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KUMASI**

**SCHOOL OF GRADUATE STUDIES  
SCHOOL OF BUSINESS**

**EFFECT OF WORKING CAPITAL MANAGEMENT ON PROFITABILITY  
OF MICROFINANCE INSTITUTIONS IN KUMASI**

**BY:**

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## DECLARATION

I hereby declare that this submission is my own work towards the award of Masters in Business Administration (MBA) and that, to the best of my knowledge, it contains no material previously published by another person nor material which has been accepted for the award of any other degree of the University except where due acknowledgement has been made in the text.

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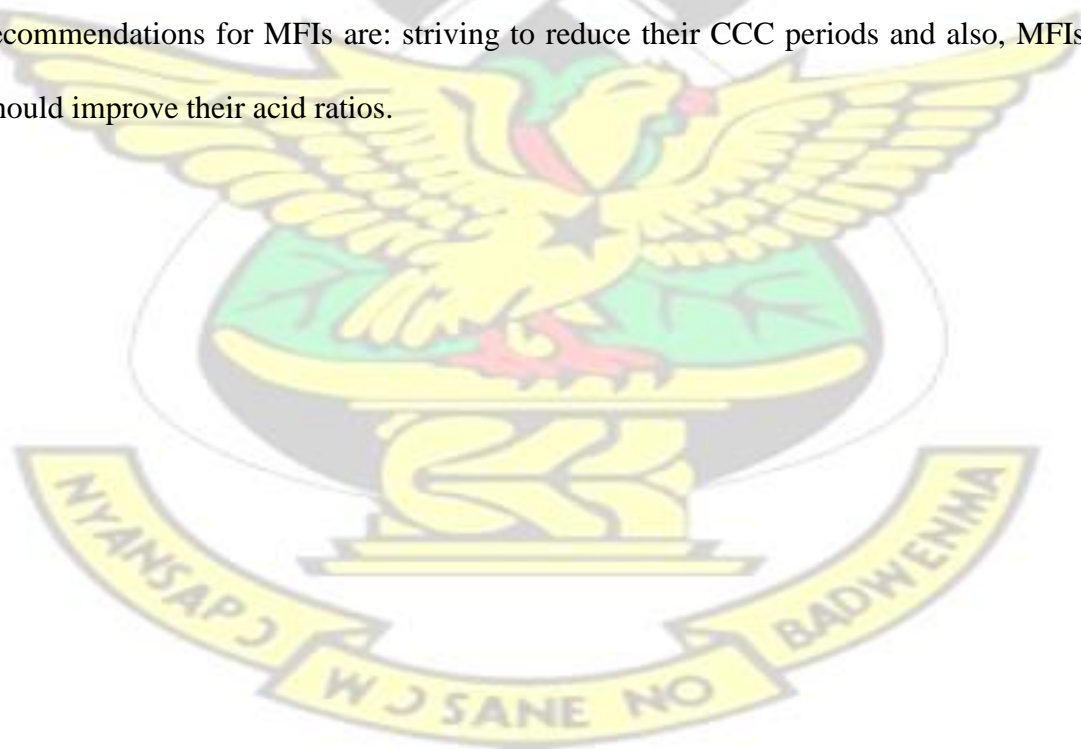
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## ABSTRACT

The study examined the effect of working capital management on the profitability of selected microfinance institutions in Kumasi from 2011-2014. The study has revealed that Cash Conversion Cycle (CCC) has a significant negative effect on the profitability (financial performance) of the selected MFIs. It was also revealed that, Acid Ratio (AR) and Loan to Deposit Ratio (LDR) have significant positive impacts on the profitability of the selected MFIs. The study further revealed that gearing has a positive but insignificant effect on the financial performance of the selected companies. Among the recommendations for MFIs are: striving to reduce their CCC periods and also, MFIs should improve their acid ratios.



## ACKNOWLEDGEMENT

My first appreciation goes to the Almighty God, who gave me strength to go through this course successfully. My next thanks go to my parents Mr. and Mrs. Atta-Owusu and siblings Philip Osei-Owusu and Susana Tawiah who supported me with their prayers.

Not forgetting my project supervisor, Mr. Michael Adusei, who helped me in various forms to come out with this work piece.



## DEDICATION

I dedicate this whole project to my Parents, Mr. and Mrs. Atta-Owusu who with the help of God has brought me this far. To them I say, May God richly bless you.

# KNUST



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## LIST OF TERMS AND ABBREVIATIONS

Terms	Description
MFI(s)	Microfinance Institution(s)
NPL	Non-Performing Loans
BoG	Bank of Ghana
GNA	Ghana News Agency
GAMC	Ghana Association of Microfinance Companies
CCC	Cash Conversion Cycle
CPP	Creditors' Payment Period
DCP	Debtors Collection Period



## **CHAPTER ONE**

### **1.0 INTRODUCTION**

This chapter presents background to the study, problem statement, significance of this study, the objectives and research questions as well as the potential limitations the researcher is likely to encounter. It also entails the scope of the study and the organisation of the whole project work.

### **1.2 BACKGROUND STUDY**

Working capital is the term used for the daily requirement of funds for a business. To meet routine payments and to provide for unforeseen events, every business needs a certain amount of cash balance (Seidman, 2005). Other writers simply describe working capital as the difference between current assets and current liabilities. Current assets of a business are those that will be converted to cash within a twelve month period. Examples are: raw materials, work-in-progress and finished goods, others include: cash, receivables, and marketable securities. Current liabilities on the other hand are liabilities that are to be settled within a twelve month period. Examples include: accounts payable, outstanding expenses, overdrafts and short term loans (Siddiqui, 2014). However, the nature of a business will determine the components of its working capital. For instance, in the case of financial institutions like microfinance institutions (MFIs), cash, loan and marketable securities, make up their current assets, whiles clients' deposits and short term loans like overdrafts make up current liabilities. Financial institutions normally do not have any raw material and work-in-progress; those are typical of manufacturing industries.

The management of working capital is to achieve two main objectives: to increase profitability and to ensure that, there is sufficient liquidity to meet short term obligations

(Pass and Pike, 1984 as cited in Watson and Head, 2010). In practice, the maturities of some of these liabilities are normally unpredictable, especially in the case of clients' deposits. As a result, many financial executives have been struggling to identify the appropriate level of working capital to hold so as to minimize their risk to liquidity and also to be profitable as well.

Considering the impact of an effective working capital management on profitability and survival of every business, the quest to seek practical tools and strategies to achieve this is of paramount importance to every business. There are a number of studies providing empirical evidence on the effects of working capital management on profitability such as the one on Spanish firms by Garcia-Teruel and Martinez-Solano (2007). In their study, they demonstrated how managers can improve profitability by shortening the cash conversion periods.

Though microfinance companies had been in existence in Ghana for a long time, the last decade has seen an increase in establishments of these institutions. MFIs currently provide financial services to an estimated 15 percent of the country's total population as compared with 10 percent for the commercial banks (Obuobi and Pollio, 2010). Micro-enterprises which depend largely on microfinance institutions for credit constitute about 66% of the total labour force in the country and, thus, represent a vital economic force (Adjei, 2010). Unfortunately these small businesses do not have access to credit from the main stream banks, because they do not have acceptable collateral and adequate data like: cash flow and financial statements to meet risk assessment criteria. The influx of microfinance companies was hence, seen as a major turning point for the country's economy. Otero (1999) asserts that, the aim of MFIs is not only about

providing capital to the poor to fight poverty but to also deliver other financial services that will assist businesses of clients to grow.

