KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY

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SCHOOL OF BUSINESS

A STUDY OF THE LIQUIDITY RISK MANAGEMENT PRACTICES AT KUMAWUMAN RURAL BANK

By

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A thesis submitted to the Department of Accounting and Finance, Kwame Nkrumah university of Science and Technology in partial fulfilment of the degree of

MASTER OF BUSINESS ADMINISTRATION (FINANCE)

PG9623913

AUGUST, 2015

DECLARATION

I do hereby declare that apart from references to other works which I have duly acknowledged; this work is as a result of my own research work carried out in the Department of Finance and Accounting of the KNUST School of Business toward the Master of Business Administration (Finance Option).

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(Supervisor) Signature Date

Prof J. M. Frimpong …………………… …………………….
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DEDICATION

To the Almighty God, my family and staff of Kumawuman Rural Bank.

ACKNOWLEDGEMENT

I wish to express my profound gratitude first and foremost to the almighty God for He is the giver of every good gift and every perfect present.

I would also like to thank my supervisor, Prof. J. M. Frimpong for the time, contributions, directions and effort that he put into helping me carry out this study.

My sincere appreciation goes to the management and staff of Kumawuman Rural Bank Limited, for responding to the interviews and questionnaire.

ABSTRACT

Banks raise deposits by accepting money and other deposits from individuals and institutions in order to operate. The extent of the deposits mobilised is normally influenced by the extent of public trust in the banks to protect their money safely and give it back to them on demand. The business of banking is carried out on the principle of trust. Thus liquidity risk management plays an integral role in the performance and survival of rural and community banks (RCBs). The high growth potential of RCBs may be brought to a catastrophic halt if a sound and robust liquidity risk management regime is not enforced.

This study sought to examine the current liquidity risk management practices and the organisational structure in relation to managing liquidity risk in Ghanaian rural banks, specifically at Kumawuman Rural Bank Ltd. The study employed interview guide and questionnaire to collect both primary and secondary data and analyzed through Statistical Package for Social Sciences (SPSS). The study revealed that the bank adopts a variety of strategies including a well constituted organizational structure to manage risks and continuously monitoring its liquidity position before giving out credit facilities.

However, the bank's homegrown liquidity risk management practices are not documented for current and future use in liquidity problem solving. Although the bank has many academically qualified and experienced staff members, the study recommends that more should be done to provide training programmes on liquidity management and timely information flow within the organization for critical staff such as branch managers, accountants and other selected staff members. Despite this reservation, it is noteworthy to point out the enviable compliance attitude of the bank with respect to regulatory policies.

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Chapter One

INTRODUCTION TO THE STUDY

1.1 BACKGROUND

A bank in Ghana is a corporate institution established under the law to undertake banking business in Ghana under the authority of a license issued by The Bank of Ghana in accordance with Act 673 – Banking act 2004 and Act 738 – the Banking (Amendment) Act 2007. Traditionally banks accept deposits and make investments with funds mobilized from customers. Such investments may entail risky securities and assets including loans and advances. Other investments may be in risk- free assets. A combination of such investments, if done properly, brings profits to banks eventually.

Fundamental to banking is the duty of collecting cheques from customers, paying cheques drawn on customer accounts and ultimately honouring withdrawals from all customers. The bank in carrying out its business of banking exposes itself to many different risks which include but not limited to liquidity, credit, legal, operational, currency and other risks. These need to be managed effectively if a bank is to survive and grow.

Risk is the likelihood of loss. It is the likelihood that the return on a financial asset or value may be lower than its anticipated value. (Pilbeam, 2005). It stands to reason therefore that persistent low returns on assets or value may translate into less appreciable financial manoeuvrability and mobility for a bank and its ability to discharge basic banking functions.

This brings to the fore the concept of liquidity. Liquidity refers to the ability to meet the withdrawal demands of customers. By standing ready to provide cash on request, financial institutions make available liquidity to depositors and creditors. In the traditional setting, bank runs emerge as a serious consequence of liquidity risk. Bank runs are periods in which customers that have their funds with the banks lose trust in their bank and as a result withdraw their funds. This may be because of worries about the financial health of the bank or because they think that other customers may stage runs. Such runs especially when they occur in chain reaction have the serious tendency to make banks insolvent. Over the years, such instability has been checked, partly, by keeping reserve requirements, relying on the availability of liquidity from central banks – the lender of last resort- and deposit insurance (Strahan 2012). Rural banks face a number of financial risks in the pursuit of their objectives and they are to manage these risks to maximize shareholders wealth. According to Timberg (2002), managing risk refers to the strategies that financial institutions and banks use in limiting and controlling uncertainty in the total portfolio of the firm. The duty of management is to respond to risks to maximize the likelihood of achieving the entity's growth objectives.

Rural banks in Ghana have a basic feature. They are designed to operate within restricted catchment areas and are also owned by the catchment community. However, the wish of rural and community banking institutions to guarantee profitable operations by trade and business financing has boosted their presence in urban centres dramatically. This in effect, exposes them to higher levels of demand for cash and therefore higher levels of risk. A strain on their relatively smaller liquid assets becomes inevitable.

The unbanked population in the country is estimated to be very high and therefore a high potential for growth and expansion in rural banking is possible. However, this growth potential, performance and survival can only be achieved if the liquidity of the rural and community bank is effectively managed. This gives a very clear indication that the concept of liquidity in the banking industry is of particular importance. It is against this backdrop that this study is to be carried out.

1.2 PROBLEM STATEMENT

Banks buy and raise money by accepting deposits from individuals and institutions to operate. The extent of the deposits raised is normally influenced by the extent of public trust in the banks to protect their money safely and to give it back to them on demand. This trust is built on the competency of management, efficient delivery of service, credible financial practices that assure depositors and compensate them by way of acceptable interest rates on deposits. Where does this hard-won trust stand when in the time of need for their money, customers are continuously unable to have access to it? The business of banking is carried out on the principle of trust. It is therefore worthy of mention that liquidity risk management plays an integral role in the performance and continued survival of rural and community banks. The world has been experiencing economic instability and crisis like what happened in 1997 and 2007. This was said to be attributable to unsound liquidity management by some prominent banks and to external shocks. According to Citi Business News Online in November 2014, a report prepared by the Association of Rural Banks Apex Bank under the supervision of the Ghana Central Bank has revealed that about 20 Rural and Community Banks are in financial distress and are likely to collapse in the ensuing weeks if on-going developments in the sector were not dealt with.

The fact is that rural banks are not exempt from the challenges in effective management including liquidity risk management. This has prompted this study. This study is to digest the effectiveness of liquidity risk management practices of rural and community banks – specifically at Kumawuman Rural Bank Ltd.

1.3 OBJECTIVES OF THE STUDY

This study has as its general objective the desire to explore the current practices in managing liquidity risk at Kumawuman Rural Bank Ltd. Specifically, the objectives are as follows:

a. To investigate the current liquidity risk management practices as well as the organisational structure in relation to managing liquidity risk in Kumawuman Rural Bank Ltd.
b. To identify factors that influence liquidity risk management practices and strategies that are set up to monitor and control liquidity risk at Kumawuman Rural Bank Ltd.
c. To compare the level of compliance of Kumawuman Rural Bank Ltd with standard liquidity risk management practices.
d. To analyse the impact of liquidity risk on the performance of Kumawuman Rural Bank Ltd.

1.4 RESEARCH QUESTIONS

The following will provide a useful guide to the conduct of the study:

a. What are the existing liquidity risk management practices and the organisational arrangement relative to managing liquidity risk in Kumawuman Rural Bank Ltd.?
b. What are the factors that influence liquidity risk management practices and what strategies are set up to monitor and control liquidity risk in Kumawuman Rural Bank Ltd.?
c. What is the level of compliance of Kumawuman Rural Bank Ltd. with the standard liquidity risk management practices?
d. What impact does liquidity risk bring to bear on the performance of Kumawuman Rural Bank Ltd.?

1.5 JUSTIFICATION OF THE STUDY

The banking industry, particularly the rural banking industry is experiencing rapid growth and has much potential which can be exploited by the banks opening many branches especially in urban areas. But this hope for growth and increased potential may founder if a sound and robust liquidity risk management regime is not in place. The practices of the rural banking sector portray a "rural ideology" to banking generally and specifically to liquidity risk management. This is not an ideal situation. This is more so as liquidity risk has gained unprecedented notoriety globally as exemplified in recent financial crisis even in the advanced economies. According to a white paper by the oracle financial services (2014), the world community watched in disbelief as liquidity evaporated in a matter of days, thus forever changing the face of the financial services industry.

The lack of depth in the Ghana money market evidenced in the limited array of liquid instruments and the lack of a vibrant capital market demand the existence and adherence to effective liquidity management practices given the ever complex and changing (worsening) economic landscape across the globe – Ghana included.

The study is therefore intended to provide an integrated and comprehensive assessment of the liquidity risk management at Kumwuman Rural Bank Ltd.

This work is meant to satisfy an academic requirement; however the findings will transcend the frontiers of academic work. It should be noted that Kumawuman Rural Bank invariably have some pertinent operational issues common to other rural and community banks and although the study is focused on one rural bank, the findings will generally stand applicable to many rural and community banks and other banks in the country as well as those in other countries similarly placed in the rural banking industry.

1.6 SCOPE OF THE STUDY

The Kumawuman Rural Bank Ltd. has ten branches: four in the Kumasi Metropolis, one in the Ejisu Juaben District, two in the Sekyere Kumawu District, two in the Sekyere East and one in the Sekyere Afram Plains District, all in the Ashanti region and all have been selected for the study. The bank has been selected for this study because of the relative ease of access to information and proximity to this researcher.

