad Policy or Bad Banking*. Annual World Bank Conference on Development Economics.

Murray, S. (2015). Microfinance through community credit unions: A tool for Poverty Alleviation in Northern Ghana. *University of Ghana, Accra*.

Nagaraj, D., & Boateng, G. (2018). Determinants of loan repayment default among farmers in Ghana, *Journal of Development and Agricultural Economics*, **4** (13): 339-345.

Nair, A., & Fissha, A. (2010). "*Rural Banking: The Case of Rural and Community Banks in Ghana "Agriculture and Rural Development Discussion Paper 48, the World Bank*, Washington, D.C

Nawaz, M., Munir, S., Siddiqui, S. A., Afzal, F., Asif, M., & Ateeq, M. (2012). Credit Risk and the Performance of Nigerian Banks, *Interdisciplinary Journal of Contemporary Research in Business*, 4 (7): 51-63.

Nguta, M. H., & Huka, G. S. (2013). Factors Influencing Loan Repayment Default in Micro-Finance Institutions: The Experience of Imenti North District, Kenya, *International Journal of Applied Science and Technology*, 3 (3): 80-84.

Olomola, A. (2001). The nature and determinants of rural loan repayment Performance in Nigeria: The Case of FADU's Micro-credit Programme, *Nigerian Institute of Social and Economic Research*, 3-6

Padmanabhan, K. P. (1988). Rural credit. *Lessons for Rural Bankers and Policy Makers. London*.

Paterson, A., & Wadman, A. (2015). "*Rural Banking: The Case of Rural and Community Banks in Ghana "Agriculture and Rural Development Discussion Paper 48, the World Bank*, Washington, D.C

Polit, C., &, Hungler, A., M. (2010). Credit risk management and profitability of commercial banks in Kenya.

Raji, K. (2012). Bank efficiency and NPLs: Evidence from Malaysia and Singapore, *Prague Economic Papers*, **2**, 118-132.

Ribeiro, M. (2006). The credit prudential framework for Banks. *National Banking College, Accra, Ghana*.

Richard, M. (2016). The credit prudential framework for Banks. *National Banking College, Accra, Ghana*.

Saunders, M., Lewis, P., & Thornhill, A. (2011). Research Methods for Business Studies, (2nd) Edition. *Harlow: Printice Hall*.

Shafiu, S. (2009). Microfinance through community credit unions: A tool for Poverty Alleviation in Northern Ghana. *University of Ghana, Accra*.

Shekhar, K.C. & Shekhar, L. (2011). Banking theory and practice (19th ed.). New Delhi: Vikas Publishing House.

Shingjerji, A. (2013). Impact of bank specific variables on the non-performing loans ratio in Albanian banking system. *Journal of Finance and Accounting*, 4(7), 14-24.

Siaw, S. (2013). Liquidity risk and bank profitability in Ghana. Unpublished Masters' thesis, *University of Ghana Business School*, Legon, 14-39.

Stiglitz, R., & Weiss, I. (2012). Capital structure and financial performance in Kenya: Evidence from firms listed at the Nairobi Securities Exchange. *International Journal of Social Sciences and Entrepreneurship, 1 (11), 209-223.*

Stutely, A. (2013). Business research methods. Oxford: Oxford University Press.

Takyi, E. A. (2011). *Micro-credit Management in Rural Bank: The Case of Baduman Rural Bank, Ltd* (Doctoral dissertation, Thesis]. Bangkok (TH): University of Science and Technology).

Teruel, S. & Solane J., (2018). Determinants of non-performing loan; Evidence from Southeastern European Banking System" *Banks and Banking Systems* 8, 45-53

Tomak, S. (2013). Determinants of commercial banks lending behavior: Evidence from Turkey. *Journal of Empirical Research*, 3(8), 933-943.

Torres-Reyna, O. (2007). Panel data analysis fixed and random effects using Stata (4.2). *Data & Statistical Services, Priceton University*.

Wangai, D. K., Bosire, N., & Gathogo, G. (2012). Impact of loan default on financial performance of microfinance Banks in Kenya: A Survey of Microfinance Banks in Nakuru Town. *Internal Journal of Science and Research (3),* 2073-2078

Warue, B. N. (2013). The effects of bank specific and macroeconomic factors on nonperforming loans in commercial banks in Kenya: A comparative panel data analysis. *Advances in Management and Applied Economics*, *3*(2), 135.

