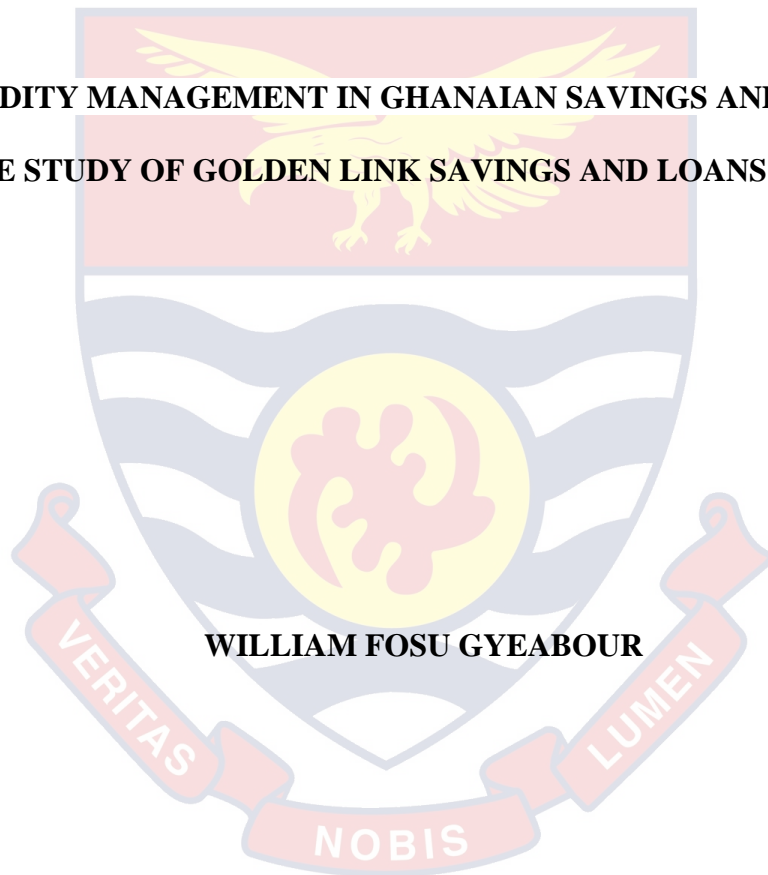


**CHRISTIAN SERVICE UNIVERSITY COLLEGE**

**LIQUIDITY MANAGEMENT IN GHANAIAIAN SAVINGS AND LOANS. A  
CASE STUDY OF GOLDEN LINK SAVINGS AND LOANS LIMITED**

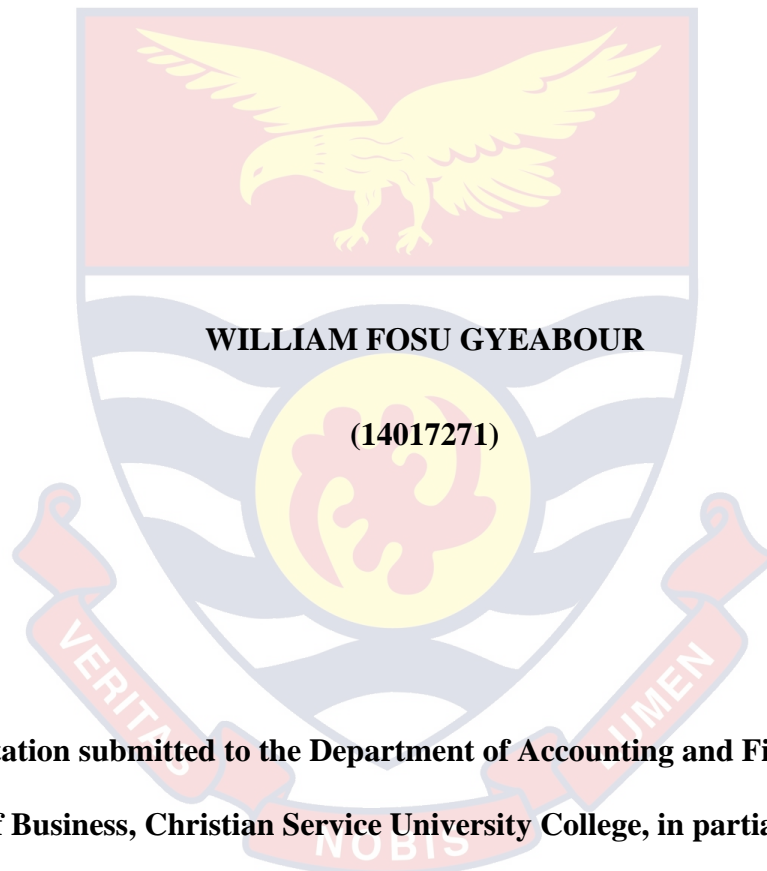


**WILLIAM FOSU GYEABOUR**

**JUNE, 2018**

**CHRISTIAN SERVICE UNIVERSITY COLLEGE**

**LIQUIDITY MANAGEMENT IN GHANAIAN SAVINGS AND LOANS. A  
CASE STUDY OF GOLDEN LINK SAVINGS AND LOANS LIMITED**



**Dissertation submitted to the Department of Accounting and Finance, of the  
School of Business, Christian Service University College, in partial fulfillment of  
the requirements for the award of the Master of Science Degree in Accounting and  
Finance**

**JUNE, 2018**

## 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 .....

**William Fosu Gyeabour**  
(Student)

### Supervisor's Declaration

I hereby declare that the preparation and presentation of the dissertation were supervised in accordance with the guidelines on supervision of dissertation laid down by the Christian Service University College.

Supervisor's Signature ..... Date .....

**Dr. Joseph Yensu**  
(Supervisor)

## ABSTRACT

The purpose of the study was to determine liquidity management in Ghanaian savings and loans with the case study of Golden Link Savings and Loans. A large body of research theoretically asserts positive association between good liquidity management and financial performance of financial institutions. Little attention has been paid to the liquidity management of Golden Link Savings and Loans which are contributing direct to the welfare of the citizen and economy growth. This research addresses some conceptual and measurement issues related to the study of liquidity management and its effects on financial performance of Golden Link Savings and Loans in a Ghanaian context. A total of 200 questionnaires were distributed but only 160 were retrieved from the respondents. Also, secondary data was collected from their published financial statement between years 2012 to 2017. Golden Link Savings and Loans was the source of data and hence the reliability of the data. The researcher used descriptive statistics, chi-square analysis and correlation efficient method. In order to test this relationship regression analysis was run with total profit before tax to total assets as the dependent variable and the liquidity, funding liquidity risk, operational efficiency, and quick ratio log of total assets as the independent variables. The findings were that financial performance as measured by profit before tax over total assets is positively related to Liquidity, funding liquidity risk, operational efficiency, quick ratio and log of total assets. The study therefore recommends that Golden Link Savings and Loans should put in place the best liquidity management practices to increase their financial performance.

## DEDICATION

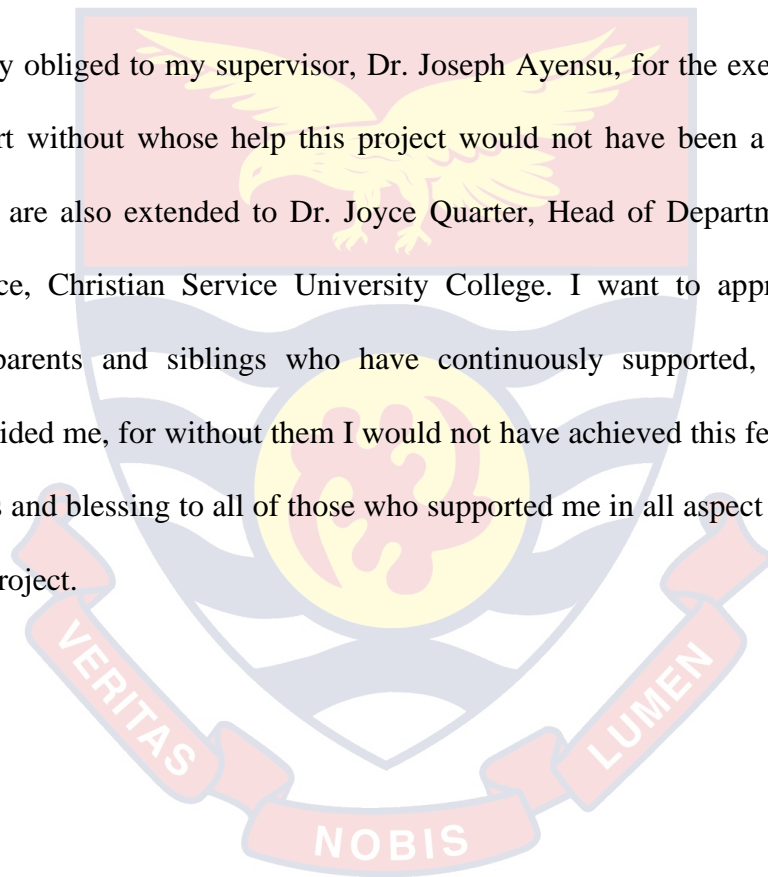
This projected work is dedicated to my loving wife Mrs. Zipporah Afriyie and my beloved children Wilhemina, Lemuel and William whom I am proud of for being my source of inspiration and joy in my life. I also owe it a duty to dedicate this piece of work to my dependable father, Pastor Samuel Ofofu Gyeabour and caring mother, Mrs. Georgina Kyei for their abundant love, care and guidance throughout my entire life.



## ACKNOWLEDGEMENT

It has been an exciting and instructive study period in the Christian Service University College and I feel privileged to have had the opportunity to carry out this study as a demonstration of knowledge gained during the period studying for my master's degree. With these acknowledgments, it would be impossible not to remember those who in one way or another, directly or indirectly, have played a role in the realization of this research project. Let me, therefore, thank them all equally.

I am deeply obliged to my supervisor, Dr. Joseph Ayensu, for the exemplary guidance and support without whose help this project would not have been a success. Similar sentiments are also extended to Dr. Joyce Quarter, Head of Department, Accounting and Finance, Christian Service University College. I want to appreciate my wife, children, parents and siblings who have continuously supported, encouraged and morally guided me, for without them I would not have achieved this feat. Lastly, I offer my regards and blessing to all of those who supported me in all aspect during the write-up of the project.



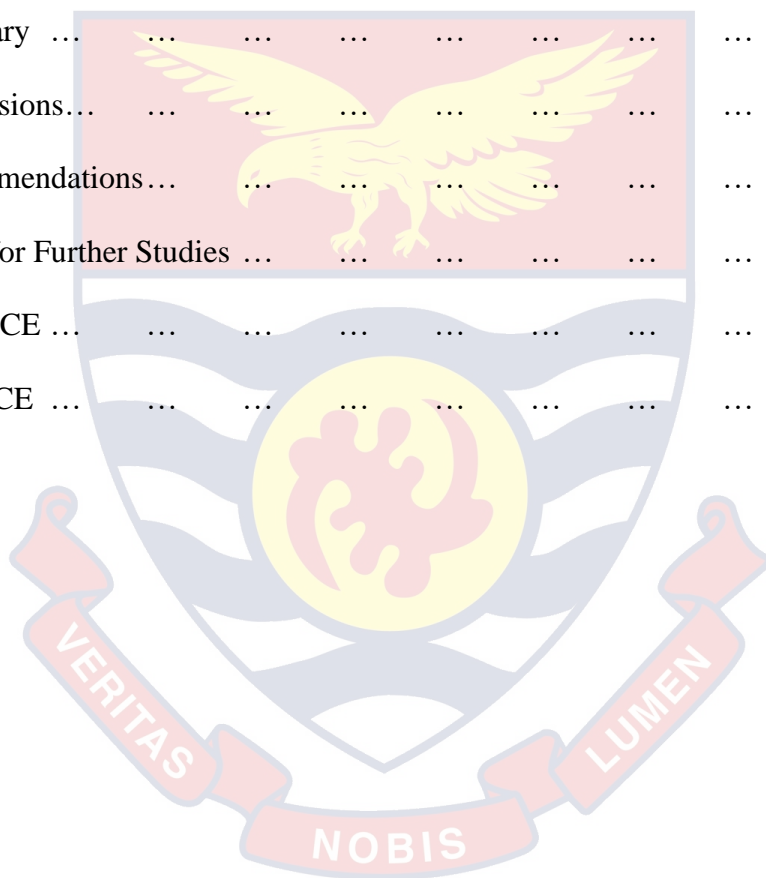
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## CHAPTER ONE

### INTRODUCTION

#### 1.1 Background to the Study

According to Khalfaoui & Saada, (2015) liquidity allows banks to meet their obligations and to fulfill economic functions such that the greater the liquidity ratio the better the bank is expected to perform. Similarly, Bordeleau & Graham, (2010) said liquidity was a major cause of the 2007 financial crisis. Liquidity is the ability of the bank or savings and loan entity to fund asset growth and meet its obligations as they fall due without incurring acceptable losses (BIS (2008)). Indeed, the Basel Committee (2009) explained that the viability of commercial banks depends on the liquidity position of the bank. Liquidity can be defined as the assets or securities which can be easily converted into cash. Liquidity refers to the short term assets (cash, short term advances, and balance with other bank) and short term liabilities (short term borrowing, account payable, lending to financial institution and short term deposits). Liquidity explains the company capability to cope with its short duration liability because it plays a vital role in defining how efficiently a firm manages its short duration requirements and invests the cash to rise the profitability of the organization.