In September, 2012, Bank of Ghana (BoG) issued provisional license to 216 MFI companies (GNA, 2012); this move shot up the confidence of the public to deal with MFIs. This however turned out to be the worst thing to happen to the Ghanaian populace as majority of the companies could not operate beyond 3 years. Though various factors were attributed these imminent collapses, liquidity challenges were cited to be the major cause of these breakdowns.

It is against this background that this study seeks to examine the effect of working capital management on the profitability of microfinance companies in Kumasi.

### **1.3 PROBLEM STATEMENT**

The recent drama in the microfinance industry has demanded that, financial institutions, (especially deposit-taking institutions) take a critical view of the management of their working capital. In what everyone thought to be a bright future for the finance industry, it rather turned out to be one of the worse things to happen to the populace. Companies who were thought to be giving credibility to the industry were part of this embarrassing situation. Though, there was a general recession in the Ghanaian economy, some institutions were able to manage their situations more successfully. It is thus, obvious that, these institutions are employing some strategies that are aiding them to survive up till now.

Various factors were attributed to these failures; paramount among these factors was liquidity challenges. Frimpong (2013) asserts that, liquidity management is largely part of working capital management. Smith (1973) also wrote that, most businesses have

collapsed because financial managers have usually proved incapable of managing their working capital effectively. It is however worth noting that, while inadequate working capital leads companies to bankruptcy, too much of it results in cash wastage and ultimate decrease in profitability (Brealey, Myers and Allen, 2011). Managers are therefore in a dilemma of achieving a desired tradeoff between liquidity and profitability in order to maximize the value of their firms.

During this downturn in the microfinance industry, a lot of people lost valuable assets; this was very agonizing. It had rippling effects on people's health; and even educational and business opportunities were lost. This situation calls for an effective strategy in the management of working capital for MFIs and this research work seeks among other objectives to establish the impact of effective working capital management on profitability. We will also delve into some of the causes of MFI failures to help stakeholders of the microfinance industry arrest this menace.

#### **1.4 OBJECTIVES**

The general objective of this study is to establish the impact working capital management has on profitability of microfinance institutions in the Kumasi Metropolis.

The specific objectives are:

- i. to establish the impact working capital management has on profitability and ii. to identify the causes of microfinance failure in Kumasi

#### **1.5 RESEARCH QUESTIONS**

The research seeks to find answers to the following questions:

1. What is the effect of working capital management on profitability of microfinance institutions?



## 2. What are the causes of microfinance failures?

### 1.6 SIGNIFICANCE OF STUDY

Working capital is extremely essential to every business. Its efficient management plays a critical role in determining the financial performance and survival of companies.

The outcome of this project will enlighten institutions providing microfinance services on the relationship between working capital components and profitability it will also help them identify some of the causes of MFI failures, so that they can be careful about some of the decisions they take.

Moreover, microfinance is an integral part of every country's economy, the study will thus, contribute immensely to the industry's development. This is because, despite the many challenges facing the industry, it is still one of the effective strategies in reducing poverty and transforming the lives of poor people.

Since this eminent failure is not new in Ghana, a completion of this project will help us ascertain the various strategies that can be employed to avoid a reoccurrence of similar problem.

The project will also be of benefit to the Ghanaian banking industry as a whole since they all operate within the same environment and hence are faced with similar challenges.

The study could also serve as a reference for stakeholders in the MFI industry.



## **1.7 SCOPE OF STUDY**

During its renaissance, the industry (microfinance) had eradication of poverty as its vision. However, in recent times, microfinance institutions in Ghana have dominated the news for all the bad reasons. What we are witnessing today is contrary to the objective for the establishment of the industry, hence the decision to choose microfinance for this study.

According to a documentary on Joy Fm ([myjoyonline.com](http://myjoyonline.com), 2013), Ashanti Region was the most hit by these failures, hence our decision to base our study in Kumasi. Relative to other cities, Kumasi, the capital of Ashanti Region is known to have a high degree of informality. Informality too has been identified to be one of the factors that microfinance thrives on well (Maruland et al, 2010).

Data will be sourced from Ghana Association of Microfinance Companies (GAMC), the umbrella body of microfinance companies as well as individual companies. The period of assessment has been limited to 2011-2014 to ensure that the results reflect current trends of operations of the company.

## **1.8 POTENTIAL LIMITATIONS**

Time is going to be a major constraint in this study. But for the short period required for the completion of the work, it would have been proper to include a lot more companies from various regions. Even though MFIs in the country share common characteristics and face similar challenges, it is possible the researcher will miss some relevant information peculiar to certain companies.

In seeking for information on the causes of microfinance failure, it is anticipated that, it will be difficult locating some officials of collapsed companies especially. There is also

the likelihood that, some of the respondents would not want to reveal certain information for fear of being implicated. Some may also be reluctant because they have signed oaths of secrecy with their respective companies and wouldn't want to breach them. These concerns would be addressed by not revealing the identities of respondents.

## **1.9 ORGANISATION OF STUDY**

The study is organized into five (5) chapters: The first will focus on introducing key component of the topic. The first chapter will include subtopics such as: background of the study, problem statement, research questions and objectives, scope and significance of the study. There will also be a touch on the potential limitations that will be encountered.

Chapter two of the research will deal with a review of related literature on working capital management practices, their effect on profitability and the causes of microfinance failures.

Chapter three forms the methodology of the study. This chapter will give details of how the research would be conducted; it would include issues such as research design, population sample and sampling procedure, data collection and organization procedures. Data that will be gathered will be analysed both qualitatively and quantitatively.

The data analysis, interpretation, and discussions are contained in chapter four.

Chapter five would deal with the summary of key findings, conclusion and recommendations.

## **CHAPTER TWO**

# **LITERATURE REVIEW ON WORKING CAPITAL AND ITS IMPACT ON PROFITABILITY AND MICROFINANCE FAILURES**

## **2.0 INTRODUCTION**

This chapter reviews existing information on the impact of working capital management on profitability. Some of the specific topics reviewed include: management of working capital, working capital policies, funding policies for working capital, factors that affect profitability and working capital management as well as sources of funds for working capital. Review has also been conducted on causes of microfinance failures.

## **2.1 DEFINITIONS**

Every business has both long term and short term objectives, but the realization of the long term objectives depends on the survival of the business in the immediate (short) term. To be successful, managers of every business need to manage their working capital effectively. Working capital is collectively made up of: current assets and current liabilities (Brealey, et al, 2011) and it has been identified to be key to the survival of every business. Working capital is also referred to as net working capital, and that refers to the difference between current assets and current liabilities. Dr. Fareed, 2014 describes working capital as the excess of the current assets over current liabilities; hence it is sometimes called net current assets. Srivastava, 2013 also describes working capital as the fund that is invested in current assets and is needed for meeting day to day expenses.

## **2.2 IMPORTANCE OF WORKING CAPITAL**

Working capital is the lifeblood of a company, without it, a firm cannot operate or even open to start business (Seidman, 2005). For instance, a certain minimum amount of cash is needed to serve as backup for unexpected costs that may arise.

Working capital also addresses the seasonal and cyclical needs of firms (Seidman, 2005). Working capital is sometimes needed to finance certain activities before revenue is generated. For example, finance institutions will need some cash to give out as loan before they can realize some revenue in the form of interest on loans and commitment fees. In cases like this, companies will need to keep a certain amount of cash balance behind to meet certain expenses that may come up till revenue is earned.

Another significance of working capital is its provision of liquidity. While waiting for its full collection of revenue, firms will need to have adequate and appropriate working capital to operate. Even a profitable company can still go bankrupt if it has insufficient working capital (Seidman, 2005).