The major subject areas to be studied have been grouped under the following themes; the definition and types of risks, liquidity risk exposures in banks, factors that bring about liquidity risk, the effect of liquidity risk on profitability and others.

Questionnaire and interviews would be the main instruments of data collection. The data would be analyzed using the Statistical Package for the Social Sciences (SPSS).

1.7 LIMITATIONS OF THE STUDY

The researcher would have loved to cover other rural banks in the region to carry out comparative analysis of liquidity risk management practices. However due to constraints posed by resources like logistics, personnel and time factor, the study is limited to the Head office and branches of Kumawuman Rural Bank.

Risk management practices are not well understood and implemented in most rural banks. As a result, only limited information may be collated on actual liquidity management practices of the bank. The time and financial constraints may also limit the number of respondents to be contacted and also limit the depth of research on the various other risk areas touched on by this study. The degree of reliability of responses due to possible memory lapse could affect the precision of the outcome.

Notwithstanding these ominous limitations, this study sets up a suitable platform upon which further studies can be conducted in the subject at stake.

1.8 ORGANISATION OF THE STUDY

This thesis has been presented in five (5) chapters. Chapter one discusses the general introduction of the work with special emphasis on the research background, problem statement, objectives, research questions, the study's justification, the scope of the work, limitations of the research and the organisation of the study.

Chapter two (2) presents a critical review of scholarly literature from selected books, journals, articles, works of writers on the subject matter of liquidity risk management and other relevant material.

Chapter three (3) provides information concerning the methodology for the research, including the research framework and expounds the research strategies and design.

Chapter four (4) covers the analysis of the data gathered and the presentation of the findings.

Chapter five (5) presents the summary of findings, recommendations and conclusions drawn from the study.

Chapter Two

LITERATURE REVIEW

2.1 INTRODUCTION

Risk is the likelihood that an actual return on an investment will be different from the expectation. In order to develop strong risk management strategies to aid them in managing risks peculiar to their business and investment transactions, numerous companies now apportion huge levels of funds and time. Risk assessment is an integral part of the process of managing risk which includes determining the risks surrounding a business investment as explained by investopedia. The field of business is fraught with risks that managers and owners need to take but it is the calculated risk that pays off. People who know when and when not to sell, thrust forward and when to find the middle ground are the ones who are usually able to manage businesses successfully (Saunders and Anthony, 1997).

In view of this, as asserted by The Banking Solutions, regulatory bodies and banks in India in recent years have been putting in unrelenting efforts to understand and quantify the growing risks facing them. It can be noted that it is far better to manage a risk in advance than waiting for it to occur.

In the quest to conduct a study that will complement the current scope of knowledge of the concept of liquidity risk management, some scholarly literature have been reviewed. Because of the high level of importance that is attached to risk, vast literature have been gathered and compiled by numerous persons and groups alike. This chapter introduces the theories that are pertinent to the purpose of the study: liquidity risk in banking institutions, liquidity risk management processes, liquidity risk measurement and monitors, liquidity risk strategy and the techniques to mitigate liquidity risk.

2.2 DEFINITION OF KEY CONCEPTS

2.2.1 RISK

Risk refers to the likelihood that the return realised on an investment will be different from the expectation. According to Oldfield and George (1991) such results may directly end in earnings being lost or may actually end in imposing constraints on the ability of the bank to achieve their business purposes. Whichever way a bank chooses to measure its risks, it is able to identify expected and unexpected losses.

2.2.2 EXPECTED LOSS

Expected loss, according to Shrieves et al (1992), is a loss the bank knows with reasonable certainty such as the expected default rate of a commercial loan portfolio.

2.2.3 UNEXPECTED LOSS

Garman (1996) defines unexpected loss as a loss linked to unforeseen occurrences. For example a loss caused by an unexpected downturn in the economy like that experienced in 2007 or declining rate of interest. The capital that Banks hold as buffer is what is used to absorb losses should they occur.

While it is believed that banks largely face Operational, Interest Rate, Liquidity, Legal, Currency and reputational risks as pointed out by Rawnsley (1995), the kind and extent of risks the organisation is likely to be faced with may be contingent on a plethora of dynamics which include, for example, the complex nature of the business activities, magnitude and frequency of business operation

2.2.4 CREDIT RISK

According to Langhor and Santommero (1995) credit risk is the potential of a bank borrower or counter party to fail to meet its obligations in accordance with agreed terms. It happens when "payments are either delayed or not made at all, which can cause cash flow problems and affect the bank's liquidity" (Greuning and Bratanovic, 2009).

2.2.5 MARKET RISK

Morsman (1993) defines this as the risk of adverse deviations of the market to the market value of the trading portfolio, due to market movement during the period required to liquidate the transactions. This results from adverse movements in the level or volatility of the market prices of interest rate instruments, equities, commodities and currencies. According to the Societe Generale Groupe, market risk is generated by trading activities such as interest rates, foreign exchange, loss of value of financial instruments and so on.

2.2.6 OPERATIONAL RISK

Rawnsley (1995) shares the opinion that operational risk is the risk of loss that results from inadequate or failed internal processes, people and systems or from external events. Also throwing more light on operational risk is the Societe Generale Groupe which identifies operational risk as the risk which refers to the risk of losses or sanctions due to procedural failures, human error or external events.

2.2.7 LIQUIDITY RISK

Andrew Crocket in the issue of Financial Stability Review (2008) is captured to attribute liquidity as an elusive notion which is easier to recognise than to define. In the article "Managing banking risk" by the Societe Generale Groupe, liquidity risk is the risk that the bank cannot meet its cash flow obligations when they are due. According to Jesswein et al (1995), liquidity risk is defined as the ability of a bank to fund increases in assets and meet obligations as they come due, without incurring unacceptable losses. Larson et al (1999) referred liquidity to be the availability of resources to meet short-term cash requirements. According to the Bank for International Settlements Liquidity risk management is of paramount importance because a liquidity shortfall at a single institution can have system-wide repercussions.

2.3 RISK MANAGEMENT

According to Bodie et al (1998) it involves identification, measurement, monitoring and controlling risks to ensure that

i. The individuals who take or manage risks clearly understand it

ii. The organisation's risk exposure is within the limits established by the Board of Directors.

iii. Risk taking decisions are in line with the business strategy and objective set by the Board of Directors.

iv. The expected payoffs compensate for the risks taken.

v. Risk taking decisions are explicit and clear.

The acceptance and management of financial risk is inherent to the business of banking and banks' roles as financial intermediaries (Allen et al, 1997). Notwithstanding the fact that banks are in the business of taking risks, it should be recognised that an institution need not engage in business in a manner that unnecessarily imposes risk upon it: nor should it absorb risk that can be transferred to other participants. Rather, it should accept those risks that are uniquely part of the array of bank's services (Hopper 1996).

According to Berger and Udell (1993), what has brought about the need to effectively structure and manage liquidity risk in financial institutions is as a result of increasing arenas for business, relaxing of global laws on finance activities worldwide, heightened level of competition and the introduction of innovative financial products.

According to the All Banking Solutions in an article Overview and Basics of Risk Management, "Banks and regulators in India are currently striving very hard to gather the understanding of the numerous risks they are susceptible to in the new liberalized economy in India. Because the economy of India is growing into a globalized one, many banking institutions have started to realise the need to identify those variety of risks and manage them effectively."

However, notwithstanding the complex nature of businesses or their sizes, there are some fundamental philosophies that can be applicable to the larger proportion of financial institutions. These reflect the strength of the strategies for managing risk of that bank in particular. (Babbel and Santomero, 1997).

2.3.1 RISK MANAGEMENT FRAMEWORK IN FINANCIAL INSTITUTIONS

Hassan (2009) states that outline for managing risk includes the totality of risks' scope, processes and techniques to manage it as well as the duties of those responsible for managing it. Koizal and Lowrenz (2008) in their research work also stated that, that outline must be all encompassing and thorough enough to reflect all the risks exposed to the bank and have the ability to be flexible in order to accommodate any fortuitous business activity. As seen in Coleman (2011), the outline for managing risk effectively involves:

i. Effectively following the process of identifying, measuring, observation and the control of risk as vividly enshrined in its management strategy and policy (Meyer 2000).

ii. A properly set up organizational arrangement which vividly enumerates the duties of everyone impacting the process of managing risk. Also, a committee can be formed to supervise, monitor and control their risk taking adventures effectively.

iii. Information flow within organisations (from lower, middle to top level management) must be smooth, good and timely with a corrective process in place to correct any deviations. According to Santomero (1997) this corrective process should be stated clearly. iv. The outline should have the ability to incorporate needed changes into it from observations made on a continuous basis.

Pyle (1997) in his work on risk management regulation in banking states that it will be highly detrimental to control risk without properly quantifying and assessing it first. Additionally, a complete evaluation of risk affords managers an unclouded perception of it so that accurate decisions can be taken for future use. (Figlewski, 1997)

To correctly gauge the level of risk exposed to an institution, measured risk must represent the total exposure that institution faces. Both short and long term effects on the institution should be measured based on the risk type (Morgan 1997). To the best magnitude attainable, banks must set up a system to measure their risk profile, although it is usually quite cumbersome to quantify certain classes of risk like operational risk. Therefore, if quantification is not possible, qualitative measures must be inculcated to determine the extent of risk.