The liquidity in the savings and loans represents its ability to fund its obligations by the contractor at the time of maturity, which includes investment and lending commitments, deposits, withdrawals and accrued liabilities (Amengor, 2010). According to Berger & Bouwman (2008) liquidity management is the description of an organization by the amount of cash or near cash assets an organization has. This implies the more liquid asset, the higher the organization's liquidity. Liquidity management can be described in two ways based on the definition of liquidity; one type of liquidity

applies to large organizations, such as financial institutions. Savings and loans are usually evaluated on their liquidity and their ability to meet cash and collateral obligations without incurring substantial losses. Another type of liquidity management refers to the ability to trade assets such as bond or stock at its current price. From the above definitions, liquidity management can be described as the effort of managers and investors to reduce liquidity risk exposure.

Comprehensive liquidity management can lessen the likelihood of severe difficulties. The importance of liquidity undeniably surpasses individual savings and loans because liquidity gap at a particular savings and loans can have organizational wide-ranging impacts which can result to the collapse of the business. The scrutiny of liquidity therefore, enjoins the managers of the savings and loans not only to assess the liquidity position of the savings and loans on a continuing basis but also to observe how financing requirements are expected to progress under numerous situations comprising disparaging circumstances. Monitoring liquidity in many firms in recent economic times requires cautious consideration of all possible unfavorable situations rather than just the mere calculations of a few ratios (Amengor, 2010).

Sound liquidity management is an important objective of savings and loans, not only because it prevents savings and loans from running in to liquidity shortages but also because it determines their profits. Munyambonera (2010), Olweny and Ongore and Kusa (2013), as cited in Lukorito et al (2014) have not only identified profitability as the primary objective pursued by commercial banks, but have also recognised that profits are a necessity for successful banking in this era of stiff competition in financial markets, and financial managers are committed to meeting that objective. Though, liquidity management has always been a priority in most savings and loans, the aftermath of the global financial crisis and lessons learned from it have renewed

concerns on savings and loans liquidity issues. In a state of turmoil in banking markets, customers can withdraw their deposits at any time and this can lead to savings and loans runs that can lead to costly liquidation of assets of even large savings and loans. The liquidity of savings and loans allows them to grant credits and consequently stimulate investment and growth. To Civelek and Al-Alami (1991), since commercial banks are the primary suppliers of funds to firms, the availability of bank credit at affordable rates is of crucial importance to firm investments, and consequently, to the health of the economy.

Generally, savings and loans should appraise the likely future cash flows, stress the same cash flow assessments under various scenarios and develop all-encompassing plans for coping with possible gaps. Modern financial and technical institutions have delivered to the savings and loans new ways of funding their undertakings and managing their liquidity. Furthermore, a decreasing capacity to depend on core deposits, increased reliance on wholesale funds and the recent disorder in international financial markets have transformed the way liquidity is viewed by the savings and loans (Munyambonera 2010).

The policies and methods employed by savings and loans in the management of liquidity depend on the scope and complexity of the savings and loans as well as the nature and intricacies of its activities. As liquidity and profitability are two inherent goals in savings and loans, the management of such firms continues to experience the conflict of trying to provide efficient mechanism of addressing their savings and loans' liquidity position. Practically, liquidity and profitability are effective indicators of the corporate health and performance of not only the commercial banks but all profit-oriented ventures (Eljelly, 2004).

The management of liquidity has passed through distinct stages; the control, optimization and the value measurement stages.

Control stage: this stage is characterized by an orderly approach of monitoring the inward, outward and outstanding balances of cash, receivables and inventories.

Optimization stage: this focuses in the management efforts to maximize the related income of liquidity management while at the same time minimizing the associated cost of its management while ensuring the physical safety. Value management approach: this focused on what ways to assist the managers in the formation and extent of value without ignoring the above mentioned stages.

Working capital distinguishes between assets in cash and other current assets and the firm's current liabilities (obligations for which cash will soon be required). Therefore, it measures the firm's competence and its short term financial health. The prime purpose of liquidity management is to preserve the optimum balance of each liquid item. To attain optimal liquidity, the management should control the interchange between profitability and liquidity effectively.

All the same, the advantages associated with liquidity management come with certain cost of investments when large funds are involved and are accumulated in liquid assets. Huge investments in certain components of working capital could hold up vital capital and consequently lead to reduced profit margins. Time management is another crucial cost implication in the liquidity management. The management must always be on top of their liquidity issues at any point in time (Eljelly, 2004).

The key objective of this study is to examine the level of liquidity management policies in Golden Link Savings and Loans Limited, how it influences the performance of the

savings and loan and investigates ways of improving the liquidity management of the savings and loans.

## 1.2 Statement of the Problem

Managing liquidity is an essential factor in the safe and comprehensive supervision of all financial institutions. The successes of financial firms greatly depend on the firm's ability to manage its liquidity which is a significant component of corporate finance. Corporate accomplishment greatly rest on the capacity of financial managers to effectively manage stock, debtors and creditors (Filbeck & Krueger, 2005). High liquidity reduces the overall profitability. According to Chandra (2001), normally a high liquidity is considered to be a sign of financial strength, however according to some authors as Assaf Neto (2003), a high liquidity can be as undesirable as a low. This would be a consequence of the fact that current assets are usually the less profitable than the fixed assets. It means that the money invested in current assets generates less returns than fixed assets, representing thus an opportunity cost. Besides that, the amounts employed in current assets generate additional costs for maintenance, reducing thus the profitability of the company. Conversely, maintaining a low level of liquidity reduces the customer demand and as a result, customers might move more often to other banks. Over time, these situations create risk exposure to the assessed policy. Therefore, each savings and loans should ensure that it operates on profit and at the same time meet the financial demands of its depositors by maintaining adequate liquidity.

The main challenge is on how to select and identify the optimum level at which the savings and loans can maintain its assets in order to optimize profit and the same time meet the financial demand of its depositors. The savings and loans might be tempted to

focus entirely on profitability and disregard liquidity by investing in a high yielding but less liquid asset that are profitable. This should be avoided at all costs. The management should find a way of balancing liquidity and profitability in an effective and efficient way. Hence, this study sought to examine liquidity management in Ghanaian savings and loans with a case study of Golden Link Savings and Loans Limited.

### **1.3 Purpose of the Study**

The purpose was to examine the effects of liquidity management in Ghanaian savings and loans.

### **1.4 Research Objectives**

The main objective of the study is to establish the effect of liquidity management of Golden Link Savings and Loans Limited.

#### **1.4.1 Specific Objectives**

The specific objectives of the study include;

- i) To examine how excess liquidity management affects the profitability of Golden Link Savings and Loans Limited.
- ii) To examine how shortage of liquidity management affects the profitability of Golden Link Savings and Loans Limited.
- iii) To show whether loans and advances do affect the profitability and liquidity management of Golden Link Savings and Loans Limited.



### 1.5 Research Questions

The research is planned to respond to the following questions:

- i) To what extent does excess liquidity management affect the profitability of Golden Link Savings and Loans Limited?
- ii) To what extent does shortage in liquidity management have significant effect on profitability of the Golden Link Savings and Loans Limited?
- iii) How do loans and advances affect the profitability and liquidity management of Golden Link Savings and Loans Limited?

### 1.6 Hypothesis of the Study

Based on the above views, the researcher hereby proposes the following hypothesis:

Ho<sub>1</sub>. Excess liquidity does not have a major impact on the profitability of Golden Link Savings and Loans Limited

Ho<sub>2</sub>. Shortage in liquidity does not have a major impact on the profitability of Golden Link Savings and Loans Limited

Ho<sub>3</sub>. Loans and advances do not have major impact on the profitability of Golden Link Savings and Loans Limited

### 1.7 Significance of the Study

The management of liquidity is crucial for the success or otherwise of every financial institution and any other business. The study is significant because it deals with an issue that savings and loans are facing and will continue to confront in the near future. The significance of the study can be looked at from three main perspectives. To the Government, the findings are expected to be meaningful to policy-makers both in the concerned government agencies and savings and loans companies, especially in

strengthening policy considerations in the subsector. Such policy improvement would be handy in enhancing the guidelines on how to improve the performance and effects of savings and loans companies in an effort to enhance their efficiency in liquidity regulation for the benefit of the members and economic growth in general. To academic and researchers, the study will add to the existing body of knowledge on liquidity management of savings and loans companies and therefore form a basis for further research. Moreover, practitioners and managements are expected to be a springboard to efficiency in savings and loans companies' management through adoption of its recommendations. The study, as part of its objectives, is to provide strategic policy recommendations that are anticipated to contribute substantially towards the improvement of the management of other liquid assets. The findings are expected to provide better insights to the management of savings and loans in Ghana in order to facilitate them make informed decisions concerning their liquidity management.

### **1.8 Delimitations of the Study**

The study focus on the liquidity management in Ghanaian savings and loans with a case study of Golden Link Savings and Loans Limited in Kumasi Metropolis and Accra Metropolis. This study was conducted on data spanning from 2013 – 2017 due to time, space and resources. That is five observations using annual financial reports. The main reason for this time span is due to availability of data and also due to the fact that chi-square statistical tool was used in testing and analyzing the hypotheses to ensure that the results arrived at are valid.

### **1.9 Limitation of the Study**

This research experienced limitations in the areas of limited information, limited time period for conducting the research and financial constraints due to the feasibility studies conducted by the researcher. There were also limitations for secondary data as much study has not been done on the subject matter in Ghana. However, the above limitations does not render the findings of this research non-reliable and replicable since the researcher carefully managed these limitations to make sure the research objectives were achieved.

### **1.10 Organization of the Study**

The research is organized into five chapters;

Chapter one, is the introductory chapter. It describes the significant of the research, research objectives, problem statement, research questions, hypothesis of the study, significance of the study and the limitation of the study.

Chapter two, provides the relevant literature on liquidity management. It also deals with the core issues of concerns that are associated with liquidity management.

Chapter three, which is the methodology, focuses on methods used in the study to achieve the identified objectives. This includes population sample of the respondent, the technique used in data collection, and methods of data analysis.

Chapter four, focuses on the analysis, interpretation and discussion of results.

Chapter five, summarizes the study and goes further to offer recommendations as to what steps could be taken to improve liquidity management in general financial institutions.

## CHAPTER TWO

### LITERATURE REVIEW

#### 2.1 Introduction

This chapter considers and critically evaluates researches and other literature related to the topic under study. This research activity allowed the researcher to appreciate the theoretical basis of the research topic. The focus of this research is to understand liquidity management practices specifically within the Ghanaian savings and loans and would address issues including bank liquidity, liquidity management, objectives of liquidity management, techniques of liquidity management and Challenges of Liquidity Management.