Wondimagegnehu, I. (2012). Community-bank partnerships creating opportunity for the unbanked. *Woodstock Institute.*15-19

APPENDIX I

QUESTIONNAIRE

Please this questionnaire is aimed at collecting data regarding the impact of loan default on the financial performance of Kakum Rural Bank Limited in Central Region. You have been selected to participate in this survey. Please give a response to all the questions as requested. Answers will be for research purposes only.

NB: Kakum Rural Bank Ltd will be referred to as KRB in the questions.

QUESTIONNAIRE FOR CUSTOMERS OF KAKUM RURAL BANK

SECTION A: BACKGROUND CHARACTERISTICS OF RESPONDENTS

1. Gender

(a) Male [ ] (b) Female [ ]

2. Age

(a) Below 20 [ ] (b) 21-30 [ ] (c) 31-40 [ ] (d) 41-50 [ ] (e) 51 and above [ ]

3. Educational background (current) of respondent

(a) Basic School [ ] (b) Secondary/Technical/Vocational School [ ]

(c) Tertiary [ ] (d) No formal education [ ] (e) Other ……

4. What is your marital status?

(a) Single [ ] (b) Married [ ] (c) Divorced [ ] (d) Widowed [ ]

5. Income level of Respondents

(a) Below ₵500.00 [ ] (b) ₵501.00-₵1000.00 [ ] (c) ₵1001.00-₵2000.0 [ ]

(d) Above ₵2001.00

6. Occupation: …….

SECTION B: FACTORS ACCOUNTING FOR LOAN DEFAULT

7. How long have you been operating with KRB?

a) Less than 5 years [ ] b) 6-10 years [ ] c) 11-15 years [ ]

d) 16-20 years [ ] e) 20 years and above [ ]

8. What account do you hold with the bank? (Multiple responses)

a) Current [ ] b) Savings [ ] c) Susu d) Fixed deposit [ ]

e) Others (specify).....

9. Did you access credit from Kakum Rural Bank within the past five years?

a) Yes [ ] b) No [ ]

10. If yes, for what purpose did you contract the loan? (Multiple responses)

a) Business activity [ ] b) Food consumption [ ] c) Funeral [ ]

d) Buy fixed assets [ ] e) Medical service [ ] e) Education [ ]

f) Others specify.....

11. How suitable is your loan repayment period

a) Highly Suitable [ ] b. Suitable [ ] c. Normal [ ]

d. Unsuitable [ ] e. Highly Unsuitable [ ]

12. What is the length of your repayment period? [……]

13. Were you asked of collateral when applying for the loan from St Joseph?

a) Yes [ ] b) No [ ]

14. Are you servicing other loans apart from the one from Kakum Rural Bank?

a) Yes [ ] b) No [ ]

15. Did you get any training before or after taking the loan?

a) Yes [ ] b) No [ ]

16. If yes how helpful was the training

a) Highly Helpful [ ] b) Helpful [ ] c) Normal [ ]

d) Not Helpful [ ] e) Less Helpful [ ]

17. How will you rank the following factors as causes of loan defaults using a scale of 1 to 10, with 10 being the highest and 1, the lowest.

	Factors	Scale
1	Delayed approval	
2	Poor credit appraisal	
3	Diversion of funds	
4	Business Failure	
5	Wrong timing of credit	
6	Ineffective monitoring	
7	Poor weather conditions	
8	Inadequate marketing avenues	
9	High Interest Rate	
10	Willful Default	

Thank You

APPENDIX II

INTERVIEW QUESTIONS FOR MANAGERS AND CREDIT OFFICERS

Please I am a student of University of Cape-Coast offering Master's in Finance and requesting your audience to these questions which would be treated as confidential as possible and used for academic work only. The questions are only meant to solicit your views on the impact of loan defaults on the financial performance of Kakum Rural Bank.

1. What is your position/status in Kakum Rural Bank (KRB)?
2. How long have you worked with the institution?
3. What are the various types of credit facilities offered by your bank to its customers?
4. How do you price your loans/credit facility?
5. Do you make your loan policy available to your loan client?
6. What types of security / collateral are often offered by borrowers to secure loans?
7. How many times do you undertake monitoring in a month?
8. In your opinion what are factors contribute to loan default in the bank?
9. Which of the loan type mentioned above has high default rate and why?
10. What is the state on loan default in the bank?
11. What is the impact of loan default on the operations of the bank?
12. What are the measures put in place by management to help reduce the incidence of loan delinquency?

THANK YOU