Seidman further explained that working capital is also needed to sustain a firm's growth. According to him, firms wanting to increase their sales will need bigger investments in items such as: inventory, personnel and accounts receivables as it grows. Fixed assets are not the only components that need to be improved; working capital must be too, to support sales growth.

### **2.3 MANAGEMENT OF WORKING CAPITAL**

Working capital management refers to the financing, investment and control of net current assets within policy guidelines (Frimpong, 2013). In simple terms, the management of the components of working capital is what is referred to as management of working capital. Working capital management can also be described as related to short-term financial planning and liquidity in general; it represents a significant indicator for short-term performance (Yeboah and Agyei, 2012).



Working capital management does not only ensure continual survival of a firm, it's also one of the essential determinants of a firm's market value because it directly affects a firm's profitability (Gamlath, G.R.M & Rathirane, Y, 2014). Shin and Soenen, 1998 also explains that, the decisions we take with the management of working capital go a long way to affect the profitability and survival of the firm.

Considering the effects of the management of working capital on survival and profitability of a business, it has become imperative for managers to take particular attention to the management of these key components. Unfortunately not all managers possess the skill and knowledge to do this efficiently. Agency problems and other business-related challenges have resulted in some managers taking decisions that are detrimental to the survival and profitability of their businesses. It is therefore very important that companies formulate clear policies concerning how key components of working capital should be managed. For instance, there must be policies about the process of granting credit; some clients may not have the ability to repay loans and if proper assessment is done, it can save the company the incidence of a NonPerforming Loan (NPL) which affects profitability. Such policies can also guide managers about the length of credit period that should be given to clients. Such policies however differ from industry to industry; for instance, while financial institutions give lots credit to be profitable, food vendors cannot do same. It is also worth mentioning that, in setting these policies, companies should be mindful of competitors' policies so as not to lose business because of unfavourable comparison (Watson and Head, 2010). For example, some MFIs, insisted on loans being repaid in a maximum of 4 months while others gave up to 6-8 months which was more liberal and attractive to a lot of customers. Managers should also be conversant with the fluctuations in the supply of cash and



demand for credit during various times of the year. For instance, during occasions like Christmas, clients demand more credit to expand their businesses.

It is not enough for companies to just have good policies on the management of working capital; companies must also ensure that these policies are followed strictly throughout the company's structures.

## **2.4 WORKING CAPITAL POLICY**

Working Capital Policy refers to areas such as the level of cash that should be held and the credit terms that should be agreed with debtors and creditors (Frimpong, 2013). The policies are categorized into three: aggressive, conservative and moderate policies (Watson and Head, 2010). The decision to implement any of these policies has a consequent effect on both liquidity and profitability of the firm.

For instance, an aggressive policy means a company is using low levels of cash and other current assets to support a certain level of sales activity and this will lead to an increase in profitability but a high liquidity risk.

A conservative policy on the other hand means a certain amount of activity will be supported by a large cash balance; this may include relaxing credit terms to your debtors. Though there will be enough cash to reduce liquidity risk, profitability will decrease.

A moderate policy is the policy that falls between the aggressive and conservative policies.

The decision to use a certain policy will be dependent on the nature of the business, since different businesses will have different working capital requirements.

## 2.5 DETERMINANTS OF MFI WORKING CAPITAL AND PROFITABILITY

Working capital related problems are cited among the most significant reasons for the failure of rural and community banks in Ghana (Owusu-Frimpong, 2008). Various researchers have therefore been able to identify some factors that affect working capital and profitability of financial institutions, some of these are:

Capital Structure: Every business needs some amount of capital before it can start operating and can subsequently grow. Capital structure of a firm reveals how the firm's operation is financed; whether it is funded by equity or debt. Though there can be various forms of capital, basically, they all come down to equity or debt (long or short). Whichever of these two is chosen, there will be a consequent impact on the firm's operations, profitability and survival. To a large extent, debt is preferred to equity because of its relative lower cost and the ease with which it is accessed (Frimpong, 2013). But in hard times when companies are faced with liquidity challenges for instance, long term funds (which normally come from equity) are preferred, to ensure survival after which profitability can be pursued.

There are situations where businesses start operation with little or no capital of their own. The owners mistakenly believe that enough profit will be earned and ploughed back into the business as capital; this is called undercapitalisation (Watson and Head, 2010). This can consequently lead to overtrading, where a company tries to support high levels of trading with a small working capital base. Though this can increase profitability, it can also increase liquidity risk because normally cash gets locked up in trading activities. A lot of microfinance companies that failed in Ghana were caught up in this web; they were found to be expanding both current and non-current assets with depositors' funds.

Cash Conversion Cycles (CCC): In simple terms, Cash Conversion Cycle is the period between when cash leaves a firm and when cash is received by the firm. Brigham & Houston (2007) defined CCC as the length of time funds are tied up in working capital. They further explained that, cash conversion cycle is a measure of how quickly current assets are converted into cash. Though cash conversion cycle is normally typical of manufacturing companies, it becomes an issue for finance companies when loans and some securities like fixed deposits are held. Some MFIs placed fixed deposits with some other MFIs, unfortunately, when they needed it, they could not get it as quickly as they wanted. There were similar problems with loans as clients defaulted and hence increased the incidence of NPL. Thus the longer it takes for cash to return to the firm (i.e. longer CCC), the higher the pressure on working capital. Less cash meant that, high exposure to liquidity risk it also meant that other business opportunities were missed as cash were locked up elsewhere; hence profitability being affected.

Management of Cash: The significance of cash to every business cannot be underestimated; hence efficient management of it is very critical to the survival of the business. Brealey et al, 2011 indicated that, for a firm to survive and grow, it needs cash which is the blood stream of every business. Dr. Siddiqui, (2014) on the other hand describes Cash as King. If adequate cash is not available as and when it is needed, the situation increases liquidity risk and payments such as, repayment of bank loans, taxes, wages, and clients' withdrawal may be missed. However, while we advocate for adequate funds to meet short term requirements, firms must be mindful of the opportunity cost of holding cash which could have been invested or put to productive use for a certain amount of good returns (Watson and Head, 2010). Considering the

risk-return trade off, managers should ensure that, an optimum cash balance is maintained to ensure survival and profitability of their firms.

Credit Policy: Like every business, MFIs also have receivables. Yeboah and Yeboah, (2014) emphasize this by citing loans and advances as components of banks' current assets. Firms have various objectives for giving credit: to penetrate and establish themselves in a particular market, to increase sales and hence achieve higher profits (Brealey et al, 2011) etc. Some microfinance institutions, as a result of higher competition gave out more loans to achieve some of these objectives. A lot of the companies ignored their credit policies and adopted the popular method of doubling clients' balances after a few months of contribution (Owusu-Nuamah, 2013). This led to a situation where a large amount of the loan portfolio went bad, thus, reducing the amount of funds available for operations. Customers will give all sorts of excuses to pay late. Bad debts particularly can drag on working capital in tough times, but it can often be reduced by making more rigorous credit checks (Bartram, 2014). Every business needs to be prompt in making their debt collections; a liberal credit policy can affect working capital badly. However, a strict credit policy can reduce the size of trade debtors, hence improve the level of working capital (Siddiqui, 2014). A higher repayment of loans can lead to an improvement of earnings, and hence improve profitability. Lower levels of loan and inefficient collections affect working capital and can also lead to a reduction in profitability (Cooper et al., 2003 as cited in Yeboah and Yeboah, 2014).