#### 2.2 Theoretical Review

According to Defee et al., (2010), a good research should theoretically be grounded. The study was therefore guided by the anticipated income theory, shiftability theory, commercial loan theory, liability management theory.

##### 2.2.1 Anticipated Income Theory

The anticipated income theory outlines how bankers look at their loan portfolio as a source of liquidity. The theory encouraged bankers to treat long-term loans as potential sources of liquidity. It typically explains how a banker can consider a mortgage loan as a source of liquidity even when it has such a long maturity period. Through the anticipated income theory, these loans are typically paid off by the borrower in a series of installments. Viewed in this way, the savings and loans loan portfolio provides the savings and loans with continuous flow of funds that adds to the savings and loans liquidity. Furthermore, even though the loans are long term, in a liquidity crisis the

savings and loans can sell the loans to obtain needed cash in secondary markets. Nonetheless, for the purpose of this study, this theory is very relevant. This is because in the management of liquidity, the theory suggests applicable remedies on cash flow, mode of loan repayment and profitability these are vital to liquidity management.

### **2.2.2 Merits of Anticipated Income Theory**

This theory is considered to be superior to the real bills policy as well as the shift ability theory since it fulfills the three objectives of liquidity, safety and profitability. Moreover, liquidity is assured to the bank when the borrower saves and repays the loan regularly in installments.

It satisfies the safety principle in that the bank grants loans not only on the basis of a good security but also on the ability of the borrower to repay the loan. The bank can utilize its excess reserves in granting term-loan and is assured of a regular income. Lastly, the term-loan is highly beneficial for the business community which gets funds for medium-terms.

### **2.2.3 Demerits of Anticipated Income Theory**

This theory of anticipated income is not free from a few defects. In terms of analyses creditworthiness it is not a theory but simply a method to analyse a borrower's creditworthiness. It gives the bank criteria for evaluating the potential of a borrower to successfully repay a loan on time. Furthermore, failure to meet emergency cash needs is also a major demerit. This is because repayment of loans in installments to the bank no doubt provides a regular stream of liquidity, but they fail to meet emergency cash needs of the lender bank. Over here, the study considers the demerit as part of the warning signals of liquidity management.

#### 2.2.4 Shiftability Theory

The shiftability theory uses a different approach. It focuses on how to shift assets in order to keep the banks liquid. When a bank is short of ready money, it is able to sell some its assets to a more liquid bank. The approach lets the system of banks run more efficiently: with fewer reserves or investing in long-term assets. Through this approach, the banking system tries to avoid liquidity crises by enabling banks to always sell or reposes at good prices. It however has a form of demerit and weaknesses. Firstly, a mere shift-ability of assets does not provide liquidity to the banking system. It entirely depends upon the economic circumstances. Secondly, the shift-ability theory ignores the fact that in times of acute depression, the shares and debentures cannot be shifted on to others by the banks.

In such a situation, there are no buyers and all who possess them want to sell them. Thirdly, a single bank may have shift able assets in sufficient quantities but if it tries to sell them when there is a run on the bank, it may adversely affect the entire banking system. Finally, if all the banks simultaneously start shifting their assets, it would have disastrous effects on both the lenders and borrowers. Avoiding liquidity crises is a key principle in liquidity management. Hence the shiftability theory elaborates on this important key and this has a direct relation to the objectives of this research work.

#### 2.2.5 Commercial Loan Theory

The commercial loan theory states that the liquidity of the commercial bank is achieved automatically through self- liquidation of loan, which being granted for short periods and to finance the working capital, where borrowers refund the borrowed funds after completion of their trade cycles successfully. The commercial banks do not lend money for the purposes of purchasing consumer goods or real estate or for investing in stocks and bonds due to the length of the expected payback period of these investments. This

theory is applicable to traders who need to finance their specific trading transactions and for a shorter period. The study also adopted this theory since liquidity deals with customers of different background and activities.

### **2.2.6 Liability Management Theory**

The liability management theory states that there's no need to follow old liquidity norms like maintaining liquid investments, liquid assets, etc., banks need to focus on the liabilities side of the income statement. Banks can satisfy liquidity needs by borrowing in the money and capital markets. The fundamental contribution of this theory was to consider both sides of a bank's income statement as sources of liquidity. In brief these include the following under listed;

#### **a) Time Certificates of Deposits**

These are the principle source of reserve money for commercial banks. Time certificates of deposits are of different maturities which ranges from 90 days to less than 12 months. They are negotiable in the money market. Hence, a bank can have access to liquidity by selling them in the money market but there still exist a couple of limitations. Firstly, if during a boom, the interest rate structure in the money market is higher than the ceiling rate set by the central bank, time deposit certificates cannot be sold in the market. Secondly, they are not a dependable source of funds for the commercial banks. Bigger commercial banks are at an advantage in selling these certificates because they have large certificates which they can afford to sell at even low interest rates. Therefore, the smaller banks are at a disadvantage in this respect.

#### **b) Borrowing from other Commercial Banks**

A Saving and Loans Limited may create additional liabilities by borrowing from other banks having excess reserves. However, such borrowings are only for a very short

duration, for a day or week at the most. The interest rate of such borrowings depends upon the prevailing rate in the money market. Again, borrowings from other saving and loans limited are only possible during normal economic conditions. In abnormal times, no saving and loans limited bank can afford to lend to others.

**c) Borrowing from the Central Bank:**

Banks also create liabilities on themselves by borrowing from the central bank of the country. They borrow to meet their liquidity needs for short term and by discounting bills from the central bank. Nonetheless, such borrowings are relatively costlier than borrowings from other sources.

**d) Raising Capital Funds:**

Commercial banks acquire funds by issuing fresh shares or debentures. Moreover, the availability of funds through these sources depends on the amount of dividend or interest rate which the bank is prepared to pay. Usually the banks are not in a position to pay rates higher than paid by manufacturing and trading companies. Hence, they are not able to get sufficient funds from these sources.

**e) Ploughing Back Profits:**

Another source of liquid funds for a commercial bank is the ploughing back of its profits. However the question is how much can it get from this source, definitely, it will depend upon its rate of profit and its dividend policy. It is the larger banks that can depend on this source rather than the smaller banks.

Again, this research has a lot of relevance on the study since it touches on the various aspects of liquidity management.



### 2.3 Empirical Review

Nasir and Raheman, (2007) studied the effect of working capital management on liquidity as well as on profitability of the firm in Pakistan. The findings showed that there was a negative relationship between variables of working capital management and profitability of the firm. Further study also found that there was a negative relationship between liquidity and profitability and a positive relationship between size of the firm and its profitability and negative relationship between debts used by the firm and its profitability.

Eljelly (2004) explicated that efficient liquidity management involves planning and controlling current assets and current liabilities to meet due short term obligations and avoid excessive investments in these assets. The relation between profitability and liquidity was examined, as measured by current ratio and cash gap on a sample of joint stock companies in Saudi Arabia using correlation and regression analysis. The findings showed that the cash conversion cycle was of more importance as a measure of liquidity than the current ratio that affects profitability. The size variable was found to have significant effect on profitability at the industry level. It was clear that there was a negative relationship between profitability and liquidity indicators such as current ratio and cash gap in the Saudi sample examined. The study also revealed that there was great variation among industries with respect to the significant measure of liquidity.

Sharma (2011) discovered that Maruti Suzuki India Ltd is satisfactorily giving out profits and maintaining liquidity position but at increased risk factor. The liquidity position of the company is fluctuating but this is acceptable. He concluded that the company is earning good profit with moderate liquidity.

Bhunja (2010) investigates the liquidity management efficiency and liquidity-profitability relationship. The data utilized was extracted from the income statements, and cash flow statements of sampled firms from the India Stock Exchange and CME data base. The purposive sample design method was applied in their analysis. Preferred sample of private sector steel companies from 1997-2006 were utilized in the analysis. Results of the study found that correlation and regression results are significantly positive and associated to the firm's profitability. Thus, firm manager should concern on inventory and receivables in purpose of creating shareholders wealth.

A study by Ghosh (2008) on the management of liquidity of TISCO Limited in the period 1996-2001 showed that although the degree of association between liquidity and profitability of the company was positive, the degree of influence of liquidity on its profitability was low and insignificant.

Pandey and Singh (2008) suggested that, for the successful working of any business, fixed and current assets play a vital role. The working capital management is essential as it has a direct impact on profitability and liquidity. They studied the working capital components and found a significant impact of working capital management on profitability for Hindalco Industries Limited.

Agarwal (1988) modeled the working capital decision as a goal programming problem, given the primary importance to liquidity, by targeting the current ratio and quick ratio. The model included three liquidity goals, two profitability goals, and four current asset sub-goals and current liability sub-goals (for each component of working capital). In particular, the profitability constraints were designed to capture the opportunity cost of excess liquidity (in terms of reduced profitability).

Adeyanju, Olabode and Olagunju (2011) studied liquidity management and commercial banks' profitability in Nigeria. The data obtained from the primary and secondary

sources analyzed through collection, sorting and grouping of the data in tables of percentages and frequency distribution. They formulated a hypothesis which was statistically tested through Pearson correlation data analysis. Findings showed that there is significant relationship between liquidity and profitability. They concluded that for continuous success, commercial banks should not compromise efficient and effective liquidity management and that both excess liquidity and illiquidity are “financial diseases” that can easily erode the profit base of a bank as they affect bank’s attempt to attain high profitability level.

#### **2.4 Bank Liquidity**

Liquidity can be defined as assets’ capability over time of being realized in the form of funds available for immediate consumption or for reinvestment in form of money (Hirshleifer, 1968). According to Basel (2008), liquidity is the bank’s ability to increase its fund in assets and meet the obligations as they arise without incurring unacceptable losses. Keynes (1936) explains that “Liquidity is dependent on the prompt realizability of an asset at short notice without loss.”

The term liquidity refers to the availability of instrumentals that can be used to transfer wealth across periods and signifies the ability of a financial firm to keep up all the time a balance between the financial inflows and outflows over time. According to Maness & Zietlow (1998), liquidity means the debt-paying ability of a concern when it becomes due; it is the ability of the firm to augment its future cash flows.

Hewson and Niehans (1976) state that liquidity is the “moneyness” of liabilities and assets, that is, the ease with which assets and liabilities can be converted to cash or cash equivalents within a period of time at the discretion of the holder. Jordan (2001) asserts that liquidity is the ability of the bank to increase its fund in assets and meet its

collateral obligations at reasonable cost as they fall due without incurring unacceptable losses. Liquidity has two dimensions; the time required to convert the assets into money and the certainty of the realized price. It is the ability to realize value in money, the most liquid among all assets.

Traditionally, liquidity was defined as the capacity of financial institutions to increase finance in their assets and comply with their liabilities as they mature. Pacurari (2008) notes that liquidity characterizes the financial situation of the company, the ability to convert assets into cash or to obtain cash to meet short term obligations.

From the above sentiments, it can be noted that the authors see liquidity as the critical attribute of liquid assets. Therefore, the liquidity of the bank represents the capacity of a bank to finance its transactions efficiently. Liquidity can be said to be the distillation of all the bank's activities. The bank liquidity exists on the assets that are readily convertible to cash and its ability to acquire funds through deposits, borrowings and capital injections. They are more vulnerable to unexpected and immediate payment demands making them more crucial to the financial institutions. Liquid assets comprises of cash and bank balances, debtors and marketable securities. Liquidity management involves discreetly managing assets and liabilities (on- and off-balance sheet), both as to concentration and cash flow, to ensure that cash inflows have an appropriate relationship to approaching cash outflows.

#### **2.4.1 Liquidity Management**

Liquidity management is the allocation of liquid resources over time to meet resource needs for payment of obligations due and for various investments that management undertakes to maximize the wealth of shareholders (Gallinger & Healey, 1987). It is the activity that a savings and loans should undertake to ensure that their holdings of liquid

assets are sufficient to meet its obligations as they fall due as well as unexpected transactions. Liquidity management includes managing and forecasting cash flows and cash position and preferably should include managing and setting toward an ideal cash position or liquidity target.