Although using quantitative measures to determine levels of risk is very necessary, it cannot relegate the import of adhering to the use of qualitative reasoning altogether. Therefore, it is important for the relevant staff members in the institution to attain the needed expert knowledge and experience through education and trials. (Pritsker, 1996). In conclusion, any risk quantification methods adopted (more often those based on quantitative models) can only be as effective and practicable as the rigorous and strict basis of methodological analysis and the control of collected data. Finally any risk measurement framework, especially those which employ quantitative techniques and modes, is only as good as its underlying assumptions, the rigours and robustness of its analytical methodologies, the controls surrounding data inputs and its fitting use.
(Fallon, 1996).

2.4 PRINCIPLES FOR LIQUIDITY RISK SUPERVISION AND MANAGEMENT

The Basel II Accord formulated 17 principles of best practices in managing liquidity risk and these are:

Basic principles for supervising and handling liquidity risk include:
Principle 1: Any bank is itself wholly in charge of controlling its liquidity risk soundly. It should put in place a healthy framework for managing liquidity risk that is able to guarantee the maintenance of sufficient liquidity. That, excess liquidity serve as a cushion and should include a level of unhindered, assets of high quality,

to weather a variety of stress events, such as those that involve the diminishing or loss of both unsecured and safeguarded sources of funding. As a way of protecting depositors and reducing the possible negative effect to the financial system, supervisors must do well to evaluate the liquidity position as well as completeness of a bank's framework for managing liquidity risk and taking quick action if the bank is lacking in either area.

Principle 2: The bank is to expressly state the function it is to perform within the financial system and declare its tolerable liquidity risk levels that is suitable for its approach to business.

Principle 3: Management must make sure the bank holds adequate liquidity and formulate plans and strategies to maintain liquidity risk that is appropriate. It must regularly evaluate information on liquidity changes of the bank and communicate it to the Board of Directors. At least once a year, the board of directors are also to appraise those strategies in place to manage its liquidity risks and demand that management handles it properly.

Principle 4: To adequately juxtapose the incentives for taking risk of distinct business units with the liquidity risks their businesses bring upon the bank, it should integrate liquidity benefits, costs and risks in the measurement of performance, internal pricing, and the process of approving new products for their important business undertakings.

Principle 5: Banks must obtain a comprehensive process to measure their liquidity risk after it has been identified and control it after it has been monitored for a while. The process should include a healthy process to systematically project the flow of cash and what the assets that are not on the balance sheet commitments generate within a time period.

Principle 6: Banks must be keenly controlling and monitoring liquidity risks and requirements for funding across business lines, legal boundaries and impediments on the ability to easily transfer liquidity.

Principle 7: Banks must put in place a strategy to source for funds from diverse avenues and with different tenures. It must do well to keep a constant presence in the market it chooses and maintain strong relationships there.

Principle 8: Banks should strongly manage its daily liquidity risks and current positions in order to meet obligations on a timely manner. It must be able to achieve this under both stressed and normal conditions thereby contributing to a smooth operation of payment and settlement procedures.

Principle 9: The collateral position of the bank should be rigorously managed to show differences between hindered and unhindered assets. It must not be forgotten to constantly observe the location of the collateral to be able to realise it easily if the need arises.

Principle 10: Banks must make sure that stress tests are carried out regularly for a range of short and long term stress scenarios to point out sources that are likely to put on pressure liquidity and to make sure that current risk levels remain within the bank's stipulated liquidity limits. These identified results must be used to manage their strategies for managing liquidity risks and carve out workable contingency plans from it.

Principle 11: Banks are to possess a recognised CFP – contingency funding plan that describes vividly the strategies that can be used to conquer liquidity deficits in difficult circumstances.

Principle 12: Banks must keep a specified level of unhindered liquid assets of good quality as insurance for a variety of liquidity strain situations.

Principle 13: Banks are supposed to regularly divulge publicly information that allows the general public to make well informed judgements about the reliability of its framework for managing liquidity.

Principle 14: The entire framework for managing liquidity must be frequently analysed by Supervisors to find out its strength or otherwise.

Principle 15: Various internal and external reports must be used by supervisors to supplement the frequent assessments that they make about the bank's liquidity risk management strategies.

Principle 16: In the case any deficiency is found out, it is the duty of the supervisor to step in effectively and in a timely manner to perform the needed corrective actions.

Principle 17: It is the duty of the supervisor to communicate with others in similar authority, like the central banks across the world, to enable cooperation with regards to the monitoring of liquidity risk. They should do well to communicate on a regular basis both at normal times, and also increase the frequency and content of the information shared as the institution faces more and more stressful times.

Chapter Three

METHODOLOGY

3.1 INTRODUCTION

This chapter covers the methods and materials of the study. This chapter seeks to discuss the population, sample size, the techniques used for sampling and data collection, the various data collection instruments as well as the procedures used in measuring and analysing the data. This chapter therefore seeks to describe how the whole research was conducted.

3.2 POPULATION

The entire management and staff of Kumawuman Rural Bank provided a good source of respondents for the study. This constituted the population for the study. Such a population ensured a fair presentation of the subject matter under consideration.

3.3 SAMPLE SIZE AND SAMPLING TECHNIQUE

The target population of the study is made up of the staff from the Treasury, Credit, Management and the Operations Departments of Kumawuman Rural Bank Limited. Twenty (20) staff members from all Ten (10) branches of the bank out of a total staff of One Hundred and Sixty Seven (167) were purposively sampled for the study. These staff members influence the management of sound liquidity in the bank.

For accurate findings to be arrived at, a sample size of twenty (20), which represents Branch Managers and their Assistants, Treasury officers, Credit officers and all other staff members connected with liquidity management in the bank were selected. Purposive sampling was used for the study because it enables the researcher to use judgments to select cases that will best enable respondents to answer questions and to meet objectives (Saunders et al; 2007). This form of sampling is mostly adopted when working with sample sizes that are very small such as in case study research and when one wishes to select cases that are particularly informative (Neuman, 2000). The selection of the respondents was influenced by the respective roles in the management of sound liquidity at the bank.

3.4 DATA COLLECTION

Primary data were obtained through the administration of questionnaire as well as the use of interviews.

Secondary data was as well useful.

3.4.1 PRIMARY DATA

Interviews and questionnaire were used to gather primary data.

3.4.2 QUESTIONNAIRE

Data collection was primarily via questionnaire. Simple and clear questionnaire was designed to obtain the views of participants. The first part of the questionnaire sought some general and introductory information from participants. The second part of the questionnaire then thoroughly examined the various sections of the study. The questionnaire is made up of both open-ended and close-ended questions. Questionnaire with covering letters were delivered to potential respondents at the various branches of the bank. Views gathered from the questionnaire were then collated, sorted and analysed with the help of Statistical Package for the Social Sciences (SPSS).

3.4.3 INTERVIEWS

Interviews were used sparingly. They were used to complement the questionnaires.

Interviewees were chosen based on their useful knowledge or experience of subject related to the study. Face-to-face interviews were used. Most of the interviews were carried out in English. This was to avoid any form of misunderstanding. Questions asked depended on identified lapses on the questionnaires.

3.4.4 SECONDARY DATA

The bank's annual reports and auditors' reports were thoroughly read and reviewed to serve as checks and balances to ensure accuracy of responses to the questions asked and also to siphon valuable information relevant to the study. Therefore, the study utilized both primary and secondary data.

3.5 METHOD OF DATA ANALYSIS

Views gathered from the questionnaire were then collated, sorted and analysed. The analysis of the data involved the use of software specifically designed for that purpose. In this regard, the Statistical Package for the Social Sciences (SPSS) was used. The statistical methods involved those descriptive in nature (mean and standard deviation). The SPSS was used primarily to generate frequency tables. These tables revealed the percentages applicable to each measure.

The details of the scoring for the scale used for this assessment are presented below:

Each item on the questionnaire was scored on a five-point Likert scale. Responses were summed and averaged for each item on the questionnaire. This average score is taken to represent the existing situation in the bank.

1 – Strongly disagree: that the respondents disagree strongly with the subject matter or statement.

2 – Disagree: that the respondents disagree with the statement with regards to the subject matter.

3 – Not sure: this means that respondents are not readily able to give knowledgeable responses on the issues. It also denotes a position of neutrality.

4 – Agree: the respondents agree with the statement or the issues with regards to the subject matter.

5 – Strongly agree: respondents agree strongly with regarding the subject matter or statement.

3.6 ORGANIZATIONAL PROFILE

Kumawuman Rural Bank Limited was incorporated in October 1982 as a Rural Bank and has since built an enviable reputation as one of the best Rural Banks in Ghana. The Bank was established under the auspices of Kumawuman Biakoye Kuo by Kumawu citizens resident in the Greater Accra Area. The Head Office of the Bank is located at Kumawu, in Ashanti Region about 72 kilometers away from Kumasi. From the modest total deposit amounting to GH¢923.38 as at the end of 1983, the deposit liabilities of the bank registered significant increases in the subsequent years and reached GH¢25,499,223.00 as at the end of December, 2013. Net loans, overdrafts and advances registered yearly increases from GH¢293.46 at the end of 1983 to

GH¢14,586,476.00 as at the end of 2013. Total assets grew during the same period from GH¢1,026.33 to GH¢34,214,224.00. From a humble beginning of six (6) staff in a rented premise at Kumawu, Ashanti, the bank now has staff strength of One Hundred and Sixty Seven (167). Over the years, the bank expanded its outreach and opened Nine (9) branches and agencies at Drobonso, Bodomase, Effiduasi, Amakom, Ahensan, Bomso, Tafo, Banko, and Adarko Jachie. All branches are now networked electronically.