Nature of Business: Business Fluctuations have a lot to do with the management of working capital. During Christmas and festive occasions, deposit taking institutions experience high withdrawals and microfinance companies are not left out. This is



however not a strong reason why working capital should be under pressure; even if a company do not have adequate capital, any discerning manager ought to know that, there will be an increase in withdrawals during these occasions, hence should prepare towards that. We can however make a case for MFIs that, most African countries have had their economies fluctuating over the years; this makes it difficult for businesses to plan. The Ghanaian economy started to see a decline from 2010, interest rate on treasury bills have been hovering around 20% for a long time now. Most investors being rational, and considering the risk-return trade-off will always opt for these government securities which are considered to be relatively safe. This consequently reduced the liquidity in the Ghanaian market and this meant that companies which thrived on deposits (microfinance companies especially) were going to suffer (Owusu-Nuamah, 2014).

Operational Efficiency/Expenses: Even small expenses can gradually grow and have a negative impact on working capital, hence profitability (Bartram, 2013). The early years of every business are usually difficult (Watson and Head); hence the need to be cautious with our spending. MFIs should set clear rules about payments and expenses and then ensure that these are followed strictly. Unfortunately, a lot of microfinance firms were seen to be making huge expenses, notable among them was the opening of more branches at the early years of their operations. A lot of wastage occurred as proper planning was not done in executing projects and making expenses.

Though there could be other factors that can affect working capital and profitability, Daniel Windaus, a senior director at REL Consultancy, advises that, working capital management should be done actively throughout an organisation. He continues by saying, firms have to provide training programs at management levels and activity training on new processes at operational level. Firms will need to provide ongoing



support in order to run these processes successfully, since changing habits does not happen overnight.

## **2.6 FINANCING WORKING CAPITAL**

As a firm grows, larger investments are needed to sustain its growth (Seidman, 2005). Non-current assets like new equipments are not the only assets required for growth; working capital must also be financed to support other sectors like sales. Also, as a result of tougher competitions, firms may want to undertake activities such as: designing new products or entering new markets, all these activities must be addressed through working capital financing.

Some authors describe working capital as a firm's investment in its assets. In this instance, working capital finance will mean an investment in assets needed to operate over a one year period. This explains why firms need investments in cash, accounts receivable, inventory, and other items listed as current assets on the firm's balance sheet.

Many firms do not have steady sales and production throughout their financial year, finance managers especially, must understand a business' financing needs at any point in time so as to raise appropriate funds for the business. For instance, firms with cyclical operations will be best financed by short-term funds since short term debts are usually easy to access and lowly priced (Brealey, et al, 2011). It is thus, only prudent to apply short-term funds to address seasonal demands which will be reduced and converted to cash to repay borrowed funds within a short period than to go for long term funds which will later be less utilized and you will have to pay for high interest which will eventually affect profitability.

That notwithstanding, firms also need long-term (or permanent) investment in working capital. Long term investment in working capital will ensure that, the level of current assets exceeds that of current liabilities (Brealey, et al, 2011). This allows a firm to operate with a comfortable financial margin since short-term assets exceed short-term obligations and hence minimizes the risk of being unable to pay short term obligations as they mature.

Watson and Head, 2010 on the other hand identified three types of funding policies: matching, conservative and aggressive funding policies. To aid explain these policies, they (Watson and Head) divided a company's assets into three: permanent current assets (assets needed to sustain normal levels of business), non-current assets (long term assets like buildings, machinery and equipments) and fluctuating current assets (variations in the level of current assets as a result of normal business activities). They described these policies as:

Matching Policy is where short term funds are used to finance fluctuating current assets and long term funds are used to finance permanent current and non-current assets. This policy is widely recommended for microfinance institutions by finance experts.

Conservative Policy: Here, long term funds are used to finance non-current assets, permanent current and some fluctuating current assets. Companies who adopt this policy rely less on short term funding; though this comes with a lower liquidity risk, it comes at the expense of reduced profitability.

Aggressive Policy: Companies who adopt this policy uses short-term funds to finance fluctuating current assets and some permanent current assets. Though it offers high profitability, it comes with a higher risk to solvency.

Working capital financing is a key aspect of every business (both small and large). Small businesses have less access to long-term sources of capital than large businesses. This consequently has led to a situation where many small firms have to rely heavily on short-term funds; much of which are tied to working capital. Inadequate equity and over dependence on short-term funds increases a firm's liquidity risk financial leverage (Seidman, 2005); all of which heighten the financial risks of extending credit.

## **2.7 SOURCES OF FUNDS FOR WORKING CAPITAL**

Businesses can source for support for their working capital in various forms, such as: short and long term loans from banks, retained earnings, factoring, credit from suppliers or even proceeds from the sale of assets (Merchant 2005). Managers however have to note that each of these sources has its own merits and demerits.

Loans from banks can take different forms; businesses can take short term loans depending on the variability in their sales and production. For a business with a seasonal production and sales, it would be better to take a short term loan such as an overdraft, which is cheaper and easy to access than to take a long term loan which will be less utilized and normally expensive.

Factoring activity ensures that firms get funds to operate with, while they wait for their debtors to make payments. Though factoring normally end up reducing the expected receivables amount, the ultimate effect is beneficial since firms will get cash to solve their short term needs.

Firms can also get funds by providing their fixed assets, inventory or account receivables as collateral for loans. Banks and credit providers normally grant loans quickly and easily once there is collateral to protect them. However, the conditions

surrounding the collateral also plays a vital role in determining the type and amount of loan that can be granted. For instance, an account receivable which is more day 90 days may not give enough leverage for a higher loan amount.

## **2.8 EVOLUTION OF MICROFINANCE**

Microfinance started originally as a tool to alleviate poverty; it was hitherto widely referred to as microcredit, that is, the granting of credit to microenterprises and poor households. From its humble beginning about 40 years ago, in Bangladesh and Bolivia, the industry has evolved impressively from simply providing short term small loans for working capital, to institutions that provide a variety of financial services, including insurance and long-term loans, even for the acquisition of fixed assets (Marulanda et al, 2010). The sector is now an integral part of the financial system of many countries and provides support to lots of businesses and families.

In Ghana however, though the tradition of people saving or taking small loans had always existed, the first microfinance was established in 1955 by the Canadian Catholic missionaries in the Northern part of the country (Asiama and Osei, 2007). A popular microfinance product “susu” is thought to have originated from Nigeria (Asiama and Osei, 2007).

Over the past decades, Microfinance has developed to encompass the provision of a variety of financial services such as: the management of small amounts of money through a range of products and a system of intermediary functions all targeted at low income clients (Ledgerwood and Gibson, 2013).

## **2.9 CAUSES OF MICROFINANCE FAILURES**

There are lots of publications about the positive successes chopped by microfinance institutions; but the story cannot be complete without making mention of the numerous



challenges that have engulfed the industry. Although many of the victim institutions grew up to considerable sizes and even applied some good management practices, they still failed. It has thus, become imperative that institutions and other stakeholders understand some of the factors that led to these occurrences and avoid making similar mistakes. Before proceeding, it is worth mentioning that, despite the numerous failures of MFIs, those that are successful are clearly in the majority.(Marulanda et al, 2010).

Financial institutions all over the world face different challenges from both external and internal factors; some of these factors have consequently led to periods of crisis which had threatened the existence of these institutions (Marulanda et al, 2010). This statement suggests that, challenges and failures in the financial sector are not peculiar to the microfinance industry only; however, the institutions' ability to manage these challenges successfully is what makes the differences between a failed story and a successful one. Marulanda and her colleagues, during their investigations also identified that, the two most commonly identified types of failures are: MFIs that go bankrupt and those that exist in a vegetative state (i.e. seeing no growth in their portfolio size or in the number of clients).

During their research, Marulanda and her other co-authors identified six categories of common causes of failures in MFIs: (a) methodological flaws in credit technology, (b)systematic fraud, (c) uncontrolled growth, (d) loss of focus, (e) design flaws and (f) a suffocating level of government intervention (Marulanda et al, 2010). Though only one of these is enough to cause a failure, in most cases, a combination of two or more has been the case.