According to Albinson (2004), liquidity management is the ability to meet financial obligations at a reasonable cost in a timely manner. The gist of liquidity is having cash when you need it. Liquidity management hence involves the strategic supply and withdrawal from the market the amount of liquidity consistent with a desired level of short term reserve money without distorting the profit making ability and operations of the savings and loan. The management of liquidity can be considered as an ongoing process that ensures cash needs can be met at reasonable cost in order for a savings and loans to maintain the required level of reserves at the Bank of Ghana and to meet the expected and contingent cash needs. It refers to the control and planning necessary to make sure that savings and loans maintain adequate liquid assets either as an obligation to the savings and loans' customers so as to meet some obligations incidental to the survival of savings and loans. The management of liquidity in savings and loans is the surrounding of both sizes of the prospective needs for liquidity at any giving time and the availability of sources of liquidity sufficient enough to meet them.

#### **2.4.2 Objectives of Liquidity Management**

Gallinger and Healey (1987) states that the main objective of liquidity management is to ensure corporate solvency. Therefore, from a liquidity perspective, value maximization is secondary to survival. However, the goals are closely related. The key issues in liquidity management are to minimize insolvency risk by:

Determining how much to invest in each component of current assets and allocate funding needs to each component of current liabilities, and managing these investments and their allocations effectively and efficiently.

Kim, Mauer and Sherman (1998) found that companies start to build liquidity to meet favorable future investment prospective. Also a connection between financial constraints and firms' liquidity demand exists as evident from previous literature.

Davis (2008) posits that the overall objective of liquidity management is to ensure that the bank is able to meet all payment obligations when they come due. Frazer (2004) notes that the objectives of the bank's liquidity management is to ensure that the banking system has sufficient liquidity to enable the payment settlement system to function effectively and to avoid large swings in the volume of available cash that would undermine the implementation of monetary policy.

Ndulu et al (2008) states the following objectives of liquidity management;

Ensure all banks and other financial institutions have in place liquidity management policies adequate to enable them meet all obligations and commitments and plan for unforeseen development. Maintains public confidence by ensuring that banks and financial institution have sufficient liquidity at all times. Ensure that banks and financial institution implement liquidity management standards that conform to established international norms.

Bankakademie (2000) notes the following objectives of liquidity management;

Satisfy minimum reserve requirements and other regulatory liquidity standards and honor all cash outflow commitments on a daily and ongoing basis. Also avoid additional cost of emergency borrowing and forced liquidation of assets. Lastly minimize the cost of foregone earnings on idle liquidity.

The long term survival of savings and loans greatly depend on how liquid they are because a savings and loans that is not liquid can signal signs of imminent distress that can easily erode the confidence of the public in the banking sector. Therefore the objective of liquidity management in savings and loans can be seen as a way of reducing insolvency and managing investment in the organization. Maintaining adequate level of liquidity depends on the ability of the institution to efficiently meet both the expected and unexpected cash flows and the collateral needs without necessarily affecting the daily operations or financial status of the institution.

### **2.4.3 Techniques of Liquidity Management**

Anghel et al (2002) asserts that each bank need to have an approved strategy for the operational management of the liquidity and the strategy that must be communicated within the organization, because in many banks, the liquidity management is no longer a complete responsibility of the treasury. The most common measure of liquidity is current ratio and return on investment for profitability (Bhupesh & Vishnani, 2007). The current ratio is used to test a bank's liquidity, that is its current or working capital position by deriving the proportion of the bank's current assets available to cover its current liability. A low current ratio means smaller investment in current assets which means a high rate of return on investment for the firm, as no unused investment is tied up in current assets. Berger and Bouwan (2008) proposed a classification of all income statements items as liquid, semi-liquid or illiquid as a method of measuring liquidity in the banking sector. They applied this technique to all items in the bank's assets, liabilities, and equity and off-balance sheet activities. They used different classifications for the items, resulting to four different measures of liquidity management. Their specifications use a classification based on the categories or

maturities of items (“cat” or “mat” measures) and include or exclude off balance sheet items (“fat” or “non-fat” measures).

Albinson (2004) proposed three main techniques for measuring liquidity, which include;

Cash flow forecasting: It indicates the likely future movement of cash in and out of the business over future period.

Liquidity gap analysis: It provides analytical framework for measuring future funding needs by comparing the amount of assets and liabilities maturing over specific time intervals.

Scenario planning: It considers possible future events by analyzing alternative possible scenarios. Barbara et al (2006) notes that in measuring and managing a bank’s liquidity exposure, the following techniques may be used:

Cash flow projections of daily liquidity positions. Cash flow projections of daily liquidity sources. Scenario analysis and simulation models and liquidity gap analysis.

McKibbon et al (2013) outlined the steps to liquidity gap analysis as follows;

Listing of characteristic factors (competencies, performance levels) of the present situation.

Cross-lists factors required to achieve the future objectives (“what should be”).

Highlights the 'gaps' that exist and need to be 'filled.'

Buffing (2007) gave the following steps to cash flow forecasting;

Decide on the time period your forecast should cover.

Review your accounting history for revenue and expenditures.



Create a simple, one-page forecasting form to begin tracking your revenue, expenditures and investments.

Start with what you know and gradually build up the reliability of your forecast.

Monitor and fine tune your forecast. Beware of fluctuations in near term numbers.

Graham (2011) outlined the steps to scenario planning of liquidity technique as follows; Scan internal and external environment, build possible scenarios, plan response, identify realistic futures and capitalize on those futures.

Farris & Hutchison (2002) state that when measuring liquidity, corporate liquidity is examined from two distinct dimensions, the static or dynamic views. The static view is based on commonly used traditional ratios, such as current ratio and quick ratio, calculated from the income statement amounts. These ratios are used to measure liquidity at a given point in time whereas dynamic view measures ongoing liquidity from the firm's operations. As a dynamic measure of the time it takes a firm to go from cash outflow to cash inflow which is measured by cash conversion cycle.

According to the authors, an important aspect of managing liquidity is making assumptions about future funding needs. While certain cash inflows and outflows can be easily calculated or predicted, savings and loans must also make assumptions about future liquidity needs, both in the very short-term and for longer time periods. One important factor to consider is the critical role a bank's reputation plays in its ability to access funds readily and at reasonable terms. The purpose of liquidity techniques is to measure savings and loans current liquidity position and its ability to meet future funding needs. These liquidity techniques give savings and loans the ability to meet future funding needs by analyzing the projected cash inflows and outflows. Albinson (2004) and Barbara (2006) techniques for measuring and managing liquidity were

slightly the same. These techniques are to be observed at all times and further reviewed from time to time, to reflect changing circumstances.

Moreover, there are some specific techniques of liquidity management and process for speedy collection of receivable from customers and slowing disbursement. These are under listed as;

(1) Speedy Cash Collection; In managing cash efficiency, the cash inflow process can be accelerated through systematic Planning and refined techniques. There are two broad approaches to do this. In the first place, the customers should be encouraged to pay as quickly as possible. Secondly, the payment from customers should be converted into cash without any delay.

(2) Rapid Payment by Customer; One ways to ensure rapid payment by customers is prompt billing. What the customer has to pay, the period of payment, etc., should be notified accurately and in advance. The use of mechanical devices for billing along with the enclosure of a self addressed return envelope will speed-up payment by customer. Another, and more important, technique to encourage prompt payment by customers is the practice of offering trade discount. The availability of discount, as discussed earlier, implies considerable saving to the customers. In their anxiety to avail of the facilities, the customers would be eager to make payment early.

(3) Early Conversion of Payment in Cash; Over here, once the customer makes the payment by writing a cheque in favors of the business concern, the collection will be expedited by prompt encashment of the cheque. It can be recalled that there is a long lag between the time a cheque is prepaid and mailed by the customer and the funds are included in the cash reservoir of the companies. The early conversion of payment into cash, as a technique to speed-up collection of accounts receivable, is done to reduce the

time lag between posting of the cheque by the customer and the realization of money by the concerns. The postal float, lethargy and bank float are collectively referred to as deposit float. Also, the term deposit float is defined as the sum of cheques written by customers that are not yet usable by the firm. The collection of accounts receivable can be considerably accelerated, by reducing transit, processing and collection time. An important the cash management technique is reduction in deposit float.

(4) Concentration Banking; In this system of decentralized collection of accounts receivables, large companies, which have a large number of branches at different place, select some of these, which are strategically located as collection centers for receiving payment from customers. Under this arrangement, the customers are required to send their payments to the collection center covering the area in which they live and these are deposited in the local amount of the concerned collection center, after meeting local expenses. A concentration bank is one with which the firm has a major account usually a disbursement account. Concentration banking is a system of decentralized billing and multiple collection points is a useful technique to expedite the collection of account receivables. It reduces the time needed in the collection process by reducing the mailing time. The mailing time is saved both in respect of sending the bill to the customers as well as in the receipt of payment. Another advantage is that concentration permits the firm to 'store' its cash more efficiently.

(5) Lock-Box System; The lock-box system is like concentration banking in that the collection is decentralized and is done at branch level. Moreover, they differ in one very important respect. While the customer sends the cheque, under the concentration banking arrangement, to the collection centers, he sends them to a post office box under the lock-box system. The lockbox system is an important is the concentration banking system. In other words, the processing time within the firm before depositing a cheque

in the bank is eliminated. The use of concentration banking and lock-box system accelerates the collection of receivables it in involves a cost. While in the case of the former, the cost is in terms of the maintenance of multiple collection centers compensation to the bank for services represent the cost associated with the latter. Thus, the lock-box system, as a method of collection of receivables, has a two-fold advantage:

(i) The bank performs the clerical task of handling the remittances prior to deposits, services which the bank may be able to perform at a lower cost. (ii) The process of collection through the banking system begins immediately upon the receipt of the cheque or remittance and does not have to wait until the firm completes its processing for internal accounting purposes.

(6) Slowing Disbursement; Apart from speedy collection of accounts receivable, the operating cash requirement can be reduced by slow disbursements of Accounts payable. It may be recalled that a basic strategy of cash management is to delay payment as long as possible without impairing the credit rating / standing of the firm. In fact, slow disbursements represent a source of funds requiring no interest payments. There are several techniques to delay payment of accounts payable, namely; (A) Avoidance of early payments; (B) Centralized disbursement; (C) float; and, (D) Accruals.

(A) Avoidance of Early Payments; One ways to delay payments is to avoid early payments. According to the terms of credit, a firm is required to make a payment within a stipulated period. It entitles a firm to cash discounts. If, however, payments are delayed beyond the due date, the credit standing may be adversely affected so that the firms would find it difficult to secure trade credit later. Thus, a firm would be advised might not payment early that is before the due date.

(B) Centralized Disbursements; Another method to slow down disbursement is to have centralized disbursement. The head office should make all the payments from a centralized disbursement account. Such an arrangement would enable a firm to delay payments and conserve cash for several reasons. Firstly, it involves increase in transit time. Secondly, the reason for reduction in operating cash requirement is that since the firm has a centralized bank account, a relatively smaller total cash balance will be needed.

(C) Float; A very important technique of slow disbursement is float. The term float refers to the amount of money tied up in cheques that have been written, but have yet to be collected and encashed. Alternatively, float represents the difference between the bank balance and book balance of cash of a firm. The difference between the as shown by the concern record and the actual bank balance is due to transit and processing delays. There are three ways of float are as below: (a) Paying from a distant bank. (b) Cheque-encashment analysis and, (c) Bank draft.

(D) Accruals; The potential tool for stretching accounts payable is accrual which is defined as current liabilities that represent a services or goods received by a concern but not yet paid for. The longer the period after which payments is made, the greater the amount of free financing and the smaller the amount of cash balance required.