The Vision of the Bank:

To become a first choice bank where the best qualified people want to work, customers want to do business, and shareholders are happy with their investment.

Chapter Four

RESULTS AND DISCUSSION

4.1 INTRODUCTION

This chapter seeks to analyze the data collected and discuss the results that were obtained. The results from the demographic characteristics of the respondents, current liquidity risk management practices, factors that influence the current liquidity management practices, the level of compliance with the standard liquidity practices and the assessment of the impact of liquidity on the performance of the bank are discussed.

4.2 DEMOGRAPHIC CHARACTERISTICS OF THE RESPONDENTS

At the end of the questionnaire administration all of the twenty (20) questionnaires were completed and returned. This therefore accounted for a 100% response rate. A breakdown of the demographic characteristics of the respondents is shown in Table 1 below.

Table 1 Demographic characteristics of the respondents (n=20)

Characteristic	N	%
Age(years)		
18-23	0	0
24-29	1	5
30-35	2	10
36-47	10	50
48 or more	7	35
Marital status		
Single	2	10
Married	17	85
Divorced	1	5
Highest Education		
Masters and above	4	20

Post Graduate Diploma	0	0
First Degree	10	50
A Level	4	20
O Level/SHS	1	5
Other	1	5
Professional Qualification		
Yes	8	40
No	12	60
Years at current job		
2 years or less	5	25
2 – 4 years	6	30
4 – 6 years	1	5
6 – 8 years	4	20
10 or more years	4	20

The table above illustrates that 85% of the respondents were above 35 years while only 15% were older than 23 but not above 35 years. None of the respondents however was below 24 years. Majority of the employees representing 85% of the respondents were married at the period of the study, while 10% were single and only 5% were divorced. The educational levels of the respondents ranged from diverse backgrounds including 50% with a First degree, 20% in the Masters' level or above, 20% at A level and 5% each at O level/SHS and other.

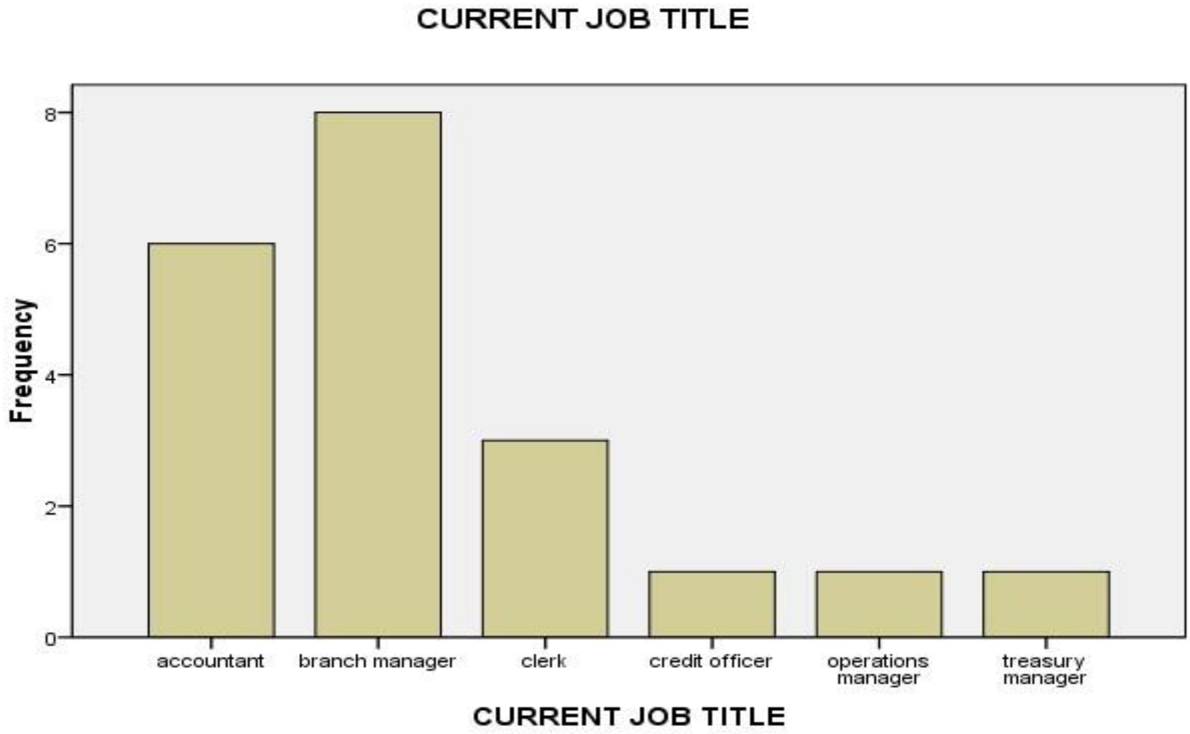


Figure 1 Current Job/Office of respondents

In all, the 20 total respondents comprised 3 Clerks (15%), 6 Accountants (30%), 8 Branch Managers (40%), 1 Credit officer (5%), 1 treasury manager (5%) and 1 Operations manager (5%).

4.3 LIQUIDITY RISK MANAGEMENT PRACTICES

The study revealed that various liquidity risk management practices were employed in the daily running of the bank. Most of these practices were carried out and enforced in the various branches as the maintenance of adequate liquidity starts from the branch level and ends with the entire bank. Although a documented liquidity risk management policy was not sighted at any of the branches, most of the respondents asserted to the fact that the bank with its branches practised and upheld various Bank of Ghana regulations as well as homegrown liquidity risk management practices specially designed by the bank and aimed at maintaining the needed level of liquid assets. In order to examine the liquidity risk management system and the organizational structure in place in relation to managing liquidity risk at the bank from the perspective of the staff members, a number of questions were raised. These questions pertained to statements or processes that have been found to influence liquidity risk management. These questions sought to solicit their views on a number of items such as the quality of staff, the constitution of a proper organizational structure in terms of managing risk and their understanding of it, the setting of minimum and maximum liquidity levels, and the level of support from the Head Office in terms of crisis.

To evaluate the prevailing liquidity risk management (LRM) practices and the organizational structure in relation to managing liquidity risk at Kumawuman Rural Bank Ltd, a 12-item questionnaire was used. Each item on the questionnaire was scored on a five-point Likert scale (0 – N/A; 1 – strongly disagree; 2 – disagree; 3 – not sure; 4 – agree; 5 – strongly agree). Responses were summed up and averaged for each item on the questionnaire. This average score was taken to represent the existing situation in the bank.

The study revealed that the bank does a significant job in terms of formulating and implementing strategies in managing its liquidity. A significant number of respondents scored high marks on the questions designed to examine the prevailing liquidity risk management practices and the organisational structure in relation to managing liquidity risk. See the table in Section B of the attached questionnaire in the appendix for the questions. Figures 2 – 13, show how the respondents scored and the mean score in each of those questions.

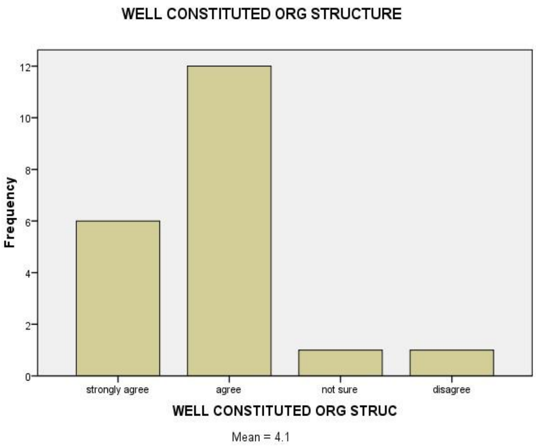
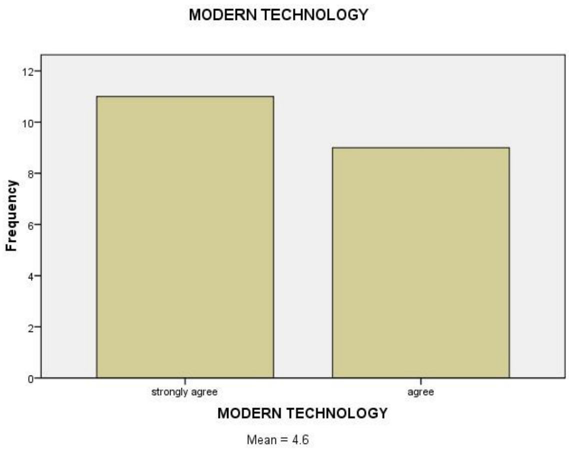


Figure 2

Figure 3



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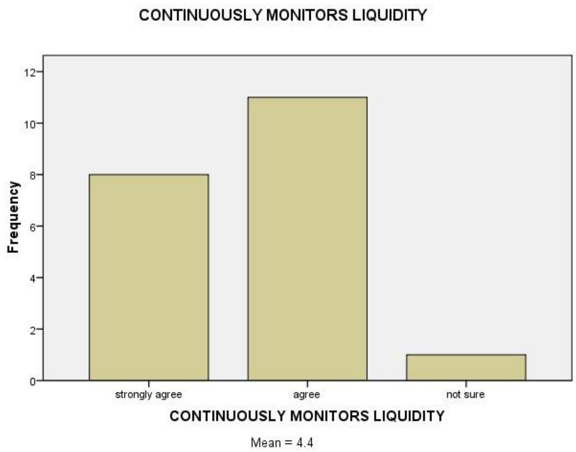