- a. Methodological flaws (at the credit department): This causative factor refers to an MFIs inability to do proper assessment of prospective loan clients before disbursing loans. Some MFIs have a very poor incentive system that rewards the quantity of loans disbursed instead of the quality of loans given out. In other words, more emphasis is placed on the disbursements instead of recovery; this situation eventually leads to the incidence of a high NPL portfolio. MFIs however, have loans as their blood line, hence a high NPL leads to a dip in profit margins which consequently affect their working capital and sometimes leads to a collapse. These institutions ought to implement proper credit rating systems and also devote some time to determine the cash flow of potential clients“ before granting loans to them.
- b. Systematic Frauds: Another feature that has characterized the failure of most MFIs is fraud at different levels of the institution. Currently, most MFIs perform various activities including taking deposits and money transfer services; these activities are characterized by frauds perpetuated by various stakeholders of the firms. The most criticized groups in terms of these frauds are: the management and loan officers; and of the two, the management group is the worst culprit. Management members abuse their power and grant loans to themselves and their relatives for their own benefits. Loan officers also take advantage of poor monitoring and supervision and grant „ghost“ loans. There are cases where loans given to some clients are shared between the clients and the loan officers. Also, high target set for loan officers sometimes pushes them to grant dubious loans. Most of these fraudulent activities sometimes happen at a time companies see an injection of extra equity and also when the company seems to be doing so well. It becomes difficult to detect these frauds because, the perpetuating

officials are always at post and wouldn't even want to go on leave. Mostly, these frauds only get uncovered when these officials depart.

- c. Uncontrolled Growth: Most institutions, in their quest to achieve rapid growth in the shortest possible time relaxed their control system, especially in terms of giving credit, but this later pushed them into crisis. Normally as a result of impressive profits that were recorded, some of the institutions, instead of increasing the capacity of their credit department, hence improving their operational efficiency rather chose to open additional branches. Their belief was that, penetrating several markets at once would give them an advantage over other competitors in the market. Unfortunately this move rather ensured that management lost control.
- d. Loss of Focus: Another disturbing feature that contributes highly to the failure of microfinance institutions is the loss of focus by the management. Regulators have always warned MFIs to stick to their core business, however, upon seeing a business opportunity, management members, venture into them, thereby deteriorating their profitability and liquidity positions. Unfortunately, most of these diversions have been with long term projects, such as housing projects, which eventually end up stressing their working capitals. Some diversions have also come in the form of taking over some subsidiaries whose activities are not in sync with the banking activity. Impressive growth and profits sometimes pushes some MFIs to take such decisions without full recourse to capacity building. When things like these happen, the management now has extra responsibilities of taking care of these subsidiaries. They have to ensure that enough profits are recouped to repay invested funds; however, they do this at the expense of their core business which suffers in the end. Loss of focus also

occurs when an MFI develops so many products to cater for the same market with the aim of penetrating the markets; the whole idea to penetrate the market is not necessarily a bad one, as long as adequate systems have been developed to support it. Some of these products have gone to support long term projects whose cash flow over the period cannot be comfortably predicted, like the real estate industry.

- e. Design Flaws: During their (Maruland et al, 2010) research, they uncovered that, the exact understanding of the market that would maximize the true potential of microfinance firms also contributed to failed experiences. In fact, in several of the cases of failed experiences, we found that some of the microfinance institutions applied best practices from other countries. Unfortunately some of these practices were not relevant to the market at-hand, or even, the target market simply did not exist. This situation has been caused by the fact that, profit levels of families of different countries or regions differ. MFIs are also known to depend largely on the existence of the informal sector, so areas where the degree of informality is low, the MFI suffers. For instance if an MFI is located in the midst of people who will want an ATM service, it will be difficult for the MFI to penetrate such a market.
- f. State Intervention: The state's involvement in MFI directly or indirectly was also fingered to be a cause of some MFI's failure. Some governments, in their quest to eradicate poverty and promote the private sector, decides to be shareholders of some MFIs. However, some governments turn around and rather use that medium to prosecute their political agenda. This situation has often led to poor loan assessments, hence the consequent result of: high default rate, portfolio losses and the ultimate need to recapitalize to prevent the institution's

closure. In such institutions funded by the state, repayment discipline weakens as clients perceive that loans technically come from public resources. Also, to prosecute their agenda as stated above, the state decides to relax their controls and reduce their prices for the funds (i.e. interest rates). This situation however crowds out private MFIs whose sources of funds may be more expensive, hence have to charge higher interest rates. These are some of the activities of the state that ends up causing failure directly or indirectly of MFIs.

## **CHAPTER THREE**

### **METHODOLOGY**

#### **3.0 INTRODUCTION**

Information described in this section may be of particular importance when making comparisons with data from other surveys or sources of information. Topics such as research design, population and sampling, data collection tools and data analysis have been discussed here.

#### **3.1 RESEARCH DESIGN**

Research design is the general plan of how you will go about answering your research questions (Saunders, Lewis, Thornhill, 2012). There are various methods that can be used in conducting research. Your choice of a certain methodology will call for a particular set of elements and strategies to aid you in your research.

Your first consideration should be whether to choose a mono qualitative or quantitative method or a multiple method. You will then have to decide on the nature of your research, whether it is an exploratory, explanatory, descriptive or a combination of these



(Saunders et al, 2012). You then proceed to select the particular strategy you will employ in your research: experiment, survey, case study, grounded theory and archival research. (Saunders et al, 2012). None of these methodologies is superior to the other, what is significant is the ability of a particular strategy to answer a researcher's question(s) and help him achieve his/her objectives (Saunders et al, 2012).

Considering the research topic where a dependent and independent variables are involved, the experiment strategy will be most appropriate to use. Though the experiment strategy is mostly typical of the natural sciences, it can be employed in social science research like this (Saunders et al, 2012). Considering the objectives of this research, we can confidently place it at both the descriptive and explanatory group. While the use of interviewing makes the research descriptive in nature, establishing the relationship between the identified variables makes it explanatory.

### **3.2 POPULATION AND SAMPLING**

As at the time of writing this work, no source could give us the exact number of microfinance institutions in the country, let alone that of Kumasi. What the association could provide was the registered members, but they conceded that, there were still a lot of companies who were not registered with them. Out of the total population of microfinance companies in Kumasi, ten (10) of them were sampled to be used for this study.

To avoid any biases, some cooperative credit unions were also included based on their involvement with microfinance businesses.

### 3.3 CONCEPTUAL FRAMEWORK

Both descriptive and econometric models were used to analyse the effect of working capital on profitability of selected microfinance institutions in Kumasi. To describe the general behaviour of the data, we used the maximum and minimum figures to produce the mean and standard deviation through the descriptive statistics. The study then estimated the impact of working capital components on profitability using a regression analysis.

Thus, from Raheman and Nasr (2007), as cited in Yeboah and Yeboah, (2014) the study could adopt:

$$ROCE_{it} = \beta_0 + \sum_{i=1}^n \beta_1 X_{it} + \varepsilon \dots \dots \dots (1)$$

Where

$ROCE_{it}$  = Return on Capital Employed of an institution  $i$  at time  $t$ ;  $i = 1, 2, 3, \dots$ , institutions.

$\beta_0$  = the intercept of equation

$\beta_1$  = Coefficient of  $X_{it}$  variables

$X_{it}$  = the different independent variables for working capital management of firm  $i$  at time  $t$ .