#### **2.4.4 Principles of Liquidity Management**

A savings and loans having clear set of liquidity management principles will definitely improve its profits. Peralto (2000) outlined the Principles for Sound Liquidity Management and Supervision as follows; banks must develop a structure for liquidity management. Banks must measure and monitor net funding requirements. Banks should manage market access. Each bank should periodically review its efforts to establish and

maintain relationships with liability holders, to maintain the diversification of liabilities, and aim to ensure its capacity to sell assets. Banks should have contingency plans in place that address the strategy for handling liquidity crises and which include procedures for making up cash flow shortfalls in emergency situations. Banks should manage their foreign currency liquidity. Each bank must have an adequate system of internal controls over its liquidity risk management process. Each bank should have in place a mechanism for ensuring that there is an adequate level of disclosure of information about the bank in order to manage public perception of the organization and its soundness. Chase (2004) developed five key principles to effectively manage liquidity that banks should consider: understand and segment cash needs then determine appropriate liquidity requirement.

Establish appropriate investment guidelines focusing on availability and safety. Select investment types within guidelines that are appropriate for each cash category. Establish and verify diversified contingent funding sources. Maximize the transparency and efficiency of the cash position across geographies and legal entities. Policies and procedures should include the following: Delineated lines of responsibility. Identification of individuals or committees responsible for managing and monitoring liquidity risk. An overall liquidity strategy. The liquidity strategy should define the general approach the bank will follow in managing liquidity. Quantitative guidelines and limits to ensure adequate liquidity. Internal control procedures to ensure adherence to policies and procedures that address the integrity of the liquidity management process. (Albinson, 2004).

From the above mentioned principles, savings and loans should have principles for controlling, identifying, and measuring, liquidity. These should translate the savings

and loans goals, objectives, and risk tolerances into operating standards. These principles assign responsibility for managing liquidity throughout the firm and also help communicate how much emphasis a firm places on asset liquidity, liability gathering, and operating cash flows to meet its day-to-day and contingent funding needs. In addition, it also creates an avenue for the savings and loans to identify their primary objectives and methods to use in meeting daily operating cash outflows, providing for seasonal and cyclical cash flow fluctuations, and addressing various adverse liquidity scenarios. Effective liquidity management, however, starts with the development of written policies and procedures, and the establishment of minimum acceptable levels of liquidity. These policies should clearly define an association's strategy for managing liquidity, delineate areas of management responsibility, and establish a process for measuring, monitoring, and managing liquidity.

#### **2.4.5 Importance of Liquidity Management in Savings and Loans**

Liquidity plays a vital role in the successful functioning of a business organization. A firm should ensure that it does not suffer from excess or lack-of liquidity to meet its short-term obligations. A study of liquidity is of major importance to both the internal and the external analysts because of its close relationship with day-to-day operations of a business Bhunia, (2010). A weak liquidity position poses a threat to the profitability as well as solvency of a firm and makes it unsafe and unsound. Brooks (2007) asserts that liquidity is an important variable for banks in determining their lending behavior in response to tighter monetary situations.

The management of liquidity helps achieve the desired tradeoff between liquidity and profitability (Nasir & Raheman, 2007). Liquidity is necessary for banks to compensate for expected and unexpected income statement fluctuations and to provide funds for growth (Bratanovic & Grueving, 2003). According to Eljelly (2004), efficient liquidity

management associates controlling and planning current assets and current liabilities in an efficient manner so as to eliminate the risk of non-payment of dues for short term requirements and hence, avoids excessive investment in these assets. Adequate liquidity helps a commercial bank to meet customers' withdrawal and or demand for loans. This reduces the possibility of providing financing under very unfavorable loan agreement restrictions and at relatively high interest costs. (Amarachukwu Ona, 2003). According to Suan (2005), effective liquidity management can lead to; Improved cash flow, reduced reliance on short-term debt and enhanced profitability.

As discuss in the above literature, the authors view on the importance of liquidity management in savings and loans are as follows: It helps savings and loans in identifying the optimum level at which a savings and loans can maintain its assets in order to optimize profit and at the same time meet the financial demands of its depositors by maintaining adequate liquidity. In addition, it serves as a tool through which savings and loans avoid over- and under-liquidity and their consequences. It also assists savings and loans in trading-off between risk and return; and liquidity and profitability.

Liquidity shortage, no matter how small, can cause great damage to a financial institution's operations and customer relationship in particular. Businesses rely on its clients to succeed and so it is a strategic business plan to build good business-client relationships. Liquidity crisis, if not properly managed can destroy those relationships instantly. In order to avoid liquidity crisis, management of organizations and financial institutions in particular needs to have a well-defined policy and clearly established procedures for monitoring, measuring, and managing liquidity. Managing liquidity is therefore a core day-to-day process requiring managers to monitor and project cash flows to ensure that adequate liquidity is maintained at all times.



#### 2.4.5 Challenges of Liquidity Management

There is an opportunity cost associated with the maintenance of liquid assets and this might affect the overall profitability of the savings and loans. According to Smith (1980), increasing profitability would tend to reduce the bank's liquidity and too much concentration on liquidity would tend to affect profitability. Thus, savings and loans should always strive to maintain a balance between conflicting objectives of liquidity and profitability. The savings and loans liquidity should not be too high or too low.

Maynard and Moore (2006) noted that, in periods of high levels of liquidity the fiscal authorities were concerned that banks will utilize excess reserves to engage in 'growth-enhancing' opportunities. They determined that in Barbados, excess reserves generally have an inverse relationship to the business cycle, which made them to conclude that commercial banks have a propensity to hold more excess reserves during recessionary periods, which can have the adverse impact of extending a recession. It may be true that the ultimate goal for any firm is to maximize profit, but too much attention on profitability may lead the bank onto a hard rock by diluting the liquidity position of the firm (Niresh, 2012). Therefore the need to strike a balance between the bank's desire to remain liquid and the desire to make profit cannot be over-emphasized and there arises the issue of liquidity management. Reid (2011) in her analysis of the Jamaican banking system found that excess liquidity generates challenges to the effective implementation of Central Bank liquidity policy since it enables commercial banks to offer additional credit to customers despite a very tight monetary policy position by the Central Bank. Similar findings were noted by Ganley (2004) in his study, which found that a significant build-up in liquidity could lead to an expansion in domestic consumption activity and consequently higher inflation. In addition, Bratanovic and Greuning (2009) indicated that a bank faces liquidity problem when it does not have the ability to

efficiently accommodate the redemption of deposits and other liabilities and to cover funding increases in the loan and investment portfolio. A savings and loans has adequate liquidity potential when it can obtain needed funds by increasing liabilities, securitizing, or selling assets promptly and at a reasonable cost. Suan (2005) outlined four challenges of liquidity management as follows; Difficulty in organizing an optimal or feasible cash management structure after taking into account the operational and regulatory constraints.

Excess cash-in-transit or cash float locked in operational processes. Inability to forecast short-term and long-term cash requirements. Struggle on centralizing and outsourcing cash management decisions. Sas (2012) asserts that banks face challenges in managing their liquidity due to the following: Insufficient stress testing, no centralized view of liquidity, overcoming the compliance mindset and limited analytic capabilities. Laurine et al (2012) in their study noted the following potential liquidity problems: hyper-inflation, operating environment, short term deposits and depositors' withdrawal behavior in terms of transaction motives.

The authors were trying to conduct studies pertaining to the problem of how to select optimum point or the level at which a firm or a saving and loans can maintain its assets in order to optimize profit as well as meet its financial demands of its depositors by maintaining adequate liquidity. This leads to inability to obtain financing from savings and loans due to poor cash flow positions or too high a leverage. No profitable savings and loans operation can hold enough liquidity to cover a sudden mass exodus of depositors. Imbalances between maturity dates of their assets and liabilities as well as the sensitivity of savings and loans to changes in interest rates, high proportion of

liabilities subject to immediate repayment and the central role in the payment process are the major reasons why savings and loans face significant liquidity problems.

Savings and loans that is overly aggressive in minimizing liquidity in order to enhance profits may find that its correspondent savings and loans and depositors will decide to test its liquidity by canceling credit lines and withdrawing deposits precisely when liquidity is already tight.

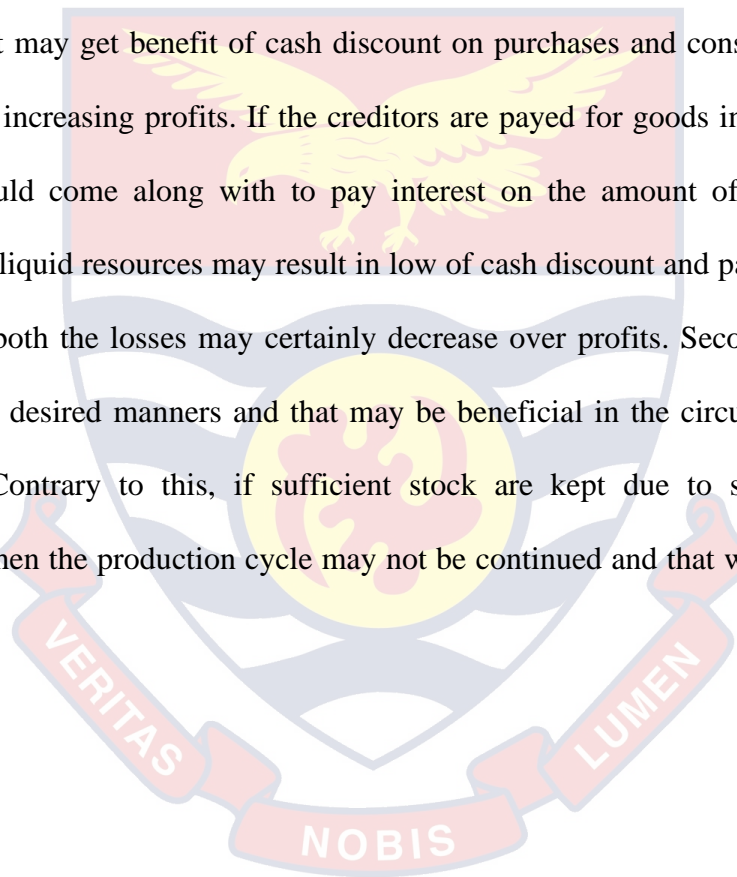
### **2.5 Sources of Liquidity Problems**

This transformation of liquid liabilities (deposits) into risky liquid (illiquid) assets in the form of loans capitalizing on their maturity mismatch expose the banks to liquidity risk (Jekinson, 2008). Mourina (2008) in his study of Islamic banks posits the liquidity risk of Islamic banks, which mainly takes the form of mismatch between assets and liabilities, is, however, partly originated from the shortage of long-term funds. Diamond and Rajan (2005) asserts, liquidity problems arise if too many projects which the banks have invested in are delayed in the economy so that there are too few resources produced at the interim date relative to depositor demand. They also view that, anticipation of a future liquidity shortage or bank insolvency for any other reason causes depositors to redeem their claims immediately. This is because depositors are coordinated so a panic in a section of depositors can cause a run on the bank. Rochet (2005) highlights that, there are three main sources of liquidity risk, on the liability side, there is a large uncertainty on the volume of withdrawals of deposits or the renewal of rolled-over inter-bank loans, especially when the bank is under suspicion of insolvency or when there is a temporary aggregate liquidity shortage. Also on the asset side, there is an uncertainty on the volume of new requests for loans that a bank will receive in the future and finally, off-balance sheet operations, like credit lines and other

commitments, positions taken by banks on derivative markets. The various authors are of the view that, banks are not endowed financially but depend on the deposits of clients and these demandable claims are used to finance illiquid assets causing liquidity problems.

## 2.6 Relationship between Liquidity and Profitability

Liquidity has an important relationship with profitability. If there are enough liquid resources, it may get benefit of cash discount on purchases and consequently that will be result in increasing profits. If the creditors are payed for goods in the given period, then it should come along with to pay interest on the amount of purchases. Thus, shortage of liquid resources may result in low of cash discount and payment of interest. Moreover, both the losses may certainly decrease over profits. Secondly, it may keep the stock at desired manners and that may be beneficial in the circulation of business activities. Contrary to this, if sufficient stock are kept due to shortage of liquid resources, then the production cycle may not be continued and that will result in heavy losses.