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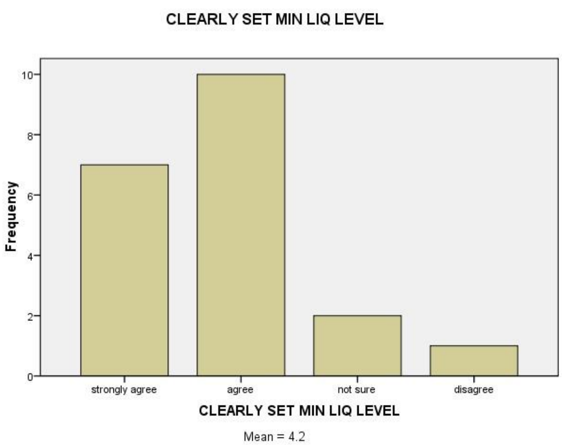

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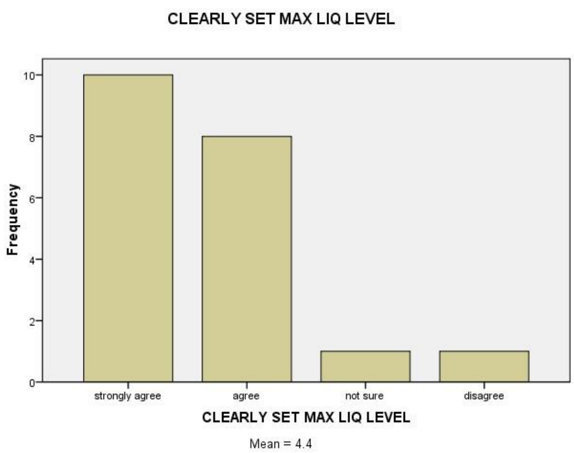

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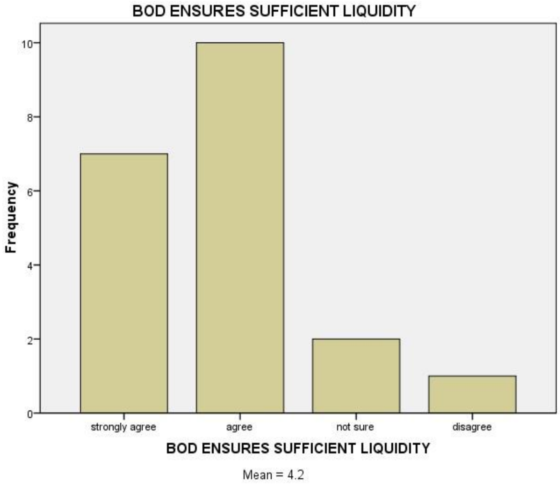


Figure 8

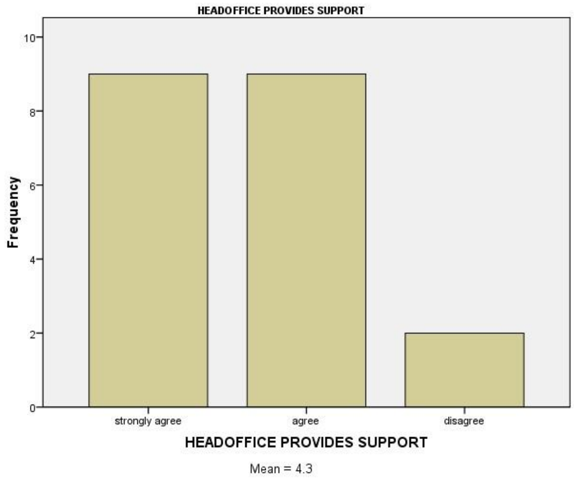


Figure 9

Figure 2 – 9 Liquidity Risk Management Practices (I)

An analysis of Liquidity Risk Management (LRM) strategies in the bank showed that the bank adopted a variety of strategies including having a well constituted organizational structure to manage their risks, continuously monitoring its liquidity position before giving out credit facilities, and clearly setting both minimum and maximum liquidity levels at the braches to meet customer demands. The Board of Directors (BOD) also ensures sufficient liquidity to meet obligations at all times, and the head office effectively and willingly provides support in times of crisis situations.

High quality staff and modern technology has also been strategically been utilized. The average score for each of these strategies was 4 – agree (with a minimum of 4.1 and a maximum of 4.6). This result suggests that the bank adhered to and implemented these strategies.

There were questions on other strategies. Responses therefrom were not as strong in the affirmative that need to be pointed out. Although the average scores on those categories of questions can be rounded up to denote 4 – agree, the researcher believes that there is no smoke without fire and no detail is too small to ignore when it comes to the banking sector. Those strategies included the bank possessing a documented homegrown Liquidity Risk Management Policy recognized by all employees. Quite a number of respondents who had different number of years' experience in their current position (from less than 2 years to 8 years) either disagreed or were unsure of the certainty of this strategy. This made a total of 40%. The other strategies include putting trained and knowledgeable individuals in charge of taking and managing risk, providing a conduit for good and timely information flow within the organisation and providing regular training for staff on liquidity management practices. The average score on these questions ranged from 3.8 to 3.9

All respondents who were either unsure or disagreed that individuals who manage risk clearly understand it had at most 2 years or less in their current position. This finding therefore, maybe as a result of the inability of the bank to unveil those in charge of making those decisions at the bank to everyone. This would promote trust and build confidence in them. Also, with the exception of one respondent who had been in his current position for 6-8 years, all other respondents who were not sure or disagreed with the statement that the bank provides regular training on liquidity have at most 2 years or less in their current position. On the strategy of providing a conduit for good and timely information flow within the organisation, respondents who were either unsure or disagreed with its implementation not only had less than 2 years in their current position but included others who had been in their position for as long as 6-8 years. This creates a picture that that is the on-going state of affairs at the bank.

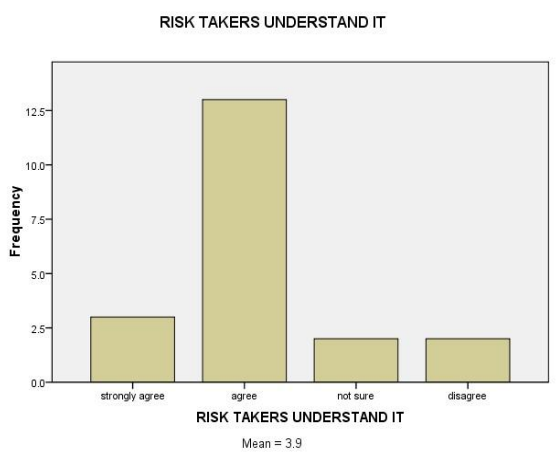


Figure 10

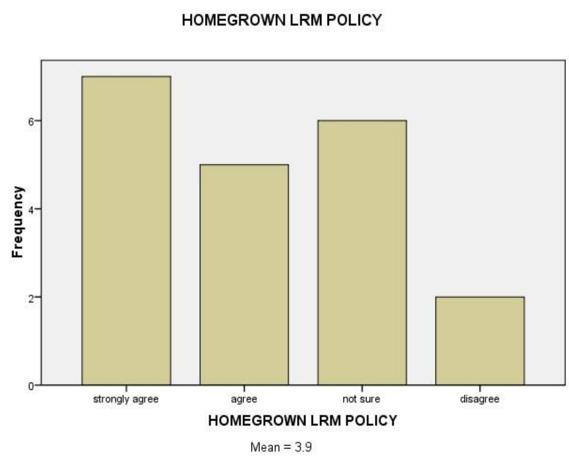


Figure 11

Figure 12

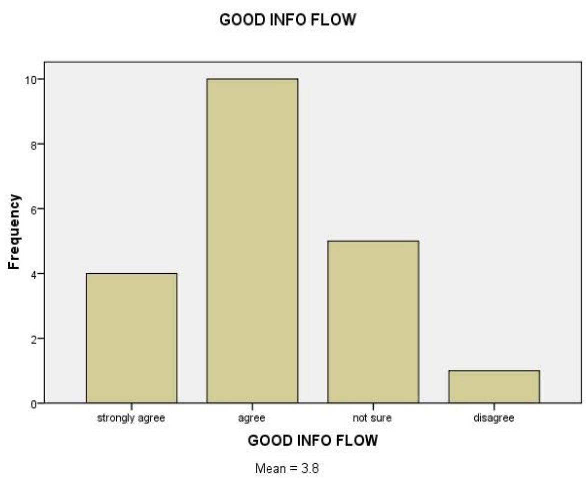


Figure 13

Figure 10 – 13 Liquidity Risk Management Practices (II)

4.4 MEASUREMENT, MONITORING AND CONTROL OF LIQUIDITY

To identify the factors that influence liquidity risk management practices and strategies that are set up to monitor and control liquidity risk at Kumawuman Rural Bank Ltd., an 8-item questionnaire was used. See the questions at the table in Section C of the attached questionnaire in the appendix. Each item on the questionnaire was scored on a five-point Likert scale as discussed above. Figures 14 – 21, show how the respondents scored and the mean score in each of those questions.