$T$  = Time from 1, 2... years and  $\varepsilon$ =Error term

Finally, the above general least square model is converted into specified variables as follows:

$$ROCE_{it} = \beta_0 + \beta_1 AR + \beta_2 LDR + \beta_3 CCC + \beta_4 CGR + \varepsilon \dots \dots \dots (2)$$

Where the variables are defined in Table 1 below; note also that the CCC can be replaced in equation 2 with its individual components of CPP and DCP.

Since working capital is largely about liquidity management, we will be considering the effects of liquidity ratios and other relevant ratios on profitability of selected firms.

Variables such as: acid ratio, loans to deposit ratio, debtors collection period, creditors payment period, cash conversion cycle, gearing ratio were chosen as the independent variables, while return on capital employed was chosen as the dependent variable.

**Table 1: Variables and their Descriptions**

NAME	DEFINITION
<b>RETURN ON CAPITAL EMPLOYED (ROCE)</b>	ROCE measures the overall profitability made from the total capital employed by the company.  $\frac{\text{Profit before interest and tax}}{\text{Capital Employed}}$
<b>ACID RATIO (AR)</b>	Also referred to as <b>quick ratio</b> , is the ratio of current asset (less inventories) to current liabilities. It measures a company's ability to meet its financial obligations as they fall due.  $\frac{\text{Current assets less inventory}}{\text{Current liabilities}}$
<b>LOANS TO DEPOSIT RATIO (LDR)</b>	This ratio measures the proportion of client deposits being held as loans  $\frac{\text{Total loans/credit}}{\text{Total Deposit}}$
<b>DEBTORS COLLECTION PERIOD (DCP)</b>	This ratio indicates the period of time it takes the MFI to collect its money from its debtors such as loan clients. This period is calculated as:  $\frac{\text{Debtors} \times 365}{\text{Credit Sales}}$

<b>CREDITORS PAYMENT PERIOD (CPP)</b>	<p>CPP shows the period of time it takes the MFI to pay its creditors like depositors. It is found by:</p> $\frac{\text{Creditors}}{\text{Cost of sales}} \times 365$
<b>CASH CONVERSION CYCLE/PERIOD (CCC)</b>	<p>CCC simply indicates the period of time between when cash leaves a company and when cash comes back into the company.</p> <p>Debtors collection period – Creditors payment period</p>
<b>GEARING RATIO (CGR)</b>	<p>Gearing ratio shows how a company is financed; it indicates the proportion of debt financed used in relation to its equity or capital employed.</p> $\frac{\text{Long-term debt}}{\text{Capital Employed}}$
<b>ERROR <math>\epsilon</math></b>	Error term

### 3.4 DATA COLLECTION AND ANALYSIS

All relevant variables were picked up from the financial statements of selected companies during the data gathering. The selected firms were: AKAD Microfinance, GHABSY Microfinance, GIFS Microfinance, ARHINPA Microfinance, Ramseyer Credit Union, House of Faith Credit Union, REMNANT Credit Union, St. Theresa's Credit Union, Dunwell Credit Union and Calvary Charismatic Credit Union. But there were also primary data in the form of interviews with some people involved in the microfinance industry. Data that were gathered were processed with the aid of a computer programme called STATA Statistical Software 12. This software aided the researcher to run regression analysis, Pearson correlation coefficient and descriptive statistics of the data gathered.

The descriptive analysis was used to describe patterns of behaviour of each variable. The Pearson correlation analysis was used to establish the relationship among the



considered variables. Then, the regression analysis estimated the impact the independent variables have on the dependent variable.

### **3.4 LIMITATIONS OF DATA COLLECTION**

It was a daunting task collecting data from institutions; GAMC which was thought to be having the data of all their registered members (at least), informed us that, they could not get us full reports of the period we were seeking. According to them, a lot of their members did not submit reports and even when they did, they found those reports to be inaccurate in most cases. When the individual companies were contacted too, they were also adamant in giving out their information even when it was explained to them that, it was purely for academic purpose. This was one of the reasons we had to consider some credit union institutions whose information is semipublic, since they share it with members of the cooperative. Even with the cooperative unions it was not easy too, the researcher had extensive interactions with them before they finally agreed to give out the information.

### **3.5 ETHICAL ISSUES**

Almost all the financial institutions have strict policies on confidentiality and one can pay the ultimate price for the breach of it. As part of the regulators' demand too, staffs of every financial institution should be made to sign an oath of secrecy before they even begin to work. Divulging information to a third party can expose the institution to a potential legal tussle and this makes employees very cautious of their behaviours. Some respondents were thus, a bit apprehensive in disclosing or giving out some information. This genuine apprehension was addressed by explaining to them that, it was purely for academic purposes and that their identities were not going to be revealed. They were

also assured that, the information they were giving out was going to be handled professionally.

## **CHAPTER FOUR**

### **PRESENTATION OF DATA AND ANALYSIS**

#### **4.0 INTRODUCTION**

This chapter presents and analyses data collected from both primary and secondary sources. The analysis begins with descriptive statistics of the variables under consideration, followed by the correlation analysis, which shows the various relationship between the variables and then the regression analysis, which indicates the impact each of the variables have on each other.

#### **4.1 DESCRIPTIVE STATISTICS**

The descriptive statistics of the dependent and independent variables used in the study are described in Table 4.1. Return on Capital Employed (ROCE) was used as proxy for profitability and is therefore designated as the dependent variable. Other variables used in the analysis include Acid Ratio (AR), Loan to Deposit Ratio (LDR), Cash Conversion Cycle (CCC), Gearing Ratio (CGR), and Debtors Collection Period (CPP). The main descriptive statistics used include the minimum and maximum values of the variables, the mean of the variables as well as their standard deviations. The degree in the variations of the variables is shown in the table by the maximum and minimum values. For instance, the profitability variable, ROCE, ranges from -0.41 to 0.64; this implies that the average return on capital employed for all the companies ranges from as low as -0.41 percent to as high as 0.64 percent.

While the mean values show the central tendency of the variables under consideration, the standard deviations indicate the variable which is most volatile and the one which is less volatile. Per the results in the table, the long days of DCP can be attributed to default by loan clients. As was mentioned above, the period chosen was the period most MFIs saw a decline in their activities because of numerous failures by other MFIs, and as part of the causes of these failures, there was a rise in the number of loans that went bad. Also, including credit unions in the study meant that, DCP will increase a bit since most of these companies give their clients up to 12 months to repay their loans. However, same cannot be said about Creditors Payment Period, CPP, because, components such as deposits make up this variable, and MFIs even strive to reduce the number of minutes clients spend waiting to make withdrawals. The result of a negative CCC is partly as a result of a high CCP.

**Table 4.1: Descriptive Statistics, using observations of 2011-2014 for 10 MFIs**

VARIABLES	OBS	MEAN	STD DEV	MIN	MAX
ROCE	40	0.5268	0.2755	-0.4114	0.6421
AR	40	1.1015	0.0511	0.4817	1.7212
LDR	40	0.7764	0.35721	0.4936	1.0592
DCP	40	777.359	841.7270	1583.7228	326.7501
CPP	40	2422.2364	1771.5832	664.6859	890.0238
CCC	40	-199.2571	89.5321	126	272
CGR	40	2.6933	1.83229	0	5.3865

*Key; ROCE=Return on Capital Employed; AR=Acid Ratio; LDR=Loan to Deposit Ratio; DCP=Debtors Collection Period; CPP=Creditors Payment Period; CCC=Cash Conversion Cycle; CGR=Gearing Ration*

Source: Analysis of Field Data, June 2015

## 4.2 PEARSON CORRELATION BETWEEN THE DEPENDENT AND

## INDEPENDENT VARIABLES

The correlation among the dependent and the independent variables was tested using Pearson correlation coefficient. The correlation coefficient is the covariance of two variables (X and Y) divided by the product of their sample standard deviations. The following model was used to estimate the correlation between the variables of the study.

$$r = \frac{\sum_{i=1}^n (x_i - \bar{x})(y_i - \bar{y})}{\sqrt{\sum_{i=1}^n (x_i - \bar{x})^2 \sum_{i=1}^n (y_i - \bar{y})^2}}$$

The above formula provides a test of whether the correlation coefficient (r) is significantly different from 0 or not.