## CHAPTER THREE

### RESEARCH METHODOLOGY AND COMPANY PROFILE

#### 3.1 Introduction

This chapter describes the methodology applied by the researcher in conduction of research project. It discusses the procedures applied in the data collection and the tools used. It also describes the process of data analysis, study design, the population and sample size as well as the sampling techniques used by the researcher.

#### 3.2 Research Design

Research design is a plan and structure of investigation developed in order to guide the research towards achieving its objectives (Robson, 2002). It can be classified into three categories, namely descriptive, explanatory and exploratory (Lewis, Saunders & Thornhill, 2007).

Descriptive study; they are designed to collect data that describe the characteristics of the topic of interest (Arthur, 1992). Descriptive research is advantageous as it helps describe the characteristics of the variables being studied and can incorporate multiple variables for analysis, unlike other methods that require only one variable (Cooper & Schindler, 2003). This design is helpful in presenting facts about the nature and status of the situation as it exist at the time of study. The research problem is structured and well understood. The aim of descriptive study is to represent an accurate profile of persons, events or situations (Lewis et al., 2009).

### 3.3 Sources of Data

The sources of data used for this research were both primary and secondary data sources and they are discussed below;

#### 3.3.1 Primary Data

The major sources of primary data were questionnaires and oral interviews.

##### Questionnaires

The questions asked were combination of both multiple choice and open-ended dichotomous questions. The open-ended questions contain information that was otherwise not anticipated. The dichotomous questions have the potential of a follow-up question to elicit information already given. The multiple choice questions await the respondents with possible answers; therefore they helped to exhaust all possible expectations and the degree of confidence which the respondents have in such possibilities. The questions were cohesive and well co-ordinated. The completed and returned questionnaires were thoroughly checked to ascertain whether they have received appropriate responses or otherwise.

##### Interview

The researcher opted for a face to face interaction with members of the savings and loans who have knowledge about the liquidity challenges experienced by the savings and loans. Some top management members and other selected branch managers were chosen to be interviewed because they tend to be involved in the day to day banking operations and are familiar with the facts and figures of the bank so can easily detect changes in the liquidity position. The questions posed during the interview include;

- a) Do you have liquidity problem in your savings and loans company?
- b) If yes, in what form do you have such problem?

- c) If no, why?
- d) What problem can these situations create in the operations of your savings and loans company?
- e) What are the factors that bring about excess liquidity or illiquidity?
- f) What in your opinion can the Bank of Ghana (BOG) do to adequately solve these problems considering the distortion effects on the economy?
- g) How effective are those measures introduced by Bank of Ghana?
- h) What are the effects of savings and loans revenue requirement in savings and loans liquidity?

The above questions are different from those in the questionnaires.

### **3.3.2 Secondary Data**

The source of this data was used extensively to enable the researcher gather enough information for analysis. The secondary data that was used include the various Bank of Ghana publications like annual reports, financial reviews, as well as the use of internet. These are available on the savings and loans and school libraries, income statements of the sample savings and loans branches.

### **3.3.3 Research Population**

According to Mugenda & Mugenda (2003) population is the entire group of individuals, events or objects that have common characteristics that are of interest to the researcher. A research population can be defined as the totality of a well-defined collection of individuals or objects that have a common, binding characteristics or traits (Polit and Hungler, 1993). Burns and Grove (1993), added that a population is defined as all elements (individuals, objects and events) that meet the sample criteria for inclusion in a study. For easy collection of data, Adum and Tesano branches of Golden Link Savings and Loans Limited were used as samples. The observations made were

used to predict as to what is obtainable in the entire Golden Link Savings and Loans Limited and the Ghanaian savings and loans industry. The target populations were two hundred (200) staff which includes two selected savings and loans branches. Copies of questionnaires were administered to the customers in the two selected savings and loans branches.

### **3.4 Sample Size**

Kumar (2000) defines a sample as a chosen subset of elements from the population. A total of 200 questionnaires were distributed but only 160 were retrieved from the respondents. The sample size of the study is one hundred and sixty (160) in which eighty (80) respondents of staff of each savings and loans branch were randomly selected. The main reason for selecting the two branches from Golden Link Savings and Loans Limited was to be able to gather sufficient information on liquidity management.

### **3.5 Sampling Technique**

Burns and Grove (2003) refer to sampling as a process of selecting a group of people, events or behaviour with which to conduct a study. Random sampling technique was used to select the two branches for the study.

### **3.6 Data Analysis**

Every research has to properly examine and interpret the data collected from the respondents. Neuman (2007) states that the method of analysis is very important to every survey approach. Several methods actually can be used in probing, classifying, tabulating and having a combination of the proofs to deal with the objectives of the



study. Looking at diverse sources of data collected for the study, the researcher addressed how the data would be processed and analyzed by using a well-structured Questionnaires and interview.

The chi-square statistical tool were used in testing and analyzing the hypotheses to ensure that the results arrived at are valid and not out of chance. It is given by the formula:

$$X^2 = \sum \frac{(O - E)^2}{E}$$

Where

$X^2$  = Chi-square

O = Observed frequency.

For both the goodness of fit test and the test of independence, the chi square statistic is the same. For both of these tests, all the categories into which the data have been divided are used. The data obtained from the sample are referred to as the observed numbers of cases. These are the frequencies of occurrence for each category into which the data have been Chi-Square Tests

E = Expected frequency

In the chi square tests, the null hypothesis makes a statement concerning how many cases are to be expected in each category if this hypothesis is correct. The chi square test is based on the difference between the observed and the expected values for each category.

$\Sigma$  = Summation

The following assumptions were considered;

*Degree of freedom (df) = (R-1) (C-1)*

*Level of significance = 0.05*

Where  $O_i$  is the observed number of cases in category  $i$ , and  $E_i$  is the expected number of cases in category  $i$ . This chi square statistic is obtained by calculating the difference between the observed number of cases and the expected number of cases in each category. This difference is squared and divided by the expected number of cases in that category. These values are then added for all the categories, and the total is referred to as the chi squared value.



## CHAPTER FOUR

### DATA ANALYSIS, FINDINGS AND DISCUSSION

#### 4.1 Introduction

This chapter provides a summary of the data analysis, results of the study and the discussion of the results of the study. The objective of the study was to evaluate the liquidity management practices of Golden Link Savings and Loans Limited.

#### 4.2 Data Presentation

The presentation of data collected means the way of representing the various forms of data obtained through various data collecting techniques to enable the researcher perform analysis and exact new meaning from it. The data collected were presented in simple tables and responses to questions in the questionnaire were analyzed by the use of simple percentages. Also, the researcher designed a questionnaire consisting of ten (10) questions formulated in such a way that short answers were given by the respondents.

The formula for calculating simple percentage is given below;

$$\% = \frac{F}{\Sigma F} \times 100$$

Where

F = frequency of response

$\Sigma F$  = sum of frequency of response

### 4.3 Data Analysis

It is a basic part of the survey and it is pretentious by its overall eminence. The results are normally reported with respect to furnishing substantiation for each objective stated to aid the study. A total number of two hundred (200) copies of questionnaires were administered. Out of these, one hundred and sixty (160) were returned. It was distributed to the management and staff in the Department of Research, Banking and Treasury, Finance and Account Departments of the savings and loans.

#### Question One

Are you a male or female banker?

**Table 10: Gender of Respondent**

Details	Adum Branch		Tasano Branch	
	M	%	F	%
Male	35	44	56	70
Female	45	56	24	30
<b>Total</b>	<b>80</b>	<b>100</b>	<b>80</b>	<b>100</b>

Source: field survey

The table 1 above shows that 44% and 56% of respondents in Adum branch are male and females respectively. In Tasano branch, 70% of the respondents are males while 30% are females. Therefore, Adum branch is dominated by females and Tasano branch is largely dominated by males. This clearly signified that majority of the respondents were males. Although, the number of males in the savings and loans industries and particularly the savings and loans sector has seen an appreciable growth over the period, their male counterparts still dominate the field.

### Question Two

How long have you been in this profession?

**Table 11: Duration of Profession**

Details	Adum Branch		Tasano Branch	
	M	%	F	%
5 years and above	37	46	28	35
Less than 5 years	43	54	52	65
<b>Total</b>	<b>80</b>	<b>100</b>	<b>80</b>	<b>100</b>

Source: field survey

From the table 2 above, 46% and 35% of respondents have been in this profession for 5 years or above in Adum and Tasano branches respectively. 54% and 65% of the respondents have been in this profession for less than 5 years in Adum and Tasano branches respectively. Therefore, both Adum and Tasano branches are dominated by less than 5 years bankers that have been in this profession. This indicated that staff of Golden Link Savings and Loans Limited has a very youthful working population.

### Question Three

What is your marital status?

**Table 12: Marital Status**

Details	Adum Branch		Tasano Branch	
	M	%	F	%
Single	17	21	23	29
Married	63	79	57	71
<b>Total</b>	<b>80</b>	<b>100</b>	<b>80</b>	<b>100</b>

Source: field survey

The results show above from table 3, that in Adum branch and Tasano branch, 21% and 29% of the respondents respectively are single and 79 % and 71% of the respondents

married respectively. Therefore, both savings and loans are dominated by married persons.

#### Question Four

Which of these assets are classified as liquid?

**Table 13: Liquid Assets**

Details	Adum Branch		Tasano Branch	
	M	%	F	%
Note and Coins	–	–	–	–
Treasury bills and Treasury Certificates	–	–	–	–
Promissory Notes	–	–	–	–
In land bill of Exchange	–	–	–	–
Negotiable Certificates of Deposits	–	–	–	–
All of the above	80	100	80	100
None of the above	–	–	–	–
<b>Total</b>	<b>80</b>	<b>100</b>	<b>80</b>	<b>100</b>

Source: field survey

#### Question Five

Is the management of liquid assets a problem to your savings and loans?

**Table 14: Management of Liquid Assets**

Details	Adum Branch		Tasano Branch	
	M	%	F	%
Yes	39	49	27	34
No	41	51	53	66
Don't know	–	–	–	–
<b>Total</b>	<b>80</b>	<b>100</b>	<b>80</b>	<b>100</b>

Source: field survey

The table 5 above shows that in Adum branch and Tasano branch, 49% and 34% respectively of the respondents affirmed that liquid assets management is a problem to their savings and loan while 51% and 66% affirmed that liquid assets management is not a problem to their savings and loans. Thus, this could be attributed to the fact that the management of the savings and loan is aware of the consequences of poor management of their liquid assets hence, adequate and proper management of liquid assets of the savings and loan is ensured. This indicate that the company can collapse in the near future.

**Question Six**

What is the effect of poor management of liquid assets otherwise known as liquidity management on your savings and loans?

**Table 15: Effect of Poor Liquid Management**

Details	Adum Branch		Tasano Branch	
	F	%	F	%
High profit	25	31	26	33
Low profit	45	56	42	52
Don't know	10	13	12	15
<b>Total</b>	<b>80</b>	<b>100</b>	<b>80</b>	<b>100</b>

Source: field survey

The results from table 6 show that in Adum branch and Tasano branch, 56% and 52% respectively of the respondents indicates that poor management of liquidity impacted on Ghanaian savings and loans is reflected in the form of low profit.

### Question Seven

What has been the effect of liquidity on the profitability portfolio management of your savings and loans?

**Table 16: Profitability Portfolio Management**

Details	Adum Branch		Tasano Branch	
	M	%	F	%
High profit	50	62	49	61
Low profit	15	19	16	20
Don't know	15	19	15	19
<b>Total</b>	<b>80</b>	<b>100</b>	<b>80</b>	<b>100</b>

Source: field survey

The above table 7 shows that in Adum and Tasano branches, 62% and 61% respectively of the respondents said that liquidity plays a very important role on the profitability of Ghanaian savings and loans while 18.75% and 20% respectively of the respondents said that savings and loans are in form of low profit.