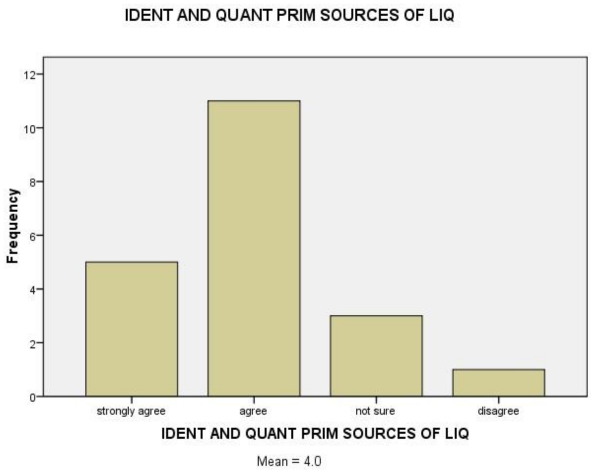


Figure 14

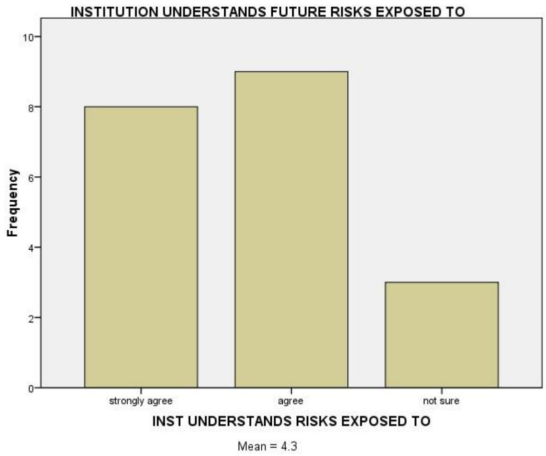


Figure 15

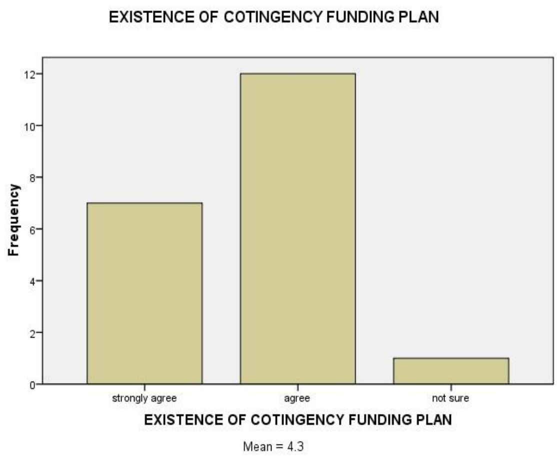
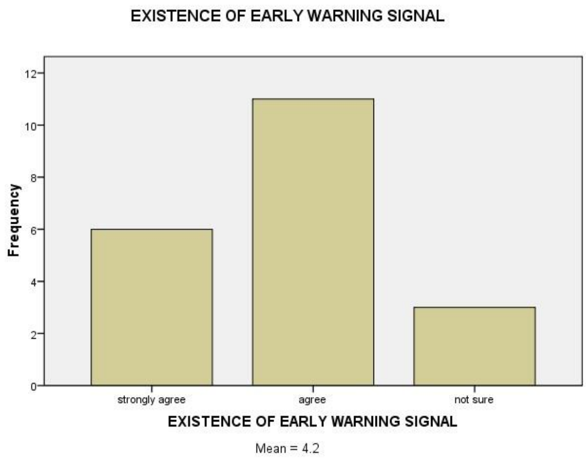


Figure 16



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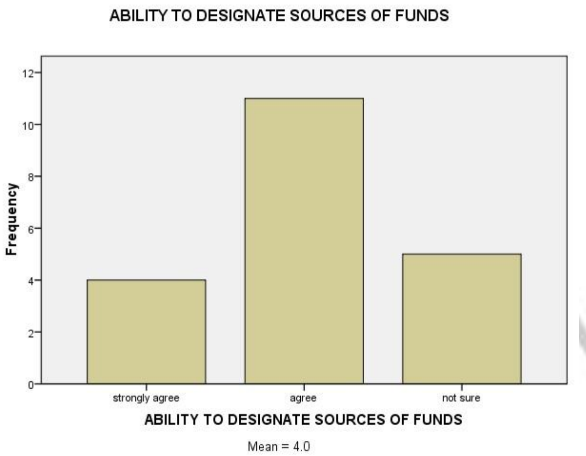

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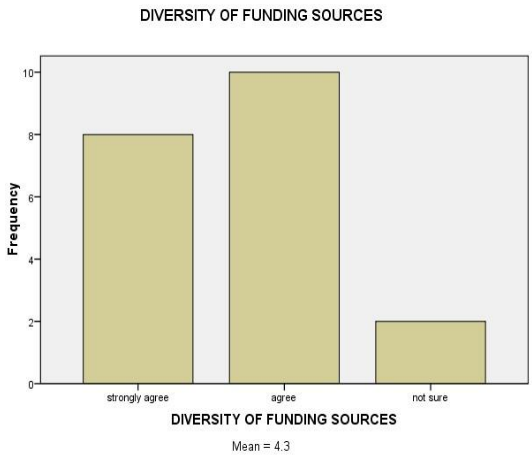

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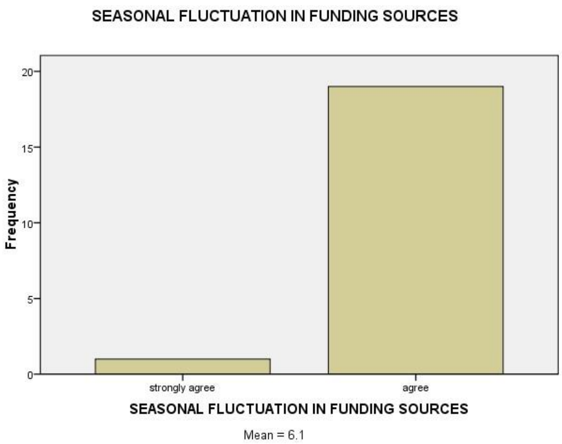


Figure 20

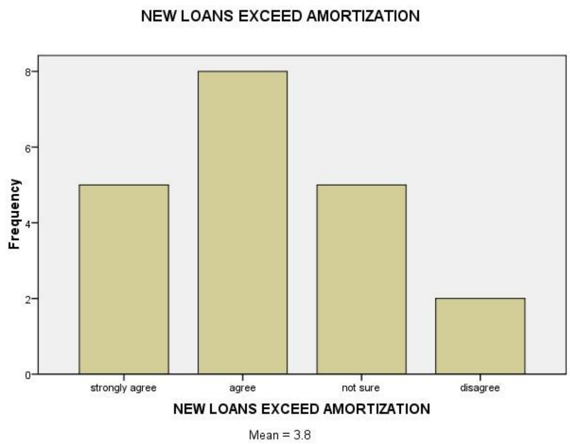


Figure 21

Figure 14 – 21 Measurement, Monitoring And Control (I)

The study further revealed that the bank does very well to identify factors that influence the measurement, monitoring and control of liquidity risk. It was found out that the bank is able to implement these strategies by having the ability and capacity to detect and quantify the primary sources of the banks liquidity risk in a timely manner (mean = 4.0). Management also has the foresight to understand both existing as well as future risks that the institution is exposed to (mean = 4.3). The existence of a contingency funding plan to address liquidity crisis conditions is also a major tool.

The contingency plan, from a discussion with the treasury and operations department, starts from the Head Office offering support to all branches in times of dwindling cash holdings at the branch. It should be noted that this statement was corroborated by the finding that the mean score for the questions to the ability of the Head Office to provide support to its branches yielded a significant 4.3 grade on the Likert Scale. This plan is further extended to the bank drawing cash from its clearing and reserve cash account at the ARB Apex Bank in a timely manner to quickly solve any impending crisis should the Head Office and Treasury request so.

The bank also scored high marks (mean = 4.3) in its ability to implement an early warning signal system in an approaching crisis situation. Note that 85% of respondents either agree or agree strongly on that score. When such a situation is detected, the bank may cut the extension of new credit facilities for a stipulated period and intensify recovery of disbursed ones to keep the liquidity of the bank balanced. The findings also seem to give the impression that the bank is able to effectively designate sources of their funds as being either volatile or stable, drawing funds from relatively diverse sources and acknowledging the unarguable fact that there is a high seasonal fluctuation in terms of sources of funding. Mean scores of 4.0, 4.3 and a whopping 6.1are respectively noted. On the question of whether the demand for new loans exceed loan amortization (repayment), respondents scored it an average of 3.8 which supposes that new loans do not in fact exceed repayment of old ones. This is in truth a good outcome for the bank because for a bank to soundly manage its liquidity, it must also be able to recover loans disbursed in a timely manner. This mean score is quite high. A further sign of worry is that respondents who agreed with the statement that demand for new loans exceed loan amortization (repayment) were not limited to ones with 2 years or less in their current position but included those with more than 10 years in their position. Therefore, measures should be put in place to keep a more effective control of this phenomenon.

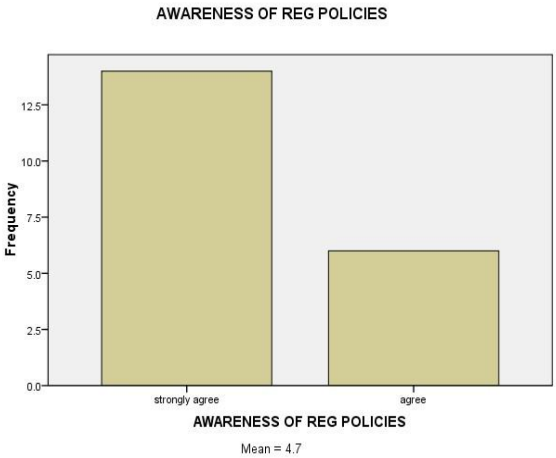
These results suggests that the study has identified these factors as significantly influencing the liquidity risk management practices and the bank duly recognizes them and strives to measure, monitor and ultimately control them.