H0: The correlation coefficient is equal to 0 (r=0)

H1: The correlation coefficient is not equal to 0 (r≠0)

**Table 4.2 Pearson's Moments Correlation Coefficient Result**

	ROCE	AR	LDR	DCP	CPP	CCC	CGR
ROCE	1.00						
AR	0.05	1.00					
LDR	0.61***	0.69***	1.00				
DCP	-0.20**	0.50	-0.41**	1.00			
CPP	0.14*	-0.43	0.06	0.03	1.00		
CCC	-0.55***	-0.49**	-0.05	0.36	-0.87***	1.00	
CGR	-0.62***	-0.48***	-0.07	0.41	-0.15	-0.11	1.00



\*\*\*, \*\*, and \* significant at 1%, 5% and 10% respectively: *Source: Analysis of Field Data, June 2015*

The Pearson's correlation result also shows that there is a positive significant relationship between ROCE and CCC ( $r=0.55$ ;  $p \leq 0.01$ ). The result implies that an increase in CCC leads to a corresponding reduction in ROCE. Also, it can be observed that there is a positive correlation between ROCE and CPP. However, the result shows that there is an inverse relationship between ROCE and CGR.

The Pearson's Correlation analysis result in Table 4.2 also gives credence to the previous result that there is no multicollinearity among the independent variables. Dury (2008) writes that for multicollinearity to exist, the correlation coefficient ( $r$ ) between the independent variables should be 0.7 or above ( $r \geq 0.7$ ). In this result, it can be observed that none of the coefficients is above 0.7, indicating the absence of multicollinearity.

#### **4.3 ANALYSIS OF MULTIPLE REGRESSION RESULT**

The parameters of this model are estimated using multivariate regression analysis. The model seeks to examine the effect of working capital management on profitability of selected microfinance institutions in Kumasi. ROCE is designated as the dependent variable whiles AR, LDR, CCC and CGR are used as proxies for measuring working capital management. The model estimated is given by:

$$ROCE_{it} = \beta_0 + \beta_1 AR + \beta_2 LDR + \beta_3 CCC + \beta_4 CGR + \varepsilon$$

The model was estimated with the use of STATA Statistical Software and the result is presented in Table 4.3

**Table 4.3 Regression Analysis Result**

	Coefficient ( $\beta$ )	T-stat	P-VALUES
Intercept	0.388	10.15***	0.0001
AR	0.321	0.421**	0.04507
LDR	-0.426	1.512**	0.01736
CCC	-0.519	-0.359***	0.0038
CGR	0.007	0.0113	0.07924

Notes: significant at: \*\*\*1, \*\*5,

No.Obs = 40

R-square = 0.5712

Adj.  $R^2$  = 0.5664,

F-stat = **27.54**; Prob of F-stat = **0.0211**,

Source: Result of Data analysis

The regression results show that Loan to Deposit Ratio has a significant positive effect on the profitability of the selected firms ( $\beta=-0.426$ ;  $t=1.50$ ;  $p=0.017$ ). In other words, as Loan to Deposit Ratio increases profitability also increases.

The result further shows that Cash Conversion Cycle (CCC) has a negative significant effect on the profitability of the selected microfinance institutions ( $\beta=-0.519$ ;  $t=-0.359$ ;  $p=0.0038$ ). The result implies that a reduction in the CCC leads to an improvement in the profitability (ROCE) of the selected companies and vice versa. It can also be observed from Table 4.3 that Acid Ratio (AR) has a significant positive effect on the financial performance of the MFIs, implying that improvement in AR leads to an improvement in their profitability.

Though the results show that CGR has positive effect on the profitability of the selected firms, its effect is not significant. Also, it can be observed from the results that CCC has a negative but insignificant effect on the profitability of microfinance companies in Kumasi.

The result further shows that the predictive power of the model as measured by Adjusted  $R^2$  is 0.566 or 56.6%. The F-statistic of 27.54 is significant at  $p < 0.05$ . The result implies that, independent variables explain about 56.6% of the variations in the profitability of the selected institutions. The results also show that all the coefficients in the model are different than zero, according to the F-Statistics

#### **4.4 DISCUSSION OF RESULTS**

From the analysis it can be deduced that, CCC has a significant negative impact on profitability of the selected firms. This result is not surprising because various studies such as: Yeboah and Yeboah, (2014) and Gamlath and Rathirane, (2014) have found the same results. The result implies that the longer it takes for cash to return to the firm (i.e. longer CCC), the higher the pressure on working capital. Less cash mean high exposure to liquidity risk it also means that other business opportunities will be missed as cash will be locked up elsewhere; hence affecting profitability.

This relationship usually occurs because, CCC which has a component of debtors (loan clients) affects profitability negatively when they (loans) hit the NonPerforming Loans (NPL) region, and it consequently affects ROCE which has interest on loans as one of its major components. The inverse relationship between CCC and profitability informs MFIs to strive to shorten their CCC period to ensure continual survival and profitability.

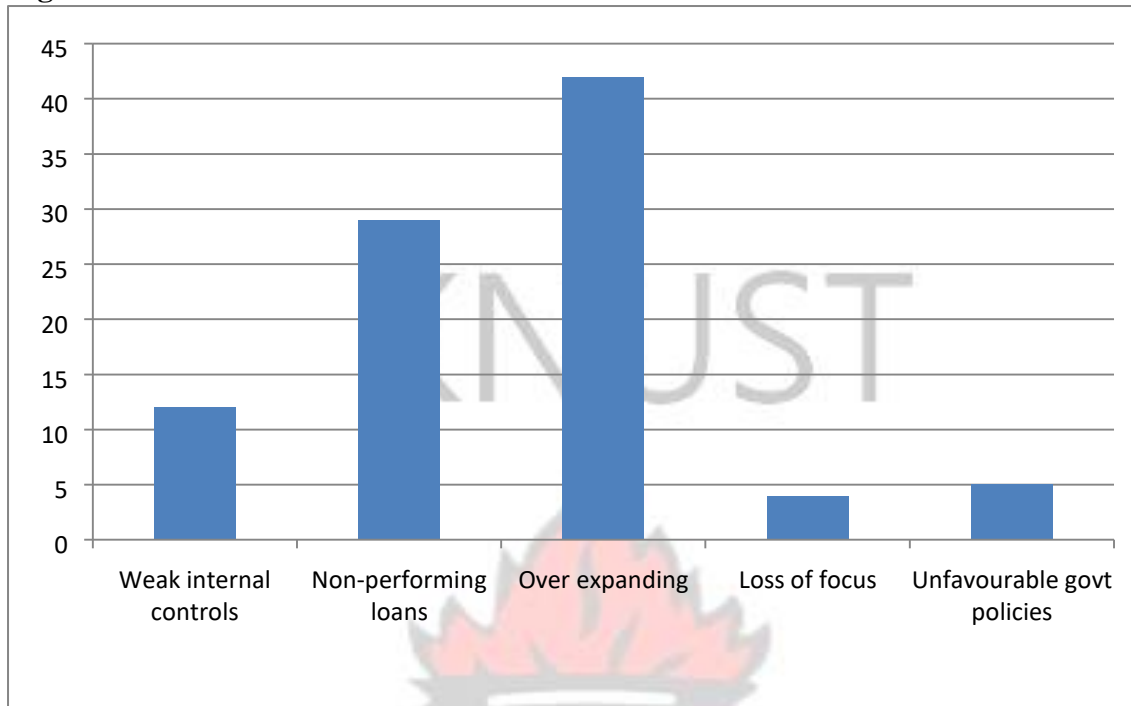
The result further shows a positive relationship between Acid Ratio (AR) and the financial performance of the selected firms. The Acid ratio, also known as quick ratio, is the ratio of current asset (less inventories) to current liabilities. It measures a company's ability to meet its financial obligations as they fall due. The result implies that when MFIs are able to meet their financial obligations when due, it improves their profitability. When companies are able to meet their financial obligations, it improves their credit worthiness and reduces their cost of capital. Also, being able meet financial obligations when due reduces extra interest and cost that may accrue. The result implies that MFIs must strive to improve their acid ratio since it has significant positive impact on their financial performance.