### Question Eight

What has been the effect of excess liquidity on the profitability of your savings and loans?

**Table 17: Effect of Excess Liquidity**

Details	Adum Branch		Tasano Branch	
	F	%	F	%
High profit	48	60	40	50
Low profit	20	25	22	28
Don't know	12	15	18	22
<b>Total</b>	<b>80</b>	<b>100</b>	<b>80</b>	<b>100</b>

Source: field survey



Table 8 above shows that liquidity does not affect the profitability of savings and loans negatively but rather positively in terms of high profit. This is attributed to the fact that the liquid assets such as cash have been tied down and invested on other profit earning assets that are highly profitable such as treasury bills, loans and advances.

### Question Nine

What has been the impact of liquidity on the loans and advances to your customers?

**Table 18: Impact on Loans and Advances**

Details	Adum Branch		Tasano Branch	
	M	%	F	%
Reduction in loans and advances	23	29	25	31
Increase in loans and advances	45	56	46	58
No effect	12	15	9	11
<b>Total</b>	<b>80</b>	<b>100</b>	<b>80</b>	<b>100</b>

Source: field survey

The results from the above table 9 shows that in Adum and Tasano savings and loans branches, 56% and 58% respectively of the respondents said that liquidity increases loans and advances while 29% and 31% respectively of the respondents said that liquidity reduces the loans. However, 15% and 11% of the respondents in the respective savings and loans noted that liquidity has no effect on loans and advances to customers.

### Hypothesis Testing

#### Hypothesis 1

Ho<sub>1</sub> –Excess liquidity does not have a significant impact on the profitability of Golden Link Savings and Loans Limited.

Using the chi-square

$$X^2 = \sum \frac{(O - E)^2}{E}$$

Level of significance = 0.05

Degree of freedom (df) = (R-1) (C-1)

Where

R= number of rows

C= number of columns

*Decision rule:* Accept  $H_0$  if the calculated value is less than table value, otherwise reject.

*Hypothesis question (Question 8)*

What has been the effect of excess liquidity on the profitability of your savings and loans?

**Table 10: Observed**

Details	High profit	Low profit	Don't know	Total
Adum Branch	50	19	11	80
Suame Branch	40	31	9	80
<b>Total</b>	<b>90</b>	<b>50</b>	<b>20</b>	<b>160</b>

**Table 11: Expected**

Details	High profit	Low profit	Don't know	Total
Adum Branch	45	25	10	<b>80</b>
Tasano Branch	45	25	10	<b>80</b>
<b>Total</b>	<b>90</b>	<b>50</b>	<b>20</b>	<b>160</b>

**Table 12: Calculation of Chi-Square**

	O	E	(O - E)	(O - E) <sup>2</sup>	$\frac{(O - E)^2}{E}$
Adum High profit	50	45	5	25	0.6
Adum Low profit	19	25	-6	36	1.4
Adum Don't know	11	10	1	1	0.1
Tasano High profit	40	45	-5	25	0.6
Tasano Low profit	31	25	6	36	1.4
Tasano Don't know	9	10	-1	1	0.1
<b>Xc<sup>2</sup></b>					<b>4.2</b>

$$df = (R-1) (C-1)$$

$$= (2-1) (3-1)$$

$$= 2$$

With a significance level of 0.05

Calculated value  $Xc^2 = 4.2$

Table value  $Xt^2 = 5.991$

Since  $Xc^2 = 4.2$  is less than  $Xt^2 = 5.991$ , we will accept the hypothesis  $H_{01}$ . Therefore, we can conclude that excess liquidity does not have a significant impact on the profitability of Golden Link Savings and Loans Limited.

## Hypothesis 2

Ho<sub>2</sub>- loans and advances do not have significant impact on the profitability of Golden Link Savings and Loans Limited.

*Decision rule:* Accept Ho<sub>2</sub> if calculated value is less than the table value, otherwise reject.

### *Hypothesis Question (Question 10)*

What has been the impact of liquidity on the loans and advances to your customers?

**Table 13: Observed**

Details	Reduction in loans and advances	Increase in loans and advances	No effects	Total
Adum	23	45	12	80
Tasano	25	46	9	80
<b>Total</b>	<b>48</b>	<b>91</b>	<b>21</b>	<b>160</b>

**Table 14: Expected**

Details	Reduction in loans and advance	Increase in loans and advances	No effect	Total
Adum branch	24	45	10	80
Tasano branch	24	45	10	80
<b>Total</b>	<b>48</b>	<b>90</b>	<b>20</b>	<b>160</b>

**Table 15: Calculation of Chi-Square**

	O	E	$(O - E)$	$(O - E)^2$	$\frac{(O - E)^2}{E}$
Adum Reduction in loans and advances	23	24	-1.0	1.00	0.042
Adum Increase in loans and advances	45	45	-0.5	0.25	0.005
Adum No effect	12	10	1.5	2.25	0.214
Tasano Reduction in loans and advances	25	24	1.0	1.00	0.042
Tasano Increase in loans and advances	46	45	0.5	0.25	0.005
Tasano No effect	9	10	-1.5	2.25	0.214
$Xc^2$					0.522

$df = (R-1) (C-1)$

$= 2$

Significance level = 0.05

Calculated value  $Xc^2 = 0.522$

Table value  $Xt^2 = 5.991$

Since  $Xc^2 = 0.522$  is less than  $Xt^2 = 5.99$ , we accept  $Ho_2$ . Therefore, we conclude that loans and advances do not have a significant impact on the profitability of Golden Link Savings and Loans Limited.

**Hypothesis 3**

$Ho_3$  – Shortage in liquidity does not have a significant impact on the profitability of Golden Link Savings and Loans Limited.

*Decision Rule:* Accept  $H_0$  if the calculated value is less than table value, otherwise reject.

*Hypothesis Question (Question 9)*

What has been the effect of illiquidity on the profitability management of your savings and loans?

**Table 16: Observed**

Details	High profit	Low profit	Don't know	Total
Adum	48	20	12	80
Tasano	40	22	18	80
<b>Total</b>	<b>88</b>	<b>42</b>	<b>30</b>	<b>160</b>

**Table 17: Expected**

Details	High profit	Low profit	Don't know	Total
Adum	44	21	15	80
Tasano	44	21	15	80
<b>Total</b>	<b>88</b>	<b>42</b>	<b>30</b>	<b>160</b>

**Table 18: Calculation of Chi-Square**

	O	E	$(O - E)$	$(O - E)^2$	$\frac{(O - E)^2}{E}$
Adum High profit	48	44	4	16	0.35
Adum Low profit	20	21	-1	1	0.05
Adum Don't know	12	15	-3	9	0.60
Tasano High profit	40	44	-4	16	0.36
Tasano Low profit	22	21	1	1	0.05
Tasano Don't know	18	15	3	9	0.60
$Xc^2$					2.02

$$df = (R-1) (C-1)$$

$$= (2-1) (3-1)$$

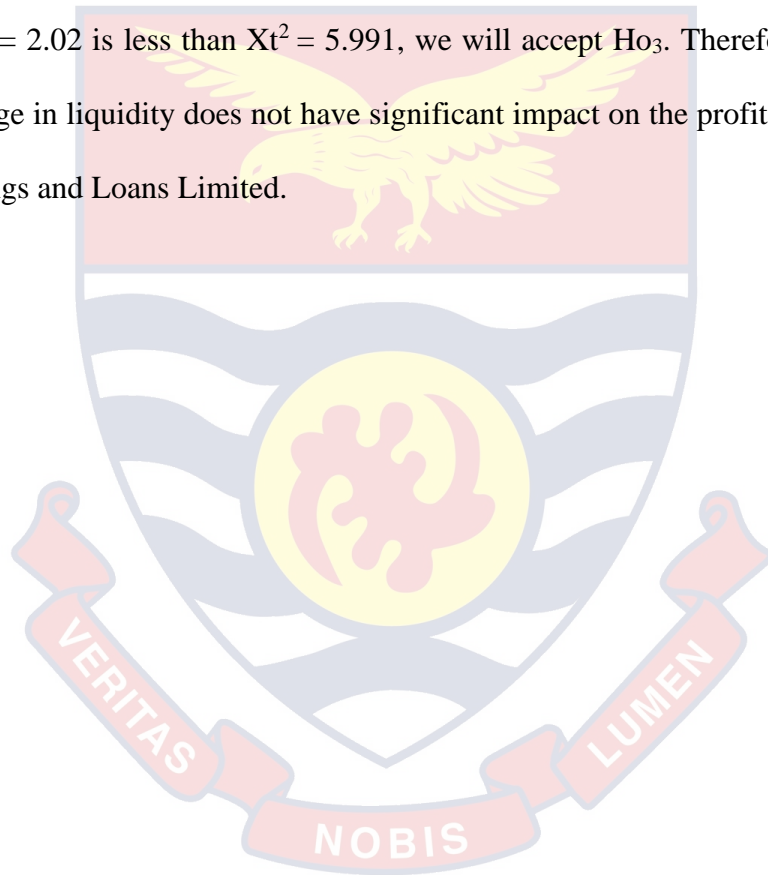
$$= 2$$

Significance level = 0.05

Calculated value  $Xc^2 = 2.02$

Table value  $Xt^2 = 5.991$

Since  $Xc^2 = 2.02$  is less than  $Xt^2 = 5.991$ , we will accept  $H_0$ . Therefore, we conclude that shortage in liquidity does not have significant impact on the profitability of Golden Link Savings and Loans Limited.



## CHAPTER FIVE

### SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

#### 5.1 Introduction

This chapter focuses on the summary of the findings realized in chapter four, the conclusion drawn by the researcher, recommendations and areas of further studies. This is in line with the objectives of the study; to evaluate the liquidity management practices of Golden Link Savings and Loans Limited.

#### 5.2 Summary

The findings revealed that there two types of problems inherent in the management of liquidity. There were problems of excess liquidity and shortage of liquidity otherwise known as illiquidity or liquidity crunch. The problems of excess liquidity and liquidity crunch are associated to the monetary authorities whose goal is to maintain an equilibrium level in the economy. To them, excess liquidity indicates a rise in the economy, for fear of inflationary pressure while liquidity crunch may be characterized by recession or deflation which affects business condition.

Excess liquidity may or may not affect savings and loans adversely depending on the management. It might signify unrestrained credit expansion of excess profit and guaranteed growth. The major problems are the shortage of liquidity which reduces their profitability; that is, if the shortage of liquidity situation is as a result of very low liquid base that hinder business expansion. Nevertheless, if the excess profit is in form of idle cash, it constitutes a serious setback. The primary data and secondary data collected were analyzed through collection, sorting and grouping of data into tables of



percentages and frequency distribution. Three hypotheses were developed which were statistically tested using chi-square.

The first hypothesis tested stated that excess liquidity does not have a significant impact on the profitability of Golden Link Savings and Loans Limited. The result revealed that excess liquidity does not have a significant impact on the profitability of Golden Link Savings and Loans Limited. And this can be linked to the fact that the calculated value  $Xc^2 = 4.2$  is less than the table value  $Xt^2 = 5.991$ .

The second hypothesis tested that loans and advances do not have significant impact on the profitability of Golden Link Savings and Loans Limited. This null hypothesis was accepted as loans and advances do not have significant impact on the profitability of Golden Link Savings and Loans Limited and this is linked to the fact that the calculated value  $Xc^2 = 0.522$  is less than the table value  $Xt^2 = 5.991$ .

The third hypothesis tested that shortage in liquidity does not have significant impact on the profitability of Golden Link Savings and Loans Limited. This null hypothesis was accepted as shortage in liquidity does not have significant impact on the profitability of Golden Link Savings and Loans Limited and this is linked to the fact that the calculated value  $Xc^2 = 2.02$  is less than the table value  $Xt^2 = 5.991$ . The study also revealed that profitability will be optimized only when liquidity is efficiently and effectively managed. i.e., financial obligations and at the same time maximizes its profit.

### 5.3 Conclusions

The following conclusions can be drawn from the research considering the findings of this study;

- i) Ghanaian savings and loans should not compromise effective and efficient liquidity management for the success of operations and survival of the firm. They should ensure there is optimal liquidity level in order to meet their financial obligations to depositors and at the same time maximize profits for the shareholders.
- ii) The significance of the banking system to economic stability and continuous development necessitates effective administration of banking laws and regulations, which will serve as operating guidelines on the savings and loans.
- iii) The ideal liquidity level of savings and loans is reached when savings and loans maintain minimum liquidity requirements as stipulated by the Bank of Ghana. This minimizes instances of savings and loans distress.
- iv) Effective management of liquidity requires that adequate level be maintained to help savings and loans estimate the proportion of customers' funds that will be demanded at any given period.
- v) It can be concluded that both excess liquidity and illiquidity are the financial headaches that can easily erode the profit base of a savings and loans as they affect the firm's profitability performance. Hence, savings and loans with the aim of promoting its profits level need to adopt effective liquidity management.

In conclusion, it is noted that profitability of the firm is inversely related to the liquidity of the firm, that is, liquidity increases as profitability decreases and vice versa.

#### 5.4 Recommendations

Even though attention has been given on the effective means managing savings and loans' liquidity, the research recommends that cash centers, branches and other concerned treasury center should comply and report promptly to avoid problems of inadequate capitalization or shortages of funds. Savings and loans occupy a central position in the country's economy. They are the pilots on which any economic activity is been carried out. Therefore the vital role of savings and loans on the development of a countries economy cannot be over-emphasized. The policy implication which emerged from this study includes the following;

Since monetary policies of Bank of Ghana grossly affect liquidity management of the Ghanaian saving and loans, the Bank of Ghana should take the interest of the later into consideration while at the same time establishing and implementing these monetary policies in general and the liquidity ratio in particular. The monetary authority should as a matter of importance encourage and legitimate the use of credit cards and enforce the usage of cheque for huge amounts in the daily business transactions. This action will go a long way to remedy the problem of maintaining huge amount of cash in vaults and safes in expectation of unprecedented withdrawal, since the movement of cash will be highly reduced.

The Bank of Ghana should be encouraged to maintain a flexible discount rate or minimum Monetary Policy Rate (MPR) so as to enable savings and loans take advantage of the alternative measures of meeting the unexpected withdrawal demands and reduce the tendency of maintaining excess idle cash at expense of profitability.

In the management of liquidity of Golden Link Savings and Loans Limited, a lot of adjustments should be made in the company to increase the benefit derived from its

management. For the benefit to be realized, the recommendations are categorized in the following ways;

Golden Link Savings and Loans should have an agreed strategy for day-to-day liquidity management. This strategy should be communicated throughout the entire organization. The Bank Governing board of Golden Link Savings and Loans should approve the strategy and significant policies related to liquidity management. The governing board should also ensure that senior management of the bank takes the steps necessary to monitor and control liquidity risk, as well report regularly the liquidity situation of the bank and immediately if there are any material changes in the bank current or prospective liquidity position. Each branch of the bank should have a management structure in place to effectively execute the liquidity strategy. This structure should include the on-going involvement of members of senior management. Senior management must ensure that liquidity is effectively managed, and that appropriate policies and procedures are established to control and limit liquidity risk. Golden Link Savings and Loans should set and regularly review limits on the size of their liquidity positions over particular time horizons.

Golden Link Savings and Loans must have adequate information systems for measuring, monitoring, controlling and reporting liquidity risks. Reports should be provided on a timely basis to the banks governing board, senior management and central bank.

Instead of maintaining excessive liquidity as a provision of unexpected withdrawal demands of the customers, the savings and loans should adopt other measures of meeting such requirements which can include borrowing and discounting bills.

### 5.5 Areas for Further Studies

Further study is recommended on how to achieve the optimal liquidity level in savings and loans. The result will help to solve the problem of excess liquidity and its reducing effects on profits. Also, further study could be launched on identifying better quantitative measures of profitability, liquidity, risk and managerial efficiency, which could lead to more satisfactory estimation of cause-effect relationship. Finally, researchers and other scholars could concentrate on the same area of study and do more extensive research using a wider data and area of coverage.



## REFERENCE

- Adeyanju, O.D., Olabode, O.S. & Olagunju, A. (2011). *Liquidity Management and Commercial Bank's Profitability in Nigeria. Research Journal of Finance and Accounting*. Vol. 2, No. 7/8.
- Agarwal, J. D. (1998). *A Goal Programming Model for Working Capital Management, Finance India*, Vol.2, Issue 2.
- Amarachukwu Ona (2003). 'Obstacles in Liquidity Management', Business Day Newspaper of February 6, 2003.
- Amengor, E. C. (2010). Importance of Liquidity and Capital Adequacy to Commercial Banks. A Paper Presented at Induction Ceremony of ACCE, UCC Campus.
- Basel committee on banking supervision announces enhancements to the Basel II capital framework. January 2009, [www.bis.org](http://www.bis.org)
- Batty, J. (1975). *Management accountancy*. London: MacDonald and Evans Ltd., p. 63.
- Berger, A. N., & Bouwman, C. H. (2008, October). Financial Crises and Bank Liquidity Creation. Retrieved March 2010, from Social Science Research Network: <http://ssrn.com/abstract=1231562>
- Bhunja, A. (2010). "A Trend Analysis of Liquidity Management Efficiency in Selected Private Sector India Steel Industry." *International Journal of Research in Commerce and Management*, Vol.1, Issue.5.
- BIS (2008). Principles for sound liquidity risk management and supervision. Basel Bank for International Settlements.

- Bordeleau, É, Graham C. (2010). The impact of liquidity on bank profitability. Working Paper. 38.
- Bratanovic, S. B. & Grueving, H. V. (2003). *Analyzing and Managing Banking Risk*, Washington D.C: The World Bank.
- Civelek, M., & M. Al-Alami. (1991). An empirical investigation of the concentration profitability relationship in the Jordanian banking industry. *Savings and Development*, 15(3), 321-51. Retrieved from <https://www.jstor.org/stable/25830270>
- Eljelly, A. (2004). Liquidity – Profitability Trade-off: *An Empirical Investigation in An Emerging Market. International Journal of Commerce and Management*, 14(2), 48-61.
- Erich, A. Helfert (1989). “Techniques of financial analysis” 6th, Universal Book stall, New Delhi, p. 22.
- Filbeck G & T Krueger (2005). *Industry Related Differences in Working Capital Management. Mid-American Journal of Business* 20(2): 11-18.
- Ganley, J. (2004). “Surplus Liquidity: Implications for Central Banks”, Lecture Series No. 3, Bank of England.
- Gresternberg, W. Charles (1960). “Financial organization and management of Business” 4th end. Asia publishing House, New Delhi, pg. 365.
- Joy, O. M. (1977). *Introduction to Financial Management*, Home Wood III, Richard D. Irwin, pg. 406.

Khalfaoui H, Saada M. Ben. (2015). The determinants of banking performance”  
*International Journal of Finance & Banking Studies IJFBS*. 4:2.

Khan M.Y. & P.K. Jain (1982). *Financial Management*, Tata McGraw Hill Publishing  
Company Limited, New Delhi, pg. 624.

Khan, M. Y. & P. K. Jain (1982). *Financial Management*, New Delhi. Op. Cit, Pg.683.

Lukorito, S., Muturi, W., Nyang’au, A., & Nyamasege, D. (2014). Assessing the effect  
of liquidity on profitability of commercial banks in Kenya. *Research Journal of  
Finance and Accounting*, 5(19).

Munyambonera, F. (2010). Determinants of commercial banks’ profitability in Sub  
Saharan Africa. *International Journal of Economics and Finance*, 5(9), 134-147.  
<http://dx.doi.org/10.5539/ijef.v5n9p134>

Nasir, M. & Raheman, A. (2007). *Working Capital Management and Profitability Case  
of Pakistani Firm. International Review of Business Research Papers*, 3(1), 279-  
300.

Olweny, T., & Shipho, T. (2011). Effects of banking sectoral factors on the profitability  
of commercial banks in Kenya. *Business Journal of Economics and Finance  
Review*, 1(5), 1-30. Retrieved from <http://www.businessjournalz.org/efr>

Ongore, V., & Kusa, G. (2013). Determinants of financial performance of commercial  
banks in Kenya. *International Journal of Economics and Financial Issues*, 3(1),  
237-252.

Prasanna Chandra (1988). *Financial Management, Theory and Practice* Tata McGraw  
Hill Publishing Company Limited, New Delhi, pg. 260

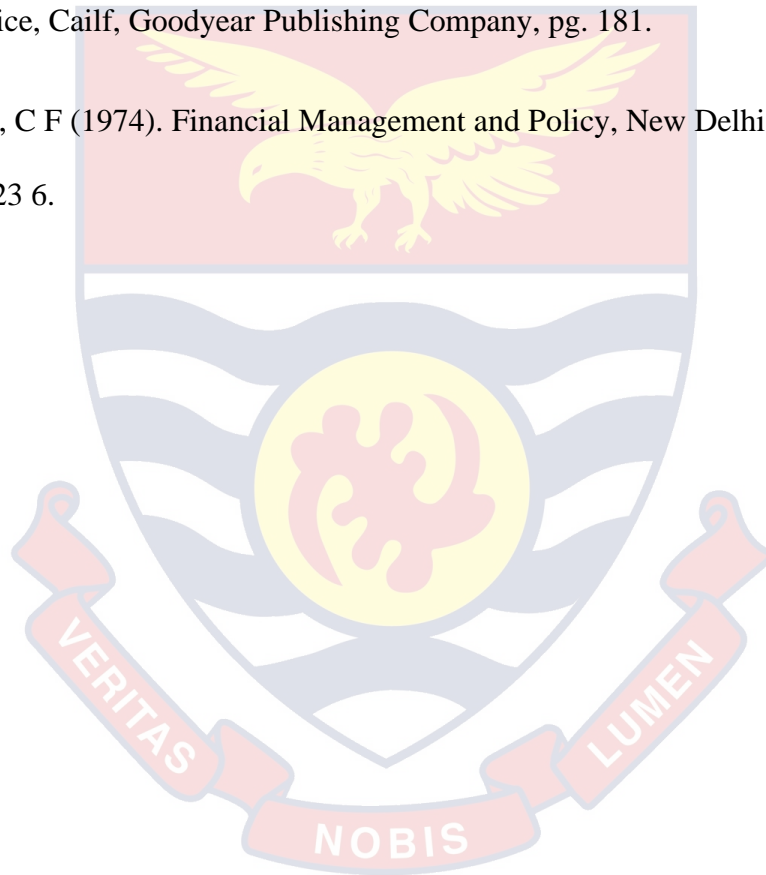


Sharma, V. (2011). "*Liquidity, Risk and Profitability Analysis. A Case Study of Maruti India Ltd*". Search and Research. Vol. 11, No. 2, pp. 191-193.

Smith, K. (1980). Profitability versus Liquidity Trade-offs in Working Capital Management, in Readings on the Management of Working Capital. New York: St. Paul, West Publishing Company.

Solomon, E. and J. J. Pringle, (1977). An Introduction to Financial Management, Santa Mouice, Cailf, Goodyear Publishing Company, pg. 181.

Van Home, C F (1974). Financial Management and Policy, New Delhi, Prentice Hall, pg 423 6.



## APPENDICE

### APPENDIX I

#### INTRODUCTION LETTER

WILLIAM FOSU

P.O BOX \_\_\_\_\_

KUMASI, GHANA.

CSUC-SCHOOL OF BUSINESS

To the respondent,

Dear Sir/Madam,

I am a post graduate student at the Christian Service University College, conducting a research on the Liquidity Management of Ghanaian Savings and Loans as a partial fulfillment of the requirement of master's degree of Accounting and Finance.

Declaration- *the information collected through this interview guide as well as your identity shall be treated as confidential and will only be used only for academic purposes.*

Your assistance in the completion of this interview guide will highly be appreciated.

Thank you.

Yours sincerely,

WILLIAM FOSU