4.5 COMPARISON OF THE LEVEL OF COMPLIANCE WITH THE STANDARD LIQUIDITY RISK MANAGEMENT PRACTICES

The ultimate standard when it comes to liquidity risk management practices is drawn from the Central Bank regulations on liquidity; in this case that of the Bank of Ghana (BOG). In pursuance of a continued secured banking status and maintenance of confidence in the financial service industry, the Bank of Ghana tolerates no compromise on liquidity requirement responsibility of banks. Banks are expected to send to the Bank of Ghana Banking Supervision Department (BSD) 1R, a weekly Liquidity Reserve Return. This return is prepared to satisfy the requirements of section 31(1) of the Banking Act, 2004, accordingly. The purpose of the return is to ensure the maintenance of prescribed liquidity to serve as buffer for deposit liabilities as well as indicating the excess liquidity available for investments in assets and meeting other obligations. The existing reserve asset managements prescribed by the

Bank of Ghana for Rural and Community Banks in particular are as follows: Primary Reserve = 8%, ARB Apex Bank Reserve = 5% and Secondary Reserve = 30%. This makes a total of 43% of total deposits as reserve.

To analyze the compliance of Kumawuman Rural Bank Ltd of these regulatory policies in place, a 4-item questionnaire was used. See the table in Section D of the attached questionnaire in the appendix for the questions. Each item on the questionnaire was scored on a five-point Likert scale as discussed above. Figures 22 – 25, show how the respondents scored and the mean score in each of those questions.



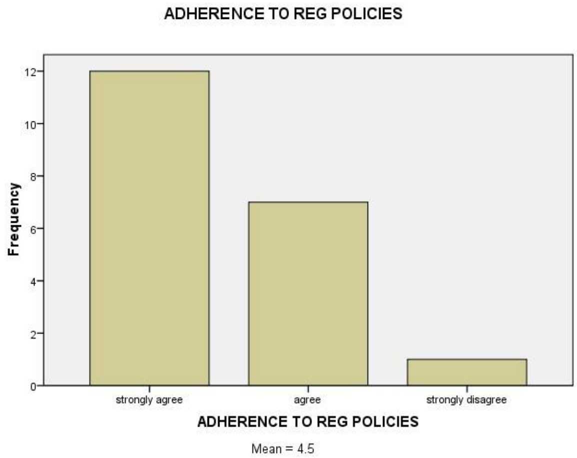
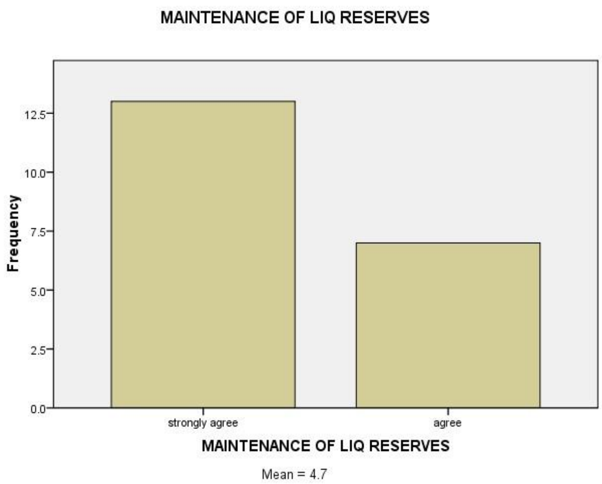


Figure 22

Figure 23



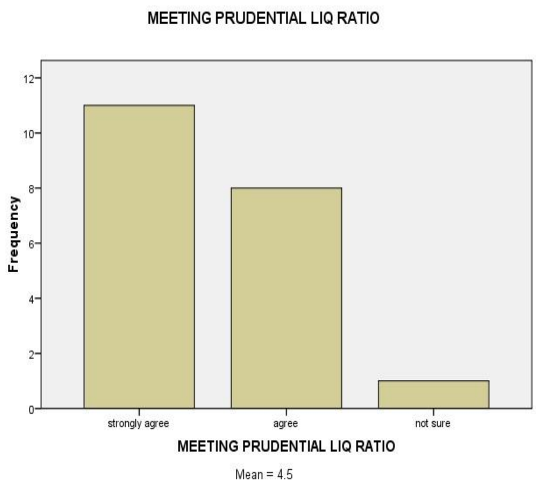


Figure 24

Figure 25

Figure 22 – 25 Level of Compliance (I)

When it comes to regulatory policies, the findings of the study point emphatically in the direction that the bank is doing very well as not less than 95% of the respondents either agreed or strongly agreed to the questions on the awareness of the bank of such regulatory policies, the adherence to those regulatory policies, the continued ability to maintain liquid reserves in accordance with Central Bank regulations and the meeting of prudential liquidity ratios. The mean scores for these were 4.7, 4.5, 4.7 and 4.5 respectively. The finding is buttressed by the fact that the bank has never been penalized by the Bank of Ghana for its inability to meet the required liquidity reserve ratio as stipulated in Sections 32 and 33 of Act 673 (2004).

4.6 THE IMPACT OF LIQUIDITY RISK ON THE PERFORMANCE OF KUMAWUMAN RURAL BANK LTD.

The ultimate aim of any banking institution is to profit from its field of business. To analyze the impact of liquidity risk management of Kumawuman Rural Bank Ltd on its performance, a 2-item questionnaire was used. See the table in Section E of the attached questionnaire in the appendix for the questions. Each item on the questionnaire was scored on a five-point Likert scale as discussed above. Figures 26 and 27 show how the respondents scored and the mean score in each of those questions.

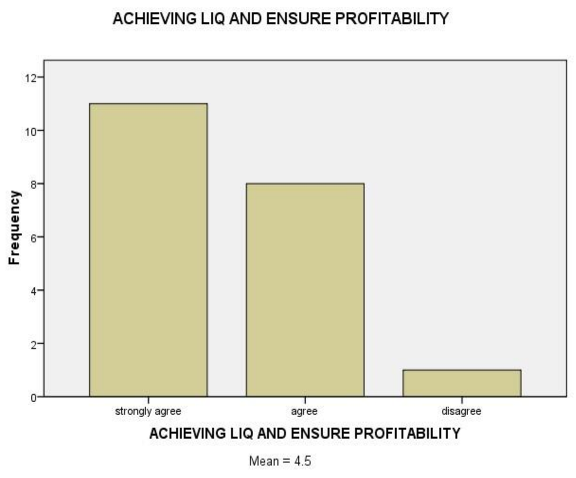


Figure 26

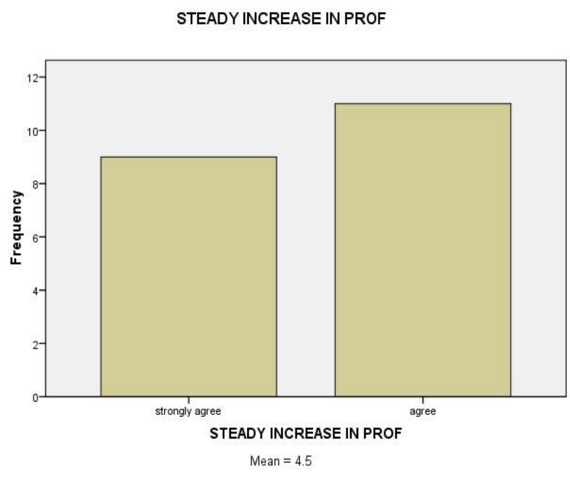


Figure 27

Figure 26 – 27 Impact of Liquidity Risk on Performance (Profitability) (I)

The figures above indicate that a vast majority of the respondents were of the view that the bank has been able to achieve adequate liquidity while ensuring profitability as well. By scoring this item an average of 4.5 and 95% either agreeing or strongly agreeing, respondents confirm that assertion. Furthermore, 100% of the respondents agreed or strongly agree to the statement that in their view, the bank has been experiencing a steady increase in profitability over the years. The result is evidenced also by the continuous increase in the profit after tax (PAT) of the bank from GH¢173,107 in 2009 to GH¢358,231 in 2010; GH¢496,773 in 2011 to GH¢707,260 in 2012, and up GH¢854,477 in 2013 as captured in the 2013 annual report and financial statements of the bank.

Chapter Five

SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 INTRODUCTION

This chapter seeks to bring the totality of the research process to an end. The findings made in the research are summarised with relevant conclusions and recommendations.

5.2 SUMMARY OF FINDINGS

The study revealed that various liquidity risk management practices were employed in the daily running of the bank. A significant number of respondents scored high marks on the questions designed to test the liquidity risk management practices. The analysis of Liquidity Risk Management (LRM) strategies in the bank showed that the bank adopted a variety of strategies including having a well constituted organizational structure to manage their risks, continuously monitoring its liquidity position before giving out credit facilities, and clearly setting both minimum and maximum liquidity levels at the branches to meet customer demands. The Board of Directors (BOD) ensures sufficient liquidity to meet obligations at all times, and the head office effectively and willingly provides support in terms of crisis situations. High quality staff and modern technology are employed. However, there were a few other respondents who held different views on other liquidity risk management practices.

These include areas such as the bank possessing a homegrown documented Liquidity Risk Management Policy recognized by all employees, and putting individuals who clearly understand the concept of risk in charge of taking and managing it. Providing a conduit for good and timely information flow within the organisation and providing regular training for staff on liquidity management practices also elicited some divergent views. Although this discrepancy may not be too big as observed in the findings (with averages between 3.8 and 3.9), the researcher believes no detail is too small to ignore and its solution may go a long way in helping keep the bank on a sustainable even keel. This is more so as the divergent opinions shared came from respondents from a wide range of a number of years in their current position – from less than two years up to 8 years.

The study was able to bring to the fore that the bank is effectively able to identify and quantify the primary sources of liquidity risk in a timely manner and also designate the sources of funds in terms of its stability or volatility. The ability to identify these is already half the problem solved. It was also found out that the bank possesses its own uniquely domesticated contingency plan and an early warning signal system to check any approaching crisis. One fact that the study cannot ignore is the revelation that the bank recognises that there is a significantly wide seasonal fluctuation in the sources of funding. Therefore, efforts should be made to address this fluctuation so as to utilize it to the benefit of the bank.

The findings of the study point emphatically in the direction that the bank is doing very well in its compliance as not less than 95% of the respondents either agreed or strongly agreed to the questions on the awareness of the bank of such regulatory policies, the adherence to those regulatory policies, the continued ability to maintain liquid reserves in accordance with Central Bank regulations and the meeting of prudential liquidity ratios. This is further buttressed by the fact that the bank was awarded with the second runner-up position in the compliance division by the ARB Apex Bank. The bank should therefore make efforts to continue this path in this regard.

It is evident in many literature that the keeping and maintenance of adequate liquidity ensures the ultimate profitability of the bank. As evidenced in the findings, 95% of the respondents agreed or strongly agreed to the assertion that the bank has been able to achieve adequate liquidity while ensuring profitability as well. Also, the entire sample size (100%) was in agreement that the bank has been experiencing a steady increase in profitability over the years.

5.3 CONCLUSION AND RECOMMENDATIONS

Sound liquidity management practice is essential in maintaining public confidence in banks. In this regard, the seasonality of withdrawal pattern coupled with other financial obligations, good credit management practice, profitable operations, reasonable capital investments, persistent increase in deposits level and effective internal control system should prevail for the attainment of efficient liquidity management. The maintenance of desirable liquidity is very fundamental to sound, safe and stable banking. However, the very nature of banking involves the taking of risk – it cannot be done away with. Liquidity risk is no exception. Liquidity shocks appear at the heart of the current financial turmoil (Banque de France Financial Stability Review, 2008). It is therefore imperative to constantly manage it.

The result of the study indicate that the bank has in place a number of strategies in managing its liquidity risk including having its own unique homegrown practices although they are not documented for recognition by all employees for current and future liquidity needs. Decisions therefore largely depend on the know-how of the personnel at the helm of affairs at any point in time. The bank also has a well constituted organisational structure for individuals responsible for taking as well as managing risk. Although the bank has many qualified staff members in terms of experience on the job and education, more should be done to provide training programmes for other involved staff (such as branch managers, accountants etc.) on liquidity management on a regular basis. It must include newly employed or promoted employees and also refresh the knowledge of those already in the system. This will help them to make good and informed decisions and deliver efficient services to the bank and its customers. Efforts should as well be made to ensure good and timely information flow within the organization by providing a clear platform and path for employees to share their views and concerns to be listened to and incorporated in decision making at the bank by management and staff. Furthermore, the detected wide seasonal fluctuation in the sources of funding deserves a critical look to bridge the seasonal gap.

Management should be commended for its ability to identify, quantify, monitor and control its liquidity risk and also for putting in place a contingency funding plan and an early warning signal system for impending risk. However, the gradual increase in new loans to exceed amortization of already disbursed ones needs a critical look. Another noteworthy point is the enviable compliance attitude of the bank in respect of regulatory policies. It goes without saying that the ability to achieve effective liquidity ultimately translates into increased profitability.

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APPENDIX 1

KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY

SCHOOL OF BUSINESS, KUMASI

LIQUIDITY RISK MANAGEMENT PRACTICES IN KUMAWUMAN RURAL BANK

QUESTIONNAIRE FOR STAFF

The series of statements and questions in this questionnaire are designed to obtain organizational and staff views on the effectiveness of liquidity risk management policy and practices in Ghanaian Rural Banks using Kumawuman Rural Bank Ltd as a case.

Kindly indicate your opinions by ticking the appropriate option (if provided) or writing your answers for open-ended questions. Please answer all questions freely but objectively.

The information is for academic purposes only and will be treated with the strictest confidentiality.

Thank you

Joseph Opoku Adusei

MBA (Finance) Student

SECTION A: DEMOGRAPHIC DATA

Please select the appropriate answer to the following questions by circling/underlining that option.

1. Age [1] 18-23 [2] 24-29 [3] 30-35 [4] 36-47 [5]48 or more

2. Marital Status: [1] Single [2] Married [3] Separated [4]Divorce [5]Widowed

3. Highest Education Level attained: [1] Masters and above [2] Post Graduate Diploma [3] First Degree [4] A 'Level' [5] O 'Level'/SHS [6] other (Please specify ……………………………………………

4. Do you have additional professional qualification? [1] Yes [2] No

   If yes, please specify

………………………………………………………………………………………………

5. Current Job Title/Office:

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

6. Number of years at your current job [1] 2 or less years [2] 2-4 years [3]4-6 years [4] 6-8 years [5] 8-10 years [6] 10 or more years

SECTION B: LIQUIDITY RISK MANAGEMENT (LRM) STRATEGIES

Please indicate the extent to which you agree with these statements.

Statement	Strongly agree	Agree	Not Sure	Disagree	Strongly disagree	N/A
7. The individuals who take/manage risk clearly understand it.						
8. The bank has a well constituted organizational structure defining clearly roles and responsibilities of individuals involved in risk taking as well as managing it.						
9. The bank has quality of staff in terms of level of education and experience.						
10. The bank provides regular training						

programmes for its staff on liquidity management.						
11. The bank uses modern technology (computer) in its operations.						
12. The bank continuously monitors its liquidity position before giving out credit facilities						
13. The bank has its own homegrown liquidity risk management policy, which is clearly defined in written form and recognized by all employees for current and future liquidity needs						
14. The bank has clearly set minimum liquidity levels to be maintained at all times in all of its						
branches.						

15. The bank has clearly set maximum liquidity levels to be maintained at all times in all of its branches in order not to lose out on other profitable activities.						
16. The board of directors ensures there is sufficient liquidity to meet its obligations when they fall due.						
17. The head office effectively and willingly provides support in the event of crisis.						
18. Information flow within the organization good and timely.						

SECTION C. MEASUREMENT, MONITORING AND CONTROL OF

LIQUIDITY RISK

Please indicate the extent to which you agree with these statements

Statement	Strongly agree	Agree	Not Sure	Disagree	Strongly disagree
19. Management is able to identify and quantify the primary sources of the banks liquidity risk in a timely manner.					
20. Management understands both existing as well as future risk that the institution can be exposed to.					
21. The bank has in place a contingency funding plan to address crisis conditions.					
22. The bank has in place an early warning signal					

system that will be used as a sign of approaching crisis					
23. Management is able to clearly designate sources of funds as volatile or stable					
24. Funding is drawn from relatively diverse sources					
25. The bank experiences significant seasonal fluctuations in sources of funding.					
26. The demand for new loans exceeds loan amortization (repayment)					

SECTION D. COMPLIANCE

Please indicate the extent to which you agree with these statements

Statement	Strongly agree	Agree	Not Sure	Disagree	Strongly disagree
27. The bank is fully aware of the existence of the central banks regulatory policies on liquidity in place.					
28. The bank continually strives to adhere to these regulatory policies					
29. The bank is continuously able to maintain liquid reserves in accordance with central bank regulations.					
30. The bank complies with prudential liquidity ratios.					

SECTION E. PROFITABILITY

Please indicate the extent to which you agree with these statements

Statement	Strongly agree	Agree	Not Sure	Disagree	Strongly disagree
31. The bank has been able to achieve adequate liquidity while ensuring profitability as well.					
32. In your view, the bank has been experiencing steady increases in profitability over the years					

Thank you!

APPENDIX 2

KUMAWUMAN RURAL LTD - FINANCIAL INDICATORS

INDICATOR (GHS)	2009	2010	2011	2012	2013
Total Income	1,404,352	1,948,004	3,261,181	4,922,439	6,358,521
Operating Expenses	1,362,652	1,799,691	2,427,036	3,536,880	5,077,127
Profit Before Tax	222,535	388,231	609,345	836,847	959,394
Profit After Tax	173,107	358,231	496,773	707,260	854,477
Deposits	6,659,443	10,947,332	15,015,641	22,355,228	25,499,223
Loans and Advances	4,159,451	6,053,844	9,426,040	11,513,428	14,586,476
Investments	3,613,789	4,231,162	5,221,546	7,070,000	8,165,000
Total Assets	10,173,989	13,572,760	18,694,263	30,553,626	34,214,224
Stated Capital	310,251	318,211	643,190	1,004,160	1,521,701
Income Surplus	119,866	351,991	286,821	302,263	310,072
Shareholders' Funds	862,187	1,206791	1,725,185	2,381,535	3,179,852
No. Branches/Agencies	8	9	9	10	10
No. of Staff	107	132	129	143	156

Source: Annual Report and Financial Statement , Kumawuman Rural Bank Ltd