#### **4.5 RESULTS ON CAUSES OF MICROFINANCE FAILURE**

The study also sought to examine the main causes of microfinance failure in Ghana. This objective was achieved by soliciting the views of individuals who are abreast with microfinance operations. The outcome of interviewing about 15 people on the causes of microfinance is what has been shown graphically below. The people that were interviewed included: staffs of some collapsed microfinance companies, officials of GAMC, experts in microfinance activities and shareholders of some microfinance companies.



**Figure 4.1: Causes of Microfinance Failure**



#### **4.6 DISCUSSION OF RESPONSES**

The interview with the various stakeholders revealed that, over expansion contributed the most to the factors that led to numerous microfinance failures in Kumasi. Some of the respondents further explained that, unknown to the management and other stakeholders of the collapsed companies, extra branches meant extra responsibilities which consequently led to an increase in expenditure. This is because, more hands will be needed to run these new offices and to also supervise and consolidate the activities of all outlets. It was further revealed that some of the companies did not even have a central head office to consolidate their activities while opening the branches. This consequently led to another causative factor in the form of fraud by some staff, since supervision was less at some of the branches. Per the results, though fraud took only 12% of all the causes that were identified, in some cases, the amounts involved were very huge.

It was also revealed during the interviews that, high incidence of non-performing loans was also a major contributor to the failure of MFIs in Kumasi. Competition pushed companies to give more loans instead of giving out quality loans. Assessments were not done well to ascertain the credit worthiness of clients and after disbursement too, repayments were not monitored. Credit officers only realized how bad a loan has been after several months of defaults.

Though respondents conceded that bad government policies and loss of focus played a role in this downturn, on the average, these factors were not major contributors. An example of an unfavourable government policy is the increment of government Treasury bill rate. Such a policy makes investors opt for such safe securities rather than investing with MFIs and exposing themselves to unnecessary risk.

## **CHAPTER FIVE**

### **SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATION**

#### **5.0 INTRODUCTION**

This chapter begins with a summary of key findings from the data that were gathered. The chapter goes further to give conclusions and recommendations in sync with the objectives of the research. The research was aimed at finding out the impact working capital management has on profitability. It also had the causes of microfinance failures as one of its objectives.

## 5.1 SUMMARY OF KEY FINDINGS

This section provides a summary of the main findings obtained when the data collected was subjected to statistical analysis. The first objective examined the effect of working capital management on the financial performance (Profitability) of selected microfinance institutions in Kumasi. Four variables were used as proxies for working capital: CCC, AR, CGR and LDR. The financial performance of the firms was measured by Return on Capital Employed (ROCE). The findings revealed that CCC has a significant negative effect on the profitability of the selected firms. The result implies that a reduction in the cash conversion cycle of the selected firms leads to an increase (improvement) in profitability (financial performance).

The findings also revealed that Acid Ratio (AR) has a significant positive effect on the financial performance of the MFIs, implying that improvement in AR leads to an improvement in their profitability.

The findings further revealed that Gearing (CGR) has a positive but insignificant effect on the financial performance of microfinance firms in Kumasi.

Overall, the study found that working capital management has significant impact on the financial performance of the selected companies. This is because the F-statistic of 27.54 is significant at  $p < 0.05$ . The result implies that, the independent variables explain about 56.6% of the variations in the profitability of the selected institutions. The result also shows that all the coefficients in the model are different than zero, according to the F-Statistics.

The findings further show that over expansion is the number one cause of microfinance breakdown. The results also showed that, the high incidence of nonperforming loans,

weak internal control measures, loss of focus and unfavourable government policies followed in that order of the causes of microfinance failure.

## **5.2 CONCLUSION**

The study had a general objective of examining the effect of working capital management on the profitability of selected microfinance institutions in Kumasi. The first objective examined the effect of working capital management on the profitability of selected microfinance institutions in Kumasi. Four variables were used as proxies for working capital and they include CCC, AR, CGR and LDR. ROCE was used to represent the financial performances of the firms. The second objective was to ascertain the causes of microfinance failures. Individuals with experience in working capital management were interviewed. The findings revealed that there is an inverse relationship between CCC and ROCE. The inverse relationship between CCC and profitability informs MFIs to strive to shorten their CCC period to ensure continual survival and profitability. Similarly, the positive correlation between gearing and profitability points to the fact that, a lower cost of long term loan increases an MFI's profitability and vice versa. Concluding on microfinance failures, it was established during the literature review and the interviews we conducted that, though there are other causes of microfinance failures, the following were major contributors: over expansion, high incidence of non-performing loans, weak internal controls, loss of focus and poor government policies leading to a bad economy. Other respondents also pointed bad product design as one of the causes of microfinance breakdown. An example was given by one of the respondents that, a company, in their quest to attract more cash hence become more liquid, rolled out a fixed deposit product which had a high interest rate. Unknowingly, this was going to further drain them with time; and this was indeed what happened; the supposed company eventually collapsed.



### 5.3 RECOMMENDATIONS

In view of the results obtained indicating the impact various working capital components have on profitability of an MFI, it is relevant that prudent measures be put in place to ensure profitability and consequent survival of microfinance institutions. Below are some recommended strategies to help stakeholders manage their working capital more effectively and to also avoid a total collapse of their institutions.

Companies should have as one of their priorities to always strive to shorten their Cash conversion periods. This will not only ensure that interests on loans are received on time, but it will also ensure that companies are liquid most of the time to avoid any embarrassment. In the literature review, mention was made to the fact that, debtors were not going to do payments voluntarily if they were not pressurized. Companies should therefore adopt other strategies such as factoring to ensure that, there is always enough cash for operation and consequent profitability.

It was also found that gearing has insignificant impact on profitability. Depending on the conditions surrounding a long term loan, a firm's profitability could be affected either positively or negatively; managers should thus be vigilant when going for loans.

On microfinance failures, it is recommended that, companies adopt a habit of growing gradually. Over expansion comes with so many responsibilities such as extra expenses which usually drain companies a lot. Again, expansion comes in various forms, rather than expanding physical structures which will lead to a decline in profitability, MFIs should rather expand their sales activities which will improve their profitability.

MFIs should have their own capital before they start operation. In the literature review, it was seen that, trying to operate without your own capital can lead to overtrading which is very risky.

Credit officers should also endeavour to do their work diligently, and not succumb to any pressure (from customers or competitors) that may cause them to go contrary to their working values. Loans should be monitored even after disbursement to ensure that full repayment is made.

Lastly before any MFI starts its operation, and even as it grows, management should lay down proper structures that will ensure that internal control measures are strengthened to prevent fraudulent activities